



201 Mission Street, Suite 2375, San Francisco, CA 94105

Tel: 415.371.8300 • Fax: 415.371.8311

<https://jaguar.health>

February 15, 2018

Dear Stockholder:

You are cordially invited to attend the Special Meeting of Stockholders (the “Special Meeting”) of Jaguar Health, Inc. (the “Company”) to be held at 201 Mission Street, Suite 2375, San Francisco, CA 94105, on Monday, March 12, 2018, at 8:30 a.m., local time.

At the Special Meeting you will be asked to:

1. Approve an amendment to the Company’s Third Amended and Restated Certificate of Incorporation (the “COI”) to increase the number of authorized shares of the Company’s voting common stock, par value \$0.0001 per share (the “Common Stock”), from 250,000,000 shares to 500,000,000 shares;
2. Approve an amendment to the COI to effect a reverse stock split at a ratio not less than 1-for-1.2 and not greater than 1-for-10, with the exact ratio, if effected at all, to be set within that range at the discretion of the Company’s board of directors before June 30, 2018 without further approval or authorization of the Company’s stockholders (the “Reverse Stock Split”);
3. Approve, for purposes of Nasdaq Listing Rule 5635(d), the issuance of Common Stock in one or more non-public capital raising transactions at a price that may be less than the greater of book or market value of our Common Stock;
4. Approve the amendment of the Company’s 2014 Stock Incentive Plan (the “2014 Plan”) to increase the number of shares of Common Stock authorized for issuance under the 2014 Plan by up to 41,060,000 shares; and
5. Approve a proposal to grant discretionary authority to adjourn the Special Meeting, if necessary, to solicit additional proxies in the event that there are not sufficient votes at the time of the Special Meeting to approve Proposals 1 through 4.

It is important that your shares be represented and voted whether or not you plan to attend the Special Meeting in person. You may vote on the Internet, by telephone or by completing and mailing a proxy card. Voting over the Internet, by telephone or by written proxy will ensure your shares are represented at the Special Meeting. If you do attend the Special Meeting, you may, of course, withdraw your proxy should you wish to vote in person. Please read the enclosed information carefully before voting.

Sincerely,

Lisa A. Conte
Chief Executive Officer & President

JAGUAR HEALTH, INC.

201 Mission Street
Suite 2375
San Francisco, CA 94105

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

To Be Held Monday, March 12, 2018

NOTICE HEREBY IS GIVEN that a Special Meeting of Stockholders (the “Special Meeting”) of Jaguar Health, Inc. (the “Company”) will be held at 201 Mission Street, Suite 2375, San Francisco, CA 94105, on Monday, March 12, 2018, at 8:30 a.m., local time, for the following purposes:

1. Approve an amendment to the Company’s Third Amended and Restated Certificate of Incorporation (the “COI”) to increase the number of authorized shares of the Company’s voting common stock, par value \$0.0001 per share (the “Common Stock”), from 250,000,000 shares to 500,000,000 shares;
2. Approve an amendment to the COI to effect a reverse stock split at a ratio not less than 1-for-1.2 and not greater than 1-for-10, with the exact ratio, if effected at all, to be set within that range at the discretion of the Company’s board of directors before June 30, 2018 without further approval or authorization of the Company’s stockholders (the “Reverse Stock Split”);
3. Approve, for purposes of Nasdaq Listing Rule 5635(d), the issuance of Common Stock in one or more non-public capital raising transactions at a price that may be less than the greater of book or market value of our Common Stock;
4. Approve the amendment of the Company’s 2014 Stock Incentive Plan (the “2014 Plan”) to increase the number of shares of Common Stock authorized for issuance under the 2014 Plan by up to 41,060,000 shares; and
5. Approve a proposal to grant discretionary authority to adjourn the Special Meeting, if necessary, to solicit additional proxies in the event that there are not sufficient votes at the time of the Special Meeting to approve Proposals 1 through 4.

In addition, stockholders may be asked to consider and vote upon such other business as may properly come before the Special Meeting or any adjournment or postponement. The Company’s board of directors is not aware of any other business to be presented to a vote of the stockholders at the Special Meeting.

Information relating to the above matters is set forth in the attached Proxy Statement. Stockholders of record at the close of business on January 17, 2018 are entitled to receive notice of and to vote at the Special Meeting and any adjournment or postponement thereof. This Notice of Special Meeting of Stockholders and Proxy Statement and Proxy Card are being sent to stockholders beginning on or about February 16, 2018. If you have questions concerning the proposals in the Proxy Statement, would like additional copies of the Proxy Statement or need help in voting your shares of Common Stock, please contact our proxy solicitor Georgeson LLC at 866-821-0284.

By Order of the Board of Directors,



Lisa A. Conte
Chief Executive Officer & President

San Francisco, California
February 15, 2018

Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting to be Held on Monday, March 12, 2018. The proxy materials are available at <https://jaguarhealth.gcs-web.com/financial-information/annual-reports>

TABLE OF CONTENTS

GENERAL INFORMATION ABOUT THE SPECIAL MEETING	1
GENERAL INFORMATION ABOUT VOTING	1
CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS	5
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT...	6
PROPOSAL 1	8
PROPOSAL 2	11
PROPOSAL 3	19
PROPOSAL 4	22
PROPOSAL 5	26
SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE	27
EQUITY COMPENSATION PLAN INFORMATION	27
COMPENSATION OF DIRECTORS AND EXECUTIVE OFFICERS	28
DESCRIPTION OF CAPITAL STOCK	37
FINANCIAL AND OTHER INFORMATION	42
Report of Independent Registered Public Accounting Firm	43
Financial Information for the Years Ended December 31, 2016 and 2015	44
Financial Information for the Three and Nine Months Ended September 30, 2017 and 2016 ...	80
Management's Discussion and Analysis of Financial Condition and Results of Operations	122
STOCKHOLDER PROPOSALS FOR 2018 ANNUAL MEETING	187
AVAILABILITY OF ANNUAL REPORT TO STOCKHOLDERS AND REPORT ON	
FORM 10-K	187
LIST OF THE COMPANY'S STOCKHOLDERS	187
DELIVERY OF PROXY MATERIALS TO HOUSEHOLDS	187
OTHER MATTERS THAT MAY COME BEFORE THE SPECIAL MEETING	188
Annex A Certificate of Amendment to Third Amended and Restated Certificate of Incorporation of Jaguar Health, Inc. to Increase Authorized Shares of Common Stock and Effect A Reverse Stock Split	A-1

PLEASE CAREFULLY READ THE ATTACHED PROXY STATEMENT. EVEN IF YOU EXPECT TO ATTEND THE SPECIAL MEETING, PLEASE PROMPTLY COMPLETE, EXECUTE, DATE AND RETURN THE ENCLOSED PROXY CARD IN THE ACCOMPANYING POSTAGE-PAID ENVELOPE. NO POSTAGE IS NECESSARY IF MAILED IN THE UNITED STATES. YOU MAY ALSO VOTE ELECTRONICALLY VIA THE INTERNET OR BY TELEPHONE BY FOLLOWING THE INSTRUCTIONS ON THE PROXY CARD. IF YOU VOTE BY INTERNET OR TELEPHONE, THEN YOU NEED NOT RETURN A WRITTEN PROXY CARD BY MAIL. STOCKHOLDERS WHO ATTEND THE SPECIAL MEETING MAY REVOKE THEIR PROXIES AND VOTE IN PERSON IF THEY SO DESIRE.

JAGUAR HEALTH, INC.

**201 Mission Street
Suite 2375
San Francisco, CA 94105**

PROXY STATEMENT

FOR THE SPECIAL MEETING OF STOCKHOLDERS

To Be Held Monday, March 12, 2018

GENERAL INFORMATION ABOUT THE SPECIAL MEETING

We are furnishing this Proxy Statement to our stockholders in connection with the solicitation of proxies by our board of directors (the “Board”) to be voted at the Special Meeting of Stockholders and at any adjournment or postponement thereof. The Special Meeting will be held at 201 Mission Street, Suite 2375, San Francisco, CA 94105, on Monday, March 12, 2018, at 8:30 a.m., local time.

When used in this Proxy Statement, the terms the “Company,” “we,” “us,” “our” and “Jaguar” refer to Jaguar Health, Inc.

Pursuant to rules adopted by the Securities and Exchange Commission (“SEC”), we are also providing access to our proxy materials over the Internet. All stockholders will have the ability to access the proxy materials at <https://jaguarhealth.gcs-web.com/financial-information/annual-reports>.

The date on which this Proxy Statement and form of proxy card, or voting instruction card, are first being sent or given to stockholders is on or about February 16, 2018.

GENERAL INFORMATION ABOUT VOTING

Record Date

As of January 17, 2018, the record date for the Special Meeting, 76,160,890 shares of our Common Stock were outstanding. Only holders of record of our Common Stock as of the close of business on the record date are entitled to notice of, and to vote at, the Special Meeting or at any adjournment or postponement thereof. A list of such holders will be open to the examination of any stockholder for any purpose germane to the meeting at Jaguar Health, Inc., 201 Mission Street, Suite 2375, San Francisco, CA 94105 for a period of ten (10) days prior to the Special Meeting. The list of stockholders will also be available for such examination at the Special Meeting. In addition, as of January 17, 2018, 42,617,893 shares of our non-voting common stock were outstanding but will not have any voting rights in connection with the Special Meeting. Each share of non-voting common stock is convertible into one share of Common Stock at the election of the holder thereof anytime on or after April 1, 2018 or automatically upon transfer to anyone that is not Nantucket Investments Limited or an affiliated investment fund. The use of the capitalized term “Common Stock” in this Proxy Statement and related materials refers only to the Company’s voting common stock and does not include the Company’s convertible non-voting common stock.

Quorum and Revocability of Proxies

Each share of our Common Stock entitles the holder of record thereof to one vote. No other securities are entitled to be voted at the Special Meeting. Each stockholder holding Common Stock may vote in person or by proxy on all matters that properly come before the Special Meeting and any adjournment or postponement thereof. The presence, in person or by proxy, of stockholders entitled to vote a majority of the shares of Common Stock outstanding on the record date will constitute a quorum for purposes of voting at the Special Meeting. Properly executed proxies marked "ABSTAIN" will be counted as "present" for purposes of determining the existence of a quorum. If a quorum should not be present, the Special Meeting may be adjourned from time to time until a quorum is obtained.

The Board is soliciting the enclosed proxy for use in connection with the Special Meeting and any postponement or adjournment thereof. If the enclosed proxy is voted via the Internet, by telephone or the proxy card is executed and returned, the shares represented by it will be voted as directed on all matters properly coming before the Special Meeting for a vote. For each proposal, you may vote "FOR," "AGAINST" or "ABSTAIN". Returning your completed proxy card or voting on the Internet or by telephone will not prevent you from voting in person at the Special Meeting should you be present and desire to do so. You may revoke your proxy by (a) delivering to the Secretary of the Company at or before the Special Meeting a written notice of revocation bearing a later date than the proxy, (b) duly executing a subsequent proxy relating to the same shares of Common Stock and delivering it to the Secretary of the Company at or before the Special Meeting or (c) attending the Special Meeting and voting in person (although attendance at the Special Meeting will not in and of itself constitute revocation of a proxy). Any written notice revoking a proxy should be delivered at or prior to the Special Meeting to: Jaguar Health, Inc., 201 Mission Street, Suite 2375, San Francisco, CA 94105, Attention: Karen S. Wright. Beneficial owners of our Common Stock who are not holders of record and wish to revoke their proxy should contact their bank, brokerage firm or other custodian, nominee or fiduciary to inquire about how to revoke their proxy.

The shares represented by all valid proxies received will be voted in the manner specified on the proxies. Where specific choices are not indicated on a valid proxy, the shares represented by such proxies received will be voted "FOR" Proposals 1 through 5.

We will bear all expenses of this solicitation, including the cost of preparing and mailing this Proxy Statement. We have retained Georgeson LLC to solicit proxies for a fee of \$7,500 plus reimbursement of reasonable out-of-pocket expenses. In addition to solicitation by use of the mail, proxies may be solicited by telephone, facsimile or personally by our directors, officers and employees, who will receive no extra compensation for their services. We will reimburse banks, brokerage firms and other custodians, nominees and fiduciaries for reasonable expenses incurred by them in sending proxy soliciting materials to beneficial owners of shares of Common Stock.

Broker Voting

Brokers holding shares of record in "street name" for a client have the discretionary authority to vote on some matters if they do not receive instructions from the client regarding how the client wants the shares voted at least 10 days before the date of the Special Meeting. There are also some matters (non-routine matters) with respect to which brokers do not have discretionary authority to vote if they do not receive timely instructions from the client. When a broker does not have discretion to vote on a particular matter and the client has not given timely instructions on how the broker should vote, a broker non-vote results.

Proposals 1 through 5 are considered "non-routine" matters. Therefore, if you hold your shares in street name and do not give your broker specific voting instructions with respect to any of Proposals 1 through 5, your shares will not be voted with respect to such proposal(s), resulting in broker non-votes.

Broker non-votes also will not be counted for purposes of determining a quorum at the Special Meeting.

Required Vote

Proposal 1

In voting with regard to the proposal to approve an amendment to our Third Amended and Restated Certificate of Incorporation (the “COI”) to increase the number of authorized shares of our Common Stock, from 250,000,000 shares to 500,000,000 shares, you may vote in favor of the proposal, vote against the proposal or abstain from voting.

The vote required to approve Proposal 1 is governed by Delaware law, our COI and our Amended and Restated Bylaws and is the affirmative vote of the holders of a majority of outstanding shares of Common Stock entitled to vote. As a result, abstentions and broker non-votes will have the same legal effect as voting against Proposal 1.

Proposal 2

In voting with regard to the proposal to approve an amendment to our COI to effect a reverse stock split at a ratio not less than 1-for-1.2 and not greater than 1-for-10, with the exact ratio, if effected at all, to be set within that range at the discretion of our board of directors before June 30, 2018 without further approval or authorization of our stockholders (the “Reverse Stock Split”), you may vote in favor of the proposal, vote against the proposal or abstain from voting.

The vote required to approve Proposal 2 is governed by Delaware law, our COI and our Amended and Restated Bylaws and is the affirmative vote of the holders of a majority of outstanding shares of Common Stock entitled to vote. As a result, abstentions and broker non-votes will have the same legal effect as voting against Proposal 2.

Proposal 3

In voting with regard to the proposal to approve, pursuant to Nasdaq Listing Rule 5635(d), the issuance of up to an aggregate of 110,000,000 shares of Common Stock in one or more non-public capital raising transactions at a price that may be less than the greater of book or market value of our Common Stock, you may vote in favor of the proposal, vote against the proposal or abstain from voting.

The vote required to approve Proposal 3 is governed by Delaware law, the Nasdaq Listing Rules, our COI and our Amended and Restated Bylaws and is the affirmative vote of the holders of a majority of the votes cast in person or by proxy at the Special Meeting, provided a quorum is present. As a result, abstentions will be considered in determining whether a quorum is present but will have no effect on the vote for Proposal 3.

Proposal 4

In voting with regard to the proposal to approve an amendment to the Company’s 2014 Stock Incentive Plan (the “2014 Plan”) to increase the number of shares of Common Stock authorized for issuance under the 2014 Plan by 41,060,000 shares, you may vote in favor of the proposal, vote against the proposal or abstain from voting.

The vote required to approve Proposal 4 is governed by Delaware law, the Nasdaq Listing Rules, our COI and our Amended and Restated Bylaws and is the affirmative vote of the holders of a majority of the votes cast in person or by proxy at the Special Meeting, provided a quorum is present.

As a result, abstentions will be considered in determining whether a quorum is present but will have no effect on the vote for Proposal 4.

Proposal 5

In voting with regard to the proposal to grant discretionary authority to adjourn the Special Meeting, if necessary, to solicit additional proxies in the event that there are not sufficient votes at the time of the Special Meeting to approve Proposals 1 through 4, you may vote in favor of the proposal, vote against the proposal or abstain from voting. The vote required to approve Proposal 5 is governed by Delaware law, our COI and our Amended and Restated Bylaws and is the affirmative vote of the holders of a majority of votes cast affirmatively or negatively (excluding abstentions and broker non-votes), provided a quorum is present. As a result, abstentions will be considered in determining whether a quorum is present but will have no effect on the vote for Proposal 5.

NO DISSENTERS' RIGHTS

The corporate action described in this Proxy Statement will not afford to stockholders the opportunity to dissent from the actions described herein and receive an agreed or judicially appraised value for their shares of Common Stock.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

The statements in this proxy statement that are not historical statements, including statements regarding future capital-raising activities and expected use of proceeds therefrom, our estimates regarding expenses, future revenues, capital requirements, needs for additional financing, our ability to obtain additional financing, our current inability to issue additional equity securities due to the limited number of authorized shares available for issuance under our certificate of incorporation, our success with regard to any business development initiatives, our ability to recruit or retain key scientific or management personnel or to retain our executive officers, our stock price and ability to meet the continued listing requirements of The NASDAQ Capital Market, and any other statements regarding our future expectations, beliefs, plans, objectives, financial conditions, assumptions or future events or performance that are not historical facts, are forward-looking statements within the meaning of the federal securities laws. These statements are subject to numerous risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from the results expressed or implied by the statements. We describe risks and uncertainties that could cause actual results and events to differ materially in the “Risk Factors” section of our annual report on Form 10-K for the year ended December 31, 2016 and Periodic Report on Form 10-Q for the period ended September 30, 2017 and in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” appearing elsewhere in this proxy statement. We undertake no obligation to update or revise publicly any forward-looking statements, whether because of new information, future events, or otherwise.

Any forward-looking statements should be considered in light of such important factors. We undertake no obligation to revise or update publicly any forward-looking statements for any reason. Readers are cautioned not to place undue reliance on any forward-looking statement, which speaks only as of the date on which such statement is made.

All subsequent written and oral forward-looking statements concerning the matters addressed in this proxy statement and attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this proxy statement.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding the beneficial ownership of shares of our Common Stock as of February 15, 2018 for:

- each person known to us to be the beneficial owner of more than 5% of our outstanding shares of Common Stock;
- each of our named executive officers;
- each of our directors; and
- all directors and named executive officers as a group.

Information with respect to beneficial ownership has been furnished by each director, executive officer or beneficial owner of more than 5% of our Common Stock. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting and investment power with respect to the securities. Except as otherwise provided by footnote, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them. The number of shares of Common Stock used to calculate the percentage ownership of each listed person includes the shares of Common Stock underlying options or warrants held by such persons that are currently exercisable or exercisable within 60 days of February 15, 2018, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

Percentage of beneficial ownership is based on 101,675,251 shares of Common Stock outstanding as of February 15, 2018, which includes 42,617,893 shares of our non-voting common stock that (x) become convertible at the option of the holder on April 1, 2018 or (y) automatically convert upon transfer to anyone that is not Nantucket Investments Limited or an affiliated investment fund. Each share of non-voting common stock is convertible into one share of Common Stock at the election of the holder thereof anytime on or after April 1, 2018 or automatically upon transfer to anyone that is not Nantucket Investments Limited or an affiliated investment fund.

Except as otherwise set forth below, the address of each beneficial owner listed in the table below is c/o Jaguar Health, Inc., 201 Mission Street, Suite 2375, San Francisco, California 94105.

<u>Name and address of beneficial owner</u>	<u>Number of Shares Beneficially Owned</u>	<u>Percentage of Shares Beneficially Owned</u>
5% Stockholders:		
Nantucket Investments Limited(1)	23,634,341	23.2%
Entities affiliated with Kingdon Capital Management L.L.C.(2)	16,709,864	16.4%
Invesco Ltd.	6,297,603	6.2%
Named executive officers and directors:		
James J. Bochnowski(3)	796,614	—*
Lisa A. Conte(4)	566,664	—*
Jiahao Qiu(5)	10,711	—*
Zhi Yang, Ph.D.(6)	1,573,147	—*
Folkert W. Kamphuis(7)	115,795	—*
Steven R. King, Ph.D.(8)	178,206	—*
John Micek III(9)	69,084	—*
Ari Azhir, Ph.D.(10)	40,854	—*
Karen S. Wright(11)	71,688	—*
Roger Waltzman	0	—*
All current executive officers and directors as a group (10 persons)(12)	3,422,763	3.3%

* Less than 1%.

- (1) Represents (i) 4,884,245 shares of Common Stock and (ii) 18,750,096 shares of Common Stock issuable upon conversion of shares of non-voting common stock that become convertible within 60 days of February 15, 2018.
- (2) Represents (i) 1,291,986 shares of Common Stock, (ii) 566,668 shares of Common Stock issuable upon exercise of warrants, and (iii) 10,946,312 shares of Common Stock issuable upon conversion of the Kingdon Notes owned by Kingdon Capital Management, L.L.C. and 3,904,901 shares of Common Stock issuable upon payment of accrued and unpaid interest on the Kingdon Notes in lieu of cash convertible at \$0.20 per share.
- (3) Includes (i) 587,576 shares of Common Stock, (ii) 110,150 shares of Common Stock issuable under stock options that are exercisable or will become exercisable within 60 days of February 15, 2018 and (iii) 98,888 shares of Common Stock issuable under warrants that are exercisable or will become exercisable within 60 days of February 15, 2018. All securities other than stock options are held by the Bochnowski Family Trust. Mr. Bochnowski is a co-trustee and beneficiary of such trust and shares voting and investment control over such shares with his spouse.
- (4) Represents 11,297 shares of Common Stock, and 555,367 shares of stock issuable under stock options that are exercisable or will become exercisable within 60 days of February 15, 2018.
- (5) Represents 10,711 shares of Common Stock issuable under stock options that are exercisable or will become exercisable within 60 days of February 15, 2018.
- (6) Represents 1,573,147 shares of Common Stock beneficially held by BVCF. Dr. Yang is the Chairperson, Founder, Managing Partner and sole shareholder of BVCF and he may be deemed to beneficially own all the shares held by BVCF.
- (7) Represents 115,795 shares of Common Stock issuable under stock options that are exercisable or will become exercisable within 60 days of February 15, 2018.
- (8) Represents 6,636 shares of Common Stock, and 171,570 shares of Common Stock issuable under stock options that are exercisable or will become exercisable within 60 days of February 15, 2018.
- (9) Represents 69,084 shares of Common Stock issuable under stock options that are exercisable or will become exercisable within 60 days of February 15, 2018.
- (10) Represents 40,854 shares of Common Stock issuable under stock options that are exercisable or will become exercisable within 60 days of February 15, 2018.
- (11) Represents 71,688 shares of Common Stock issuable under stock options that are exercisable or will become exercisable within 60 days of February 15, 2018.
- (12) See footnotes (3) - (11).

**PROPOSAL 1—TO APPROVE AN AMENDMENT TO OUR THIRD AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES
OF COMMON STOCK**

At the Special Meeting, holders of our Common Stock will be asked to approve an amendment to our Third Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 250 million shares to 500 million shares.

Background

Our Third Amended and Restated Certificate of Incorporation (the “COI”) currently authorizes us to issue a total of 250,000,000 shares of common stock, \$0.0001 par value (the “Common Stock”), 50,000,000 shares of non-voting common stock, \$0.0001 par value, and 10,000,000 shares of preferred stock, \$0.0001 par value. The Board has approved, and is seeking stockholder approval of, an amendment to our COI (the “Amendment”) to implement an increase in the number of shares of authorized Common Stock from 250,000,000 shares to 500,000,000 shares.

The Board is proposing the Amendment, in substantially the form attached hereto as *Annex A*, to (i) increase the number of authorized shares of our Common Stock from 250,000,000 shares to 500,000,000 shares and (ii) authorize the Board to effect a reverse stock split of our outstanding shares of Common Stock as described in Proposal 2 further below. Of the 250,000,000 shares of Common Stock currently authorized by the COI, as of February 15, 2018, 82,925,155 shares are issued and outstanding, 4,820,025 shares are reserved for issuance upon exercise of existing stock purchase warrants, 9,386,543 shares are reserved for future issuance under existing equity incentive awards and 94,995 shares are available for grant under the Company’s 2014 Stock Incentive Plan. Therefore, we currently have limited authorized shares of Common Stock available for future issuance.

The Board has unanimously determined that the Amendment is advisable and in the best interests of the company and our stockholders, and recommends that our stockholders approve the Amendment. In accordance with the General Corporation Law of the State of Delaware (the “DGCL”), we are hereby seeking approval of the Amendment by our stockholders.

No changes to the Certificate are being proposed with respect to the number of authorized shares of non-voting common stock or preferred stock. Other than the proposed increase in the number of authorized shares of common stock, the Amendment is not intended to modify the rights of existing stockholders in any material respect. The additional shares of Common Stock to be authorized pursuant to the proposed amendment will be of the same class of Common Stock as is currently authorized under our COI.

Under the DGCL, our stockholders are not entitled to appraisal rights with respect to the proposed amendment to our COI to increase the number of authorized shares of Common Stock, and we will not independently provide stockholders with any such rights.

Bifurcation of Proposal 1 and Proposal 2

While the Amendment reflects the proposed amendments to our COI described in both Proposal 1 and Proposal 2, the approval of one proposal is not conditioned on the approval of the other proposal. To the extent that only one of these two proposals is approved by stockholders, we will only include the language relating to the proposal that was approved in the version of the Amendment that we file with the Secretary of State of the State of Delaware.

Reasons for the Amendment

The Board believes that the proposed increase in the number of authorized shares of Common Stock will benefit us by providing the shares needed to raise additional capital to execute our business

plan as well as improving our flexibility in responding to future business opportunities. The additional authorized shares will be available for issuance from time to time to enable us to respond to future business opportunities requiring the issuance of shares, the consummation of Common Stock-based financings, acquisition or strategic joint venture transactions involving the issuance of Common Stock, or for other general purposes that the Board may deem advisable. In recent months, we have explored opportunities to raise funds from strategic or financial partners and determined that any such potential investment would require an increase in the number of authorized shares. We are seeking approval for the amendment at this time because opportunities requiring prompt action may arise in the future, and the Board believes the delay and expense in seeking approval for additional authorized Common Stock at a special meeting of stockholders could deprive us of the ability to take advantage of potential opportunities.

Without an increase in the number of authorized shares of Common Stock, we may be constrained in our ability to raise capital, may not be able to fund our operations, may not comply with our debt covenants and may lose important business opportunities, which could adversely affect our financial performance and growth.

In determining the size of the proposed authorized share increase, the Board considered a number of factors, including the amount of capital needed to fund our operations, the potential terms needed to raise additional capital including the potential issuance of warrants to purchase Common Stock associated with equity financings and that over a number of years we may potentially need additional shares in connection with future equity transactions, acquisitions or other strategic transactions. Aside from (i) preliminary discussions with potential investors regarding the proposed issuance of Common Stock in one or more non-public capital raising transactions described in Proposal 3, which may or may not occur and for which no definitive plans are currently in place, and (ii) the proposed increase to the number of shares of Common Stock authorized under the Company's 2014 Stock Incentive Plan by up to 41,060,000 shares as described in Proposal 4, we currently have no specific plans, proposals or arrangements to issue any of the newly authorized securities should stockholders approve this Proposal 1. If the stockholders do not approve this proposal, then we will not have the needed additional shares available to raise the capital to execute our business plan and we may default on our debt covenants in the future.

The Board does not intend to issue any Common Stock except on terms which the Board deems to be in the best interests of the company and our then existing stockholders.

Potential Effects of the Amendment

The proposed increase in the number of authorized shares of Common Stock will not have any immediate effect on the rights of our existing stockholders. The Board will have the authority to issue the additional shares of Common Stock without requiring future stockholder approval of such issuances, except as may be required by applicable law or rules of any stock exchange on which our securities may be listed. The issuance of additional shares of Common Stock will decrease the relative percentage of equity ownership of our existing stockholders, thereby diluting the voting power of their Common Stock, and, depending on the price at which additional shares may be issued, could also be dilutive to the earnings per share of our Common Stock.

It is possible that a subsequent issuance of these shares could have the effect of delaying or preventing a change in control of the Company. Shares of authorized and unissued Common Stock could, within the limits imposed by applicable law, be issued in one or more transactions that would make a change in control of the Company more difficult, and therefore, less likely. Issuances of additional shares of our Common Stock could dilute the earnings per share and book value per share of our outstanding Common Stock and dilute the stock ownership or voting rights of a person seeking to obtain control of the Company. While it may be deemed to have potential anti-takeover effects, the

proposal to increase the authorized Common Stock is not prompted by any specific effort of which we are aware to accumulate shares of our Common Stock or obtain control of the Company.

The additional authorized shares of Common Stock, if and when issued, would be part of the existing class of Common Stock and would have the same rights and privileges as the shares of Common Stock currently outstanding. Stockholders do not have preemptive rights with respect to our Common Stock. Therefore, should the Board determine to issue additional shares of Common Stock, existing stockholders would not have any preferential rights to purchase such shares in order to maintain their proportionate ownership thereof.

Effectiveness of Amendment

If the Amendment is approved by our stockholders, it will become effective upon the filing of an amendment to our COI, which filing is expected to occur promptly after stockholder approval of this proposal. The text of *Annex A* remains subject to modification to include such changes as may be required by the Secretary of State of the State of Delaware and as the Board deems necessary or advisable to implement the increase in our authorized shares.

Required Vote of Stockholders

To approve the increase in the number of authorized shares of Common Stock, the affirmative vote of the holders of a majority of the outstanding shares of Common Stock as of the record date, present in person or by remote communication, if applicable, or represented by proxy at the Special Meeting, voting together as a single class and entitled to vote, is required. Because approval is based on the affirmative vote of a majority of the outstanding shares of Common Stock entitled to vote, a holder's failure to vote in person or by proxy at the special meeting, an abstention from voting, or the failure of a holder of Common Stock who holds his or her shares in "street name" through a broker or other nominee to give voting instructions to such broker or other nominee, will have the same effect as a vote "AGAINST" adoption of this proposal.

The Board of Directors unanimously recommends that the stockholders vote "FOR" Proposal No. 1 to amend our Third Amended and Restated Certificate of Incorporation to increase the number of authorized shares of Common Stock from 250,000,000 to 500,000,000.

PROPOSAL 2—TO APPROVE AN AMENDMENT TO OUR THIRD AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT AT A RATIO OF NOT LESS THAN 1-FOR-1.2 AND NOT GREATER THAN 1-FOR-10, WITH THE EXACT RATIO, IF EFFECTED AT ALL, TO BE SET WITHIN THAT RANGE AT THE DISCRETION OF OUR BOARD OF DIRECTORS BEFORE JUNE 30, 2018 WITHOUT FURTHER APPROVAL OR AUTHORIZATION OF OUR STOCKHOLDERS

At the Special Meeting, holders of our Common Stock will be asked to approve an amendment to our Third Amended and Restated Certificate of Incorporation to effect a reverse stock split of our issued and outstanding Common Stock by a numerical ratio of not less than 1-for-1.2 and not more than 1-for-10, such ratio and the implementation and timing of such reverse stock split to be determined in the discretion of the Board. A reverse stock split would reduce the number of outstanding shares of our Common Stock, and the holdings of each stockholder, according to the same formula.

If the proposal is approved, the Board's present intention is to effect a reverse stock split of our issued and outstanding Common Stock by a numerical ratio of not less than 1-for-1.2 and not more than 1-for-10 on or prior to June 30, 2018. We are requesting authorization to effect the reverse stock split at the Board's discretion at any time prior to June 30, 2018 to provide the Board with the flexibility to determine the appropriate ratio for, and timing to effect, the reverse stock split based upon our performance and market factors. However, the Board reserves its right to elect not to proceed and abandon the reverse stock split if it determines, in its sole discretion, that this proposal is no longer in the best interests of our stockholders.

Background

The form of the proposed amendment to our COI (i) to effect the reverse stock split and (ii) increase the number of authorized shares of our Common Stock from 250,000,000 shares to 500,000,000 shares as described in Proposal 1 is attached to this proxy statement as *Annex A*. With respect to this Proposal 2, the Amendment will effect a reverse stock split of our Common Stock using a split ratio between, and including, 1-for-1.2 and 1-for-10, with the actual ratio within this range to be selected by the Board following stockholder approval. The Board believes that stockholder approval of a range of potential split ratios (rather than a single split ratio) provides the Board with the flexibility to achieve the desired results of the reverse stock split. The reverse stock split, if approved and implemented, would not have any effect on the authorized number of shares of our Common Stock or preferred stock. If the stockholders approve this proposal, the reverse stock split will be effected only upon a determination by the Board that the reverse stock split is in the best interests of the stockholders at that time. In connection with any determination to effect the reverse stock split, the Board will set the timing for such a split and select the specific ratio from within the range of ratios set forth herein. If the Board does not implement the reverse stock split on or before the day prior to June 30, 2018, the authority granted in this proposal to implement the reverse stock split on these terms will terminate. The Board reserves its right to elect not to proceed with and to abandon the reverse stock split if it determines, in its sole discretion, that this proposal is no longer in the best interests of the stockholders. No further action by the stockholders will be required for the Board to either implement or abandon the reverse stock split.

Bifurcation of Proposal 1 and Proposal 2

While the Amendment reflects the proposed amendments to our COI described in both Proposal 1 and Proposal 2, the approval of one proposal is not conditioned on the approval of the other proposal. To the extent that only one of these two proposals is approved by stockholders, we will only include the language relating to the proposal that was approved in the version of the Amendment that we file with the Secretary of State of the State of Delaware.

Reasons for the Reverse Stock Split

The Board authorized the resolution to seek stockholder approval to effect the reverse split of our Common Stock with the primary intent of increasing the price of our Common Stock in order to meet The NASDAQ Capital Market's minimum price per share criteria for continued listing on that exchange. Our Common Stock is publicly traded and listed on The NASDAQ Capital Market under the symbol "JAGX." The Board believes that, in addition to increasing the price of our Common Stock, the reverse stock split would also reduce certain of our costs, such as NASDAQ listing fees, and make our Common Stock more attractive to a broader range of institutional and other investors. The combination of lower transaction costs and increased interest from institutional investors and investment funds may ultimately improve the trading liquidity of our Common Stock. Accordingly, we believe that authority granted to the Board to effect the reverse stock split is in the Company's and the stockholders' best interests.

On May 16, 2017, we received a letter from the Listing Qualifications Department of NASDAQ notifying us that we were not in compliance with Nasdaq Listing Rule 5550(a)(2), as the minimum bid price for the Company's listed securities was less than \$1 for the previous 30 consecutive business days. Since we did not regain compliance with the minimum bid price requirement during the initial 180 calendar day grace period, on November 13, 2017, we requested and were granted a second 180 calendar day grace period, or until May 14, 2018, to regain compliance with the minimum bid price requirement.

In addition to establishing a mechanism for the price of our Common Stock to meet the NASDAQ's minimum bid price requirement, we also believe that the reverse stock split will make our Common Stock more attractive to a broader range of institutional and other investors. It is our understanding that the current market price of our Common Stock may affect its acceptability to certain institutional investors, professional investors and other members of the investing public. It is also our understanding that many brokerage houses and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers. In addition, some of those policies and practices may function to make the processing of trades in low-priced stocks economically unattractive to brokers. Moreover, because brokers' commissions on low-priced stocks generally represent a higher percentage of the stock price than commissions on higher-priced stocks, the current average price per share of our Common Stock can result in individual stockholders paying transaction costs representing a higher percentage of their total share value than would be the case if the share price were substantially higher. However, some investors may view the reverse stock split negatively because it reduces the number of shares of Common Stock available in the public market.

Reducing the number of outstanding shares of our Common Stock through the reverse stock split is intended, absent other factors, to increase the per share market price of our Common Stock. However, other factors, such as our financial results, market conditions and the market perception of our business may adversely affect the market price of our Common Stock. As a result, there can be no assurance that the reverse stock split, if completed, will result in the intended benefits described above, that the market price of our Common Stock will increase following the reverse stock split, that the market price of our Common Stock will not decrease in the future, or that our Common Stock will achieve a high enough price per share to permit its continued listing by NASDAQ.

Certain Risks Associated with the Reverse Stock Split

In evaluating a reverse stock split, the Board also took into consideration certain risks associated with reverse stock splits, including the negative perception of reverse stock splits held by some investors, analysts and other stock market participants, the fact that the stock price of some companies

that have effected reverse stock splits has subsequently declined back to pre-reverse stock split levels, and the risks described below.

There can be no assurance that the total market capitalization of our Common Stock (the aggregate value of our Common Stock at the then market price) after the implementation of a reverse stock split will be equal to or greater than the total market capitalization before the reverse stock split or that the per share market price of our Common Stock following a reverse stock split will increase in proportion to the reduction in the number of shares of our Common Stock outstanding before the reverse stock split.

There can be no assurance that the market price per new share of our Common Stock after a reverse stock split will remain unchanged or increase in proportion to the reduction in the number of shares of our Common Stock outstanding before the reverse stock split. For example, based on the closing price of our Common Stock on February 2, 2018, of \$0.15 per share, if the Board were to implement the reverse stock split and utilize a ratio of 1-for-7, we cannot assure you that the post-split market price of our Common Stock would be \$1.05 (that is, \$0.15 multiplied by 7) per share or greater. The market price of a company's shares may fluctuate and potentially decline after a reverse stock split.

Accordingly, the total market capitalization of our Common Stock after a reverse stock split when and if implemented may be lower than the total market capitalization before the reverse stock split. Moreover, in the future, the market price of our Common Stock following a reverse stock split may not exceed or remain higher than the market price prior to the reverse stock split.

If a reverse stock split is effected, the resulting per-share market price may not attract institutional investors or investment funds and may not satisfy the investing guidelines of such investors and, consequently, the trading liquidity of our common stock may not improve.

While the Board believes that a higher stock price may help generate investor interest, there can be no assurance that a reverse stock split will result in a per-share market price that will attract institutional investors or investment funds or that such share price will satisfy the investing guidelines of institutional investors or investment funds. As a result, the trading liquidity of our Common Stock may not necessarily improve.

A decline in the market price of our Common Stock after a reverse stock split is implemented may result in a greater percentage decline than would occur in the absence of a reverse stock split.

If a reverse stock split is effected and the market price of our Common Stock declines, the percentage decline may be greater than would occur in the absence of a reverse stock split. The market price of our Common Stock will, however, also be based upon our performance and other factors, which are unrelated to the number of shares of Common Stock outstanding.

Effecting the Reverse Stock Split; Board Discretion to Implement Reverse Stock Split

If approved by stockholders at the Special Meeting and the Board decides that it is in the best interests of the Company and our stockholders to effect the reverse stock split, the Board will establish an appropriate ratio for the reverse stock split based on several factors existing at such time and we will subsequently file the Amendment. The Board will consider, among other factors, prevailing market conditions, the likely effect of the reverse stock split on the trading price of our Common Stock and on our compliance with applicable NASDAQ listing requirements, and the marketability and liquidity of our Common Stock. The Board will determine the timing of the filing of the Amendment with the Secretary of State of the State of Delaware to effect the reverse stock split. If, for any reason, the Board of Directors deems it advisable, the Board in its sole discretion, may abandon the reverse stock split at any time prior to the effectiveness of any filing of the Amendment, without further action by our stockholders. The reverse stock split will be effective as of the date and time set forth in the Amendment (the "Effective Time").

Upon the filing of the Amendment, without further action on the part of the Company or our stockholders, the outstanding shares of Common Stock held by stockholders of record as of the Effective Time would be converted into a lesser number of shares of Common Stock calculated in accordance with the terms of the Amendment, based on a reverse split ratio within the range of 1-for-1.2 and 1-for-10. In the event of a reverse stock split at a ratio of 1-for-7, for example, if a stockholder holds 700 shares of Common Stock as of the Effective Time, such stockholder would hold 100 shares of Common Stock following such reverse stock split.

Effect on Outstanding Shares, Options, and Certain Other Securities

If the reverse stock split is implemented, the number of shares of our Common Stock owned by each stockholder will be reduced in the same proportion as the reduction in the total number of shares outstanding, such that the percentage of our Common Stock owned by each stockholder will remain unchanged, except for any de minimis change resulting from the treatment of any fractional shares that such stockholder would have received as a result of the reverse stock split. The number of shares of Common Stock that may be received upon conversion, exercise or exchange, as the case may be, of outstanding options or other securities convertible into, or exercisable or exchangeable for, shares of our Common Stock, and the exercise or conversion prices for these securities, will also be adjusted in accordance with their terms, as of the Effective Time.

Effect on Registration and Stock Trading

Our Common Stock is currently registered under Section 12(b) of the Exchange Act and we are subject to the periodic reporting and other requirements of the Exchange Act. The proposed reverse stock split will not affect the registration of our Common Stock under the Exchange Act. If the reverse stock split is effected, our Common Stock will receive a new CUSIP number.

Mechanics of Reverse Split

If this Proposal 2 is approved by the stockholders at the Special Meeting and the Board decides that it is in the best interests of the Company and our stockholders to effectuate the reverse stock split, our stockholders will be notified that the reverse stock split has been effected. The mechanics of the reverse stock split will differ depending upon whether a stockholder holds its shares of Common Stock in brokerage accounts or “street name” or whether the shares are registered directly in a stockholder’s name and held in book-entry form or certificate form.

- Our stockholders who hold shares of Common Stock in “street name” through a nominee (such as a bank or broker) will be treated in the same manner as stockholders whose shares are registered in their names, and nominees will be instructed to effect the reverse stock split for their beneficial holders. However, nominees may have different procedures for processing the reverse stock split and stockholders holding shares in “street name” are encouraged to contact their nominees.
- Our registered stockholders may hold some or all of their shares of Common Stock electronically in book-entry form under the direct registration system for securities. These stockholders will not have stock certificates evidencing their ownership of our Common Stock. They are, however, provided with a statement reflecting the number of shares registered in their accounts. Stockholders holding registered shares of our Common Stock in book-entry form need not take any action to receive post-reverse stock split shares as a transaction statement will automatically be sent to the stockholder’s address of record indicating the number of shares held.
- Some of our registered stockholders hold all their shares of Common Stock in certificate form or a combination of certificate and book-entry form. Stockholders holding shares of Common

Stock in certificate form will receive a transmittal letter from Computershare Trust Company, N.A. (the “Transfer Agent”) as soon as practicable after the Effective Date of the reverse stock split for use in transmitting the existing certificates representing shares of our Common Stock (the “Old Certificates”) to the Transfer Agent. The letter of transmittal will contain instructions for the surrender of the Old Certificates to the Transfer Agent in exchange for new certificates representing the appropriate number of whole shares of new Common Stock giving effect to the reverse stock split. No new stock certificates will be issued to any stockholder until such stockholder has surrendered all certificates, together with a properly completed and executed Letter of Transmittal, to the Transfer Agent. The stockholders will then receive, at their option, either a new certificate or certificates or book-entry shares representing the number of whole shares of Common Stock into which their pre-reverse stock split shares have been converted as a result of the reverse stock split. Until surrendered, we will deem outstanding Old Certificates held by stockholders to be cancelled and only to represent the number of whole shares of post-reverse stock split Common Stock to which the stockholders are entitled.

STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATE(S) AND SHOULD NOT SUBMIT ANY CERTIFICATE(S) UNTIL REQUESTED TO DO SO.

Treatment of Fractional Shares

We do not currently intend to issue fractional shares in connection with the reverse stock split. Therefore, we will not issue certificates representing fractional shares. In lieu of issuing fractions of shares, we will round up to the next whole number.

Effect on Authorized but Unissued Shares of Capital Stock

Currently, we are authorized to issue up to a total of 250,000,000 shares of Common Stock, of which 82,925,155 shares were issued and outstanding as of the record date, 50,000,000 shares of non-voting common stock, of which 42,617,893 shares were issued and outstanding as of the record date, and 10,000,000 shares of preferred stock, none of which were issued and outstanding as of the record date. The reverse stock split, if approved and implemented, would not have any effect on the authorized number of shares of our Common Stock, non-voting common stock or preferred stock; provided, however, that stockholder approval of Proposal 1 will result in an increase in the number of authorized shares to the number described in Proposal 1. Proportionately, the reverse stock split would increase the ratio between our authorized capital stock and our issued capital stock. This means that, subject to the limits imposed by NASDAQ Listing Rule 5635(d) (discussed in Proposal 3), the Board could issue a relatively larger amount of capital stock without additional action by our stockholders. Aside from (i) preliminary discussions with potential investors regarding the proposed issuance of Common Stock in one or more non-public capital raising transactions described in Proposal 3, which may or may not occur and for which no definitive plans are currently in place, and (ii) the proposed increase to the number of shares of Common Stock authorized under the Company’s 2014 Stock Incentive Plan by up to 41,060,000 shares as described in Proposal 4, we currently have no specific plans, proposals or arrangements with respect to the newly authorized shares that will be available as a result of the reverse stock split, assuming this Proposal 2 is approved and the Board elects to conduct such reverse stock split. The issuance of additional shares of our capital stock would dilute the voting and economic rights of our existing stockholders. Additionally, the ability to issue a relatively larger amount of capital stock could allow our Board to take certain actions which would discourage hostile takeover attempts. The ability to resist takeover attempts could also allow the Board greater power to resist or delay changes in control or the removal of our management team. The Board would consider any takeover attempts and proposed changes in control or management, and would act in accordance with our stockholders’ best interests, as determined by the exercise of the directors’ business judgment.

Accounting Consequences

The reverse stock split will not affect the par value of our Common Stock per share, which will remain \$0.0001 par value per share. As a result, as of the Effective Time, the total of the stated capital attributable to Common Stock and the additional paid-in capital account on our balance sheet will not change due to the reverse stock split. Reported per share net income or loss will be higher because there will be fewer shares of Common Stock outstanding.

No Going Private Transaction

Notwithstanding the decrease in the number of outstanding shares following the implementation of the reverse stock split, the Board does not intend for this transaction to be the first step in a “going private transaction” within the meaning of Rule 13e-3 of the Exchange Act, and the implementation of the proposed reverse stock split will not cause the Company to go private.

No Dissenter’s Rights

Under the DGCL, stockholders will not be entitled to dissenter’s rights with respect to the proposed Amendment to effect the reverse stock split, and we do not intend to independently provide stockholders with any such right.

Reservation of Right to Abandon the Amendment to our Third Amended and Restated Certificate of Incorporation

The Board reserves the right to abandon the Amendment described in this Proposal 2 without further action by our stockholders at any time before the Effective Time, even if stockholders approve the Amendment at the special meeting of stockholders. By voting in favor of the Amendment to our COI, stockholders are also expressly authorizing the Board to determine not to proceed with, and abandon, a reverse stock split if it should so decide.

Material U.S. Federal Income Tax Consequences of the Reverse Stock Split

The following discussion is a summary of the material U.S. federal income tax consequences of the proposed reverse stock split to U.S. Holders (as defined below) of our Common Stock. This discussion is based on the Internal Revenue Code of 1986, as amended (the “Code”), U.S. Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service (the “IRS”), in each case in effect as of the date of this proxy statement. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a U.S. Holder. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below and there can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the proposed reverse stock split.

For purposes of this discussion, a “U.S. Holder” is a beneficial owner of our Common Stock that, for U.S. federal income tax purposes, is or is treated as (i) an individual who is a citizen or resident of the United States; (ii) a corporation (or any other entity or arrangement treated as a corporation) created or organized under the laws of the United States, any state thereof, or the District of Columbia; (iii) an estate, the income of which is subject to U.S. federal income tax regardless of its source; or (iv) a trust if (1) its administration is subject to the primary supervision of a court within the United States and all of its substantial decisions are subject to the control of one or more “United States persons” (within the meaning of Section 7701(a)(30) of the Code), or (2) it has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

This discussion is limited to U.S. Holders who hold our Common Stock as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to the particular circumstances of a U.S. Holder, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to U.S. Holders that are subject to special rules, including, without limitation, financial institutions, insurance companies, real estate investment trusts, regulated investment companies, grantor trusts, tax-exempt organizations, brokers, dealers or traders in securities, commodities or currencies, stockholders who hold our Common Stock as part of a position in a straddle or as part of a hedging, conversion or integrated transaction for U.S. federal income tax purposes, U.S. Holders that have a functional currency other than the U.S. dollar, or U.S. Holders who actually or constructively own 10% or more of our voting stock.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) is the beneficial owner of our Common Stock, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner and the activities of the partnership. Accordingly, partnerships (and other entities treated as partnerships for U.S. federal income tax purposes) holding our Common Stock and the partners in such entities should consult their own tax advisors regarding the U.S. federal income tax consequences of the proposed reverse stock split to them.

In addition, the following discussion does not address the U.S. federal estate and gift tax, alternative minimum tax, or state, local and non-U.S. tax law consequences of the proposed reverse stock split. Furthermore, the following discussion does not address any tax consequences of transactions effectuated before, after or at the same time as the proposed reverse stock split, whether or not they are in connection with the proposed reverse stock split.

Each stockholder should consult his, her or its own tax advisors concerning the particular U.S. federal tax consequences of the reverse stock split, as well as the consequences arising under the laws of any other taxing jurisdiction, including any state, local or foreign income tax consequences.

The proposed reverse stock split is intended to be treated as a “recapitalization” for U.S. federal income tax purposes pursuant to Section 368(a)(1)(E) of the Code. As a result, a U.S. Holder generally should not recognize gain or loss upon the proposed reverse stock split for U.S. federal income tax purposes. A U.S. Holder’s aggregate adjusted tax basis in the shares of our Common Stock received pursuant to the proposed reverse stock split should equal the aggregate adjusted tax basis of the shares of our Common Stock exchanged therefor. The U.S. Holder’s holding period in the shares of our Common Stock received pursuant to the proposed reverse stock split should include the holding period in the shares of our Common Stock exchanged therefor. However, a U.S. Holder who receives a whole share of Common Stock in lieu of a fractional share generally may recognize gain in an amount not to exceed the excess of the fair market value of such whole share over the fair market value of the fractional share to which such U.S. Holder was otherwise entitled. Any such recognition of gain may affect the holding period and adjusted tax basis of such U.S. Holder’s whole share received in lieu of a fractional share. U.S. Treasury Regulations provide detailed rules for allocating the tax basis and holding period of shares of Common Stock surrendered in a recapitalization to shares received in the recapitalization. U.S. Holders of shares of our Common Stock acquired on different dates and at different prices should consult their tax advisors regarding the allocation of the tax basis and holding period of such shares.

The U.S. federal income tax discussion set forth above does not discuss all aspects of U.S. federal income taxation that may be relevant to a particular stockholder in light of such stockholder’s circumstances and income tax situation. Accordingly, we urge you to consult with your own tax advisor with respect to all of the potential U.S. federal, state, local and foreign tax consequences to you of the reverse stock split.

Consequences if the Reverse Split is Not Approved

In the event that the reverse stock split is not approved, we intend to actively monitor the trading price of our Common Stock on The NASDAQ Capital Market and will consider available options to resolve our non-compliance with the Nasdaq listing rules. We believe that our ability to remain listed on The NASDAQ Capital Market would be significantly and negatively affected if the reverse stock split is not approved. If we are unable to achieve an increase in our stock price and our Common Stock is subsequently delisted, we could experience significant negative impacts including the acceleration of our outstanding debt with Kingdon Capital Management L.L.C. In addition, if our Common Stock is delisted it will significantly and negatively affect our ability to obtain alternative debt or equity financing in order to support Company operations.

Required Vote of Stockholders

To approve the amendment of our Third Amended and Restated Certificate of Incorporation to effect the reverse stock split at a ratio of not less than 1-for-1.2 and not greater than 1-for-10, with the exact ratio, if effected at all, to be set within that range at the discretion of the Board before June 30, 2018, without further approval or authorization of our stockholders, the affirmative vote of the holders of a majority of the outstanding shares of Common Stock as of the record date, present in person or by remote communication, if applicable, or represented by proxy at the Special Meeting, voting together as a single class and entitled to vote, is required. Because approval is based on the affirmative vote of a majority of the outstanding shares of Common Stock entitled to vote, a holder's failure to vote in person or by proxy at the special meeting, an abstention from voting, or the failure of a holder of Common Stock who holds his or her shares in "street name" through a broker or other nominee to give voting instructions to such broker or other nominee, will have the same effect as a vote "AGAINST" adoption of this proposal.

The Board of Directors unanimously recommends that the stockholders vote "FOR" Proposal No. 2 to effect a reverse stock split at a ratio of not less than 1-for-1.2 and not greater than 1-for-10, with the exact ratio, if effected at all, to be set within that range at the discretion of the Board of Directors before June 30, 2018, without further approval or authorization of our stockholders.

**PROPOSAL 3—TO APPROVE, PURSUANT TO NASDAQ LISTING RULE 5635(D), THE ISSUANCE
JAGUAR COMMON STOCK IN ONE OR MORE NON-PUBLIC CAPITAL RAISING
TRANSACTIONS AT A PRICE THAT MAY BE LESS THAN THE GREATER OF BOOK OR
MARKET VALUE OF OUR COMMON STOCK**

At the Special Meeting, holders of our Common Stock will be asked to approve, pursuant to Nasdaq Listing Rule 5635(d), the issuance of our Common Stock in one or more non-public capital raising transactions at a price that may be less than the greater of book or market value of our Common Stock.

Background

The Board is seeking advance stockholder approval as required by Nasdaq Listing Rule 5635(d) to enable us to issue shares of Common Stock in one or more non-public capital raising transactions and to provide the Board with the flexibility to enter into and close such non-public capital raising transactions on a timely basis.

Stockholder Approval Requirement

Pursuant to Nasdaq Listing Rule 5635(d), stockholder approval is required prior to the issuance of securities in connection with a transaction other than a public offering involving: (i) the sale, issuance or potential issuance by us of Common Stock (or securities convertible into or exercisable for Common Stock) at a price less than the greater of book or market value which together with sales by our officers, directors or substantial stockholders equals 20% or more of Common Stock or 20% or more of the voting power outstanding before the issuance; or (ii) the sale, issuance or potential issuance by us of Common Stock (or securities convertible into or exercisable common stock) equal to 20% or more of the Common Stock or 20% or more of the voting power outstanding before the issuance for less than the greater of book or market value of the stock. The per share price of our Common Stock for which we obtain future commitments, if any, in connection with a potential private placement is likely to be less than the greater of book or market value.

As a result, we are seeking advance stockholder approval for the sale and issuance of such shares in connection with potential non-public capital raising transactions pursuant to the Nasdaq Listing Rule 5635(d). We may seek to raise additional capital to implement our business strategy and enhance our overall capitalization. Moreover, our audited financial statements for the fiscal year ended December 31, 2016 were prepared on the basis that we will continue as a going concern and, given our financial position, we will need additional financing to continue in operation.

We have not determined the particular terms for such prospective offerings. Because we may seek additional capital that triggers the requirements of Nasdaq Listing Rule 5635(d), we are seeking stockholder approval now, so that we will be able to move quickly to take full advantage of any opportunities that may develop in the equity markets.

Specifically, we are seeking stockholder approval, for the purpose of compliance with the Nasdaq Listing Rule 5635(d), for the potential issuance of shares subject to the following limitations approved by our Board:

- potential issuance not to exceed 110,000,000 shares of our Common Stock (including pursuant to preferred stock, options, warrants, convertible debt or other securities exercisable for or convertible into Common Stock);
- the total aggregate consideration will not exceed \$15 million;
- at a maximum discount of 42% below the greater of book or market value of our Common Stock at the time of issuance;

- such issuances must occur, if at all, within the six-week period commencing on the date of the approval by the stockholders; and
- upon such terms as the Board shall deem to be in our best interests.

We have initiated the process of identifying potential investors and opportunities, but have not arrived at any specific terms. As a result, the price of the securities issued in the potential offering has not been determined but is likely (on a per share equivalent) to be less than the greater of book value or market value of our Common Stock. The final terms of any such transaction will be determined by the Board. If this proposal is approved, we will not solicit further authorization from our stockholders prior to any such capital raising transaction.

Potential Effects of this Proposal

The issuance of additional shares of Common Stock will decrease the relative percentage of equity ownership of our existing stockholders, thereby diluting the voting power of their Common Stock, and, depending on the price at which additional shares may be issued, could also be dilutive to the earnings per share of our Common Stock. It is possible that a subsequent issuance of these shares could have the effect of delaying or preventing a change in control of the Company. Shares of authorized and unissued Common Stock could, within the limits imposed by applicable law, be issued in one or more transactions that would make a change in control of the Company more difficult, and therefore, less likely. Issuances of additional shares of our Common Stock could dilute the earnings per share and book value per share of our outstanding Common Stock and dilute the stock ownership or voting rights of a person seeking to obtain control of the Company. While it may be deemed to have potential anti-takeover effects, the proposal to authorize the Board to issue additional shares of common stock is not prompted by any specific effort of which we are aware to accumulate shares of our common stock or obtain control of the Company.

The additional authorized shares of Common Stock, if and when issued, would be part of the existing class of Common Stock and would have the same rights and privileges as the shares of Common Stock currently outstanding. Stockholders do not have preemptive rights with respect to our Common Stock. Therefore, should the Board determine to issue additional shares of Common Stock, existing stockholders would not have any preferential rights to purchase such shares in order to maintain their proportionate ownership thereof.

The Board has not yet determined the terms and conditions of any offerings. As a result, the level of potential dilution cannot be determined at this time, but as discussed above, we may not issue more than 110,000,000 shares of Common Stock in the aggregate pursuant to the authority requested from stockholders under this proposal. It is possible that if we conduct a non-public capital raising transaction, some of the shares we sell could be purchased by one or more investors who could acquire a large block of our Common Stock. This may concentrate voting power in the hands of a few stockholders who may then be able to exercise greater influence on our operations or the outcome of matters put to a vote of stockholders in the future.

We cannot determine what the actual net proceeds of any transactions contemplated by this proposal would be at this time, but as discussed above, the aggregate dollar amount of the non-public offerings will be no more than \$15 million. If such a proposed transaction is completed, the net proceeds will be used for the commercialization of Mytesi, the FDA-approved anti-secretory human prescription drug product of our wholly-owned subsidiary, Napo Pharmaceuticals, Inc. (“Napo”), and general corporate purposes. We currently have no arrangements or understandings regarding any specific transaction to be effected pursuant to the approval of this proposal, so we cannot predict whether we will be successful should we seek to raise capital through any such offerings.

Effectiveness of this Proposal

If this proposal is approved by our stockholders, it will become effective immediately and will remain in force until the earlier of (i) six weeks from the date of such stockholder approval or (ii) such time that the Board may issue the maximum amount of authorized shares approved in this proposal.

Required Vote of Stockholders

To approve the issuance of Common Stock in one or more non-public capital raising transactions at a price that may be less than the greater of book or market value of our Common Stock, the affirmative vote of the holders of a majority of shares of votes cast, in person or by remote communication, if applicable, or represented by proxy at the Special Meeting, voting together as a single class and entitled to vote, is required. As this vote is a non-routine matter under applicable rules, your bank, broker or other nominee cannot vote without instructions from you. Although failure to submit a proxy or vote in person at the special meeting, or a failure to provide your broker, nominee, fiduciary or other custodian, as applicable, with instructions on how to vote your shares will not affect the outcome of the vote on this proposal, the failure to submit a proxy or vote in person at the Special Meeting will make it more difficult to meet the requirement under our bylaws that the holders of a majority of our capital stock issued and outstanding and entitled to vote at the Special Meeting be present in person or by proxy to constitute a quorum at the Special Meeting.

The Board of Directors unanimously recommends that the stockholders vote “FOR” Proposal No. 3 to authorize the issuance, pursuant to Nasdaq Listing Rule 5635(d), of our Common Stock in one or more non-public capital raising transactions at a price that may be less than the greater of book or market value of our Common Stock.

PROPOSAL 4—TO APPROVE THE AMENDMENT OF OUR 2014 STOCK INCENTIVE PLAN TO INCREASE THE NUMBER OF SHARES OF COMMON STOCK AUTHORIZED FOR ISSUANCE UNDER THE 2014 PLAN

At the Special Meeting, holders of our Common Stock will be asked to approve the amendment of our 2014 Stock Incentive Plan to increase the number of shares of Common Stock authorized for issuance under the 2014 Plan by 41,060,000 shares. The proposed amendment of the 2014 Plan is presented in conjunction with Proposal 1 for the increase the number of authorized shares of our Common Stock, from 250,000,000 shares to 500,000,000 shares. The increase in the number of shares of Common Stock authorized for issuance under the 2014 Plan will not exceed 41,060,000 shares, which would be approximately 15% of the issued and outstanding shares of the Company on a fully-diluted basis following the capital-raising transactions contemplated by Proposal 3.

Background

On August 2, 2017, the Board unanimously approved the amendment of the 2014 Plan, subject to approval by the stockholders, to increase the number of shares of common stock authorized for issuance under the 2014 Plan by 5,200,000 shares. On February 5, 2018, the Board unanimously approved the amendment of the 2014 Plan, subject to approval by the stockholders, to increase the number of shares of Common Stock authorized for issuance under the 2014 Plan by an additional 35,860,000 shares.

The Board has directed that the proposal to amend the 2014 Plan be submitted to the stockholders for their approval at the Special Meeting. The Board believes that our interests and the interests of our stockholders will be advanced if we can continue to offer our employees, notably at the senior management level, advisors, consultants, and non-employee directors the opportunity to acquire or increase their proprietary interests in us. The Board has concluded that our ability to attract, retain and motivate top quality management and employees is material to our success and would be enhanced by our continued ability to grant equity compensation under the 2014 Plan. Accordingly, the Board has determined that the number of shares available for issuance under the 2014 Plan should be increased so that we may continue our compensation structure and strategy and succession planning process.

When adopted, a total of 333,333 shares of Common Stock were allocated to the 2014 Plan. Since its adoption, additional shares of Common Stock have been allocated to the 2014 Plan. Effective January 1, 2016, 162,498 shares were added to the 2014 Plan share pool under the 2014 Plan's automatic annual share pool increase. On April 1, 2016, the Board approved, subject to stockholder approval, an amendment to the 2014 Plan that increased the number of shares available for issuance under the 2014 Plan by 1,550,000 shares. Our stockholders approved this increase in the number of shares on June 14, 2016. On January 1, 2017, 280,142 shares were added to the 2014 Plan share pool under the automatic annual share pool increase. The automatic annual share pool increase is equal to 2% of the total number of shares of Common Stock outstanding on December 31 of the preceding calendar year. On March 28, 2017, the Board approved, subject to stockholder approval, an amendment to the 2014 Plan that increased the number of shares available for issuance under the 2014 Plan by 6,500,188 shares. Our stockholders approved this increase in the number of shares on July 27, 2017. On January 1, 2018, 2,106,507 shares were added to the 2014 Plan share pool under the automatic annual share pool increase.

Under the 2014 Plan, stock awards are outstanding for a total of 3,402,684 shares that have been granted to 47 employees, directors and consultants. Thus, the total number of shares currently available for issuance under the 2014 Plan as of February 15, 2018 is 2,201,502 shares, not including the 41,060,000 share increase that is the subject of this Proposal 4. If stockholders approve this Proposal 5, the total number of shares available for future stock awards under the 2014 Plan will be 43,261,502. Of the total number of shares allocated to the 2014 Plan, including the 41,060,000 share increase that is

the subject of this Proposal 4, the maximum aggregate number of shares that may be issued pursuant to the exercise of incentive stock options within the meaning of Section 422(b) of the Code, shall not exceed 43,261,502 shares. Based on current forecasts and estimated stock award grant rates, if the increase is not approved, it is anticipated that the 2014 Plan could run out of available shares as soon as March 31, 2018.

Stockholder approval of the amendment of the 2014 Plan is being sought (i) in order for incentive stock options to meet the requirements of the Code, and (ii) in order to meet The Nasdaq Capital Market listing requirements. If the stockholders do not approve the amendment and restatement of the 2014 Plan at the Special Meeting, the amendment of the 2014 Plan will not become effective, and the number of shares authorized for issuance under the 2014 Plan will not be increased by up to 41,060,000 shares.

For information with respect to grants to certain executive officers in Fiscal Year 2016 under the 2014 Plan, see page 28 and for information with respect to grants to our non-employee directors, see page 34.

The material terms of the proposed amendment of the 2014 Plan are summarized below. This summary of the 2014 Plan is not intended to be a complete description of the 2014 Plan. This summary is qualified in its entirety by the actual text of the 2014 Plan to which reference is made. A copy of the 2014 Plan is attached as Exhibit 10.1 to our Current Report on Form 8-K (No. 001-36714) filed with the Securities and Exchange Commission on June 20, 2016.

Material Terms of the 2014 Plan

In July 2014, our Board of Directors adopted the 2014 Plan, and in July 2014, our stockholders approved the 2014 Plan. The 2014 Plan became effective in May 2015. The 2014 Plan provides for the grant of incentive stock options to our eligible employees, and for the grant of nonstatutory stock options, restricted stock, and RSUs to eligible employees, directors and consultants.

Authorized Shares. We originally approved 333,333 shares of our Common Stock for issuance pursuant to the 2014 Plan. On April 1, 2016, we unanimously approved the amendment of the 2014 Plan, subject to approval by the stockholders, which was received on June 14, 2016, to increase the number of shares of our Common Stock authorized for contingent issuance under the 2014 Plan by 1,550,000 shares from 495,831 to 2,045,831. On March 28, 2017, we unanimously approved the amendment of the 2014 Plan, subject to approval by the stockholders, which was received on July 27, 2017, to increase the number of shares of our Common Stock authorized for issuance under the 2014 Plan by 6,500,188 shares from 2,325,973 to 8,826,161. On August 2 2017, we unanimously approved the amendment of the 2014 Plan, subject to approval by the stockholders, to increase the number of shares of our Common Stock authorized for issuance under the 2014 Plan by up to 5,200,000 shares from 8,826,161 to 14,026,161. On January 31, 2018, we unanimously approved the amendment of the 2014 Plan, subject to approval by the stockholders, to increase the number of shares of our Common Stock authorized for issuance under the 2014 Plan by up to 35,860,000 shares from 16,132,668 to 51,992,668.

On January 1st of each year, for a period of not more than five years, beginning on January 1, 2016 and ending no later than January 1, 2019, the number of shares allocated to the 2014 Plan automatically increases in an amount equal to 2% of the total number of shares of Common Stock outstanding on December 31st of the preceding calendar year. The Board of Directors may act prior to January 1st of any given year, at its discretion, to provide for no increase in shares or to add a lesser number of shares than provided for in the prior sentence. On January 1, 2016, a total of 162,498 shares were added to the 2014 Plan share pool under the automatic annual share pool increase. On January 1, 2017, a total of 280,142 shares were added to the 2014 Plan share pool under the automatic annual share pool increase. On January 1, 2018, a total of 2,106,507 shares were added to the 2014 Plan share pool under the automatic annual share pool increase.

If a stock award expires without having been exercised in full, or, with respect to restricted stock and RSUs, a stock award is forfeited, the shares that were subject to those stock awards will become available for future grant or sale under the 2014 Plan (unless the 2014 Plan has terminated). If unvested shares of restricted stock or RSUs are repurchased by the company or are forfeited to the company, such shares will become available for future awards under the 2014 Plan.

Plan Administration. The 2014 Plan is administered by the compensation committee of the Board of directors (the “committee”) or our Board of Directors, acting as the committee. In the case of awards intended to qualify as “performance-based compensation” within the meaning of Section 162(m) of the Code, the committee will consist of two or more “outside directors” within the meaning of Section 162(m) of the Code. In addition, if we determine it is desirable to qualify transactions under the 2014 Plan as exempt under Rule 16b-3, such transactions will be structured to satisfy the requirements for exemption under Rule 16b-3. Subject to the provisions of the 2014 Plan, the committee has the power to administer the 2014 Plan, including but not limited to, the power to interpret the terms of the 2014 Plan and stock awards granted under it, to create, amend and revoke rules relating to the 2014 Plan, including creating sub-plans, and to determine the terms of the awards, including the exercise price, the number of shares subject to each such award, the exercisability of the awards and the form of consideration, if any, payable upon exercise. The 2014 Plan limits the aggregate amount of stock awards granted under the 2014 Plan to 233,333 shares to any one participant in a fiscal year (300,000 in the first year of employment).

Options. Both incentive stock options qualifying under Section 422 of the Code and non-statutory stock options may be granted under the 2014 Plan. Of the total number of shares allocated to the 2014 Plan, the maximum aggregate number of shares that may be issued pursuant to the exercise of incentive stock options shall not exceed 41,060,000 shares. The exercise price of options granted under the 2014 Plan must at least be equal to the fair market value of the Common Stock on the date of grant. The term of an incentive stock option may not exceed ten years, except that with respect to any participant who owns more than 10% of the voting power of all classes of our outstanding stock, the term must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. For nonstatutory stock options the exercise price must equal at least 100% of the fair market value. The committee will determine the methods of payment of the exercise price of an option, which may include cash, shares or other property acceptable to the committee, as well as other types of consideration permitted by applicable law. After the termination of service of an employee, director or consultant, he or she may exercise the vested portion of his or her option for the period of time stated in his or her award agreement, except in the case of an employee terminated for cause (as defined in the 2014 Plan) the option will terminate upon his or her termination from service. Generally, if termination is due to death or disability, the vested portion of the option will remain exercisable for 12 months. In all other cases, the vested portion of the option generally will remain exercisable for three months following the termination of service. An option may not be exercised after expiration of its term. However, if the exercise of an option is prevented by applicable law the exercise period may be extended under certain circumstances. Subject to the provisions of the 2014 Plan, the committee determines the other terms of options.

Restricted Stock. Restricted stock awards may be granted under the 2014 Plan. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the committee. The committee will determine the number of shares of restricted stock granted to any employee, director or consultant and, subject to the provisions of the 2014 Plan, will determine the terms and conditions of such awards. The committee may impose whatever conditions to vesting it determines to be appropriate (for example, the committee may set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the committee, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of restricted stock awards generally will have voting and dividend rights with

respect to such shares upon grant without regard to vesting, unless the committee provides otherwise. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

RSUs. Awards of RSUs may be granted under the 2014 Plan. An RSU is the right to receive a share of Common Stock at a future date. The committee determines the terms and conditions of RSUs, including the vesting criteria (which may include accomplishing specified performance criteria or continued service to us) and the form and timing of payment. Notwithstanding the foregoing, the committee, in its sole discretion, may accelerate the time at which RSUs will vest.

Non-Transferability of Awards. Unless the committee provides otherwise, stock awards issued under the 2014 Plan are not transferrable other than by will or the laws of descent and distribution, and only the recipient of an award may exercise an award during his or her lifetime, although a recipient may designate a beneficiary to exercise an award after death.

Certain Adjustments. In the event of certain changes in the capitalization, to prevent diminution or enlargement of the benefits or potential benefits available under the 2014 Plan, the committee will adjust the number and class of shares that may be delivered under the 2014 Plan and/or the number, class and price of shares covered by each outstanding award, and the numerical share limits set forth in the 2014 Plan. In the event of the proposed liquidation or dissolution, the committee will notify participants as soon as practicable and all awards will terminate immediately prior to the consummation of such proposed transaction.

Merger or Change in Control. The 2014 Plan provides that in the event of a merger or change in control, as defined under the 2014 Plan, each outstanding award will be treated as the committee determines, including (i) the assumption, continuation or substitution of the stock awards by the successor corporation or its parent or subsidiary, (ii) the acceleration of vesting for any unvested portion of the stock awards, or (iii) the cash-out of the stock awards.

Amendment; Termination. The Board has the authority to amend, suspend or terminate the 2014 Plan provided such action does not impair the existing rights of any participant.

Required Vote of Stockholders

To approve the amendment of the 2014 Plan (this Proposal 4), the affirmative vote of the holders of a majority of shares of votes cast, in person or by remote communication, if applicable, or represented by proxy at the Special Meeting, voting together as a single class and entitled to vote, is required. Although failure to submit a proxy or vote in person at the special meeting, or a failure to provide your broker, nominee, fiduciary or other custodian, as applicable, with instructions on how to vote your shares will not affect the outcome of the vote on this proposal, the failure to submit a proxy or vote in person at the Special Meeting will make it more difficult to meet the requirement under our bylaws that the holders of a majority of our capital stock issued and outstanding and entitled to vote at the Special Meeting be present in person or by proxy to constitute a quorum at the Special Meeting.

The Board of Directors unanimously recommends that the stockholders vote “FOR” Proposal No. 4 to amend the 2014 Plan to increase the number of shares of Common Stock authorized for issuance under the 2014 Plan.

PROPOSAL 5—GRANT OF DISCRETIONARY AUTHORITY TO ADJOURN THE SPECIAL MEETING IF NECESSARY TO SOLICIT ADDITIONAL PROXIES

Although it is not expected, the Special Meeting may be adjourned for the purpose of soliciting additional proxies. Any such adjournment of the Special Meeting may be made without notice, other than by the announcement made at the Special Meeting, by approval of the holders of a majority of the shares of our Common Stock present in person or by proxy and entitled to vote at the Special Meeting, whether or not a quorum exists. We are soliciting proxies to grant discretionary authority to the chairperson of the Special Meeting to adjourn the Special Meeting, if necessary, for the purpose of soliciting additional proxies in favor of any or all of Proposals 1 through 4. The chairperson will have the discretion to decide whether or not to use the authority granted to such person pursuant to this Proposal 5 to adjourn the Special Meeting.

Required Vote of Stockholders

To approve the grant of discretionary authority to the chairperson of the Special Meeting to adjourn the Special Meeting, if necessary, for the purpose of soliciting additional proxies in favor of any or all of Proposals 1 through 4, the affirmative vote of the holders of a majority of shares of votes cast, in person or by remote communication, if applicable, or represented by proxy at the Special Meeting, voting together as a single class and entitled to vote, is required. Although failure to submit a proxy or vote in person at the special meeting, or a failure to provide your broker, nominee, fiduciary or other custodian, as applicable, with instructions on how to vote your shares will not affect the outcome of the vote on this proposal, the failure to submit a proxy or vote in person at the Special Meeting will make it more difficult to meet the requirement under our bylaws that the holders of a majority of the our capital stock issued and outstanding and entitled to vote at the Special Meeting be present in person or by proxy to constitute a quorum at the Special Meeting.

The Board of Directors unanimously recommends that the stockholders vote “FOR” Proposal No. 6 to grant discretionary authority to adjourn the Special Meeting, if necessary, to solicit additional proxies in favor of any or all of Proposals 1 through 5.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act, and regulations of the SEC thereunder require our directors, officers and persons who own more than 10% of our Common Stock, as well as certain affiliates of such persons, to file initial reports of their ownership of our Common Stock and subsequent reports of changes in such ownership with the SEC. Directors, officers and persons owning more than 10% of our Common Stock are required by SEC regulations to furnish us with copies of all Section 16(a) reports they file. Based solely on our review of the copies of such reports and amendments thereto received by us and written representations from these persons that no other reports were required, we believe that during the fiscal year ended December 31, 2016, our directors, officers and owners of more than 10% of our Common Stock complied with all applicable filing requirements.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides information about our Common Stock that may be issued upon the exercise of options, warrants and rights under all of our existing equity compensation plans as of December 31, 2016.

<u>Plan Category</u>	<u>Number of Securities to be Issued Upon Exercise of Outstanding Options, Restricted Stock, and RSUs</u>	<u>Weighted-Average Exercise Price of Outstanding Options, Restricted Stock, and RSUs</u>	<u>Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans(1)</u>
Equity Compensation Plans Approved by Security Holders:			
2013 Equity Incentive Plan(1)	565,377	\$3.64	—
2014 Stock Incentive Plan	2,005,843	\$2.20	39,988

(1) Our 2013 Equity Incentive Plan was terminated in May 2015 in connection with our initial public offering and replaced by the 2014 Stock Plan, although the 2013 Equity Incentive Plan continues to govern the administration of awards made prior to its replacement by the 2014 Stock Incentive Plan.

COMPENSATION OF DIRECTORS AND EXECUTIVE OFFICERS

Summary Compensation Table

The total compensation paid to our principal executive officer and its three highest compensated executive officers other than the principal executive officer, respectively, for services rendered in 2016, 2015 and 2014, as applicable, is summarized as follows:

	Year	Salary (\$)	Bonus (\$)	Severance (\$)	Option awards (\$)(1)	Stock awards (\$)(2)	All other compensation (\$)(3)	Total (\$)
Lisa A. Conte	2016	446,205	—	—	435,493	—	14,923	896,622
President and Chief	2015	421,539	45,000	—	—	—	12,001	478,540
Executive Officer	2014	330,769	—	—	236,797	86,071	10,055	663,692
Steven R. King, Ph.D.	2016	284,456	—	—	84,584	—	29,241	398,281
Executive Vice President,	2015	268,731	19,125	—	—	—	26,568	314,424
Sustainable Supply, Ethnobotanical	2014	210,865	—	—	160,383	50,208	18,226	439,682
Research and Intellectual Property								
Karen S. Wright	2016	243,385	—	—	68,863	—	—	312,248
Chief Financial Officer and	2015	32,308	—	—	18,126	—	—	50,434
Treasurer(4)	2014	—	—	—	—	—	—	—
John A. Kallassy	2016	93,664	—	71,625	—	—	13,828	179,117
Chief Operating Officer,	2015	265,808	24,836	—	45,100	7,666	26,568	369,978
Former Chief Financial Officer and	2014	181,731	—	—	118,398	43,035	19,207	362,371
Former Treasurer(5)								
Roger Waltzman	2016	165,000	10,000	—	95,730	—	—	270,730
Chief Scientific Officer(6)	2015	—	—	—	—	—	—	—
	2014	—	—	—	—	—	—	—

Footnotes to Summary Compensation Table

- (1) Represents the dollar amounts recognized for financial statement reporting purposes with respect to the fiscal year (for stock option awards) determined under FASB ASC Topic 718 using assumptions set forth in the footnotes to the financial statements in the Annual Report on Form 10-K for the years ended 2016 and 2015. The following are the options held by each executive officer as of December 31, 2016:
- a. Ms. Conte—an aggregate of 764,179 shares were granted as follows: 16,998 shares granted December 19, 2016, 318,000 shares granted September 22, 2016, 69,970 shares granted April 1, 2016 which became effective at the annual stockholders' meeting of June 14, 2016, 113,212 shares granted July 7, 2015 which became effective at the annual stockholders' meeting of June 14, 2016, 85,616 shares granted July 2, 2015 which became effective at the annual stockholders' meeting of June 14, 2016, and 160,383 shares granted April 1, 2014;
 - b. Dr. King—an aggregate of 199,299 shares were granted as follows: 4,496 shares granted December 19, 2016, 23,042 shares granted September 22, 2016, 28,263 shares granted April 1, 2016 which became effective at the annual stockholders' meeting of June 14, 2016, 49,942 shares granted July 2, 2015 which became effective at the annual stockholders' meeting of June 14, 2016, and 93,556 shares granted April 1, 2014;
 - c. Ms. Wright—an aggregate of 130,366 shares were granted as follows: 2,866 shares granted December 19, 2016, 103,698 shares granted September 22, 2016, 3,802 shares granted April 1, 2016 which became effective at the annual stockholders' meeting of June 14, 2016, and 20,000 shares granted November 23, 2015;
 - d. Mr. Kallassy—80,191 shares were granted April 1, 2014 and 13,365 shares granted May 13, 2015.

- e. Dr. Waltzman—an aggregate of 130,366 shares were granted as follows: 2,866 shares granted December 19, 2016 and 127,500 shares granted August 12, 2016.

All of the April 1, 2014 option grants vested 25% on January 1, 2015 (nine months from grant date), with the remainder vesting equally over the following 27 months such that the options are vested in full on April 1, 2017. Ms. Wright's November 23, 2015 option vested 25% on September 9, 2016, with the remainder vesting equally over the following 27 months such that the option is vested in full on November 9, 2018. All of the July 2, 2015 options were granted contingent upon approval of Jaguar's stockholders at the June 14, 2016 annual stockholders' meeting and vest 1/36th per month beginning one month after grant date, with the remainder vesting equally over the following 35 months such that the option is vested in full on July 2, 2018. Ms. Conte's July 7, 2015 option was likewise granted contingent upon approval of our stockholders at the June 14, 2016 annual stockholders' meeting and vests 1/36th per month beginning one month after grant date, with the remainder vesting equally over the following 35 months such that the option is vested in full on July 7, 2018. All of the options granted on April 1, 2016 which became effective at the annual stockholders' meeting of June 14, 2016, September 22, 2016 and December 19, 2016 vest 1/36th per month beginning one month after grant, with the remainder vesting equally over the following 35 months such that the option is vested in full on December 19, 2019. Mr. Kallassy's May 13, 2015 option grant vested 25% on June 19, 2015, with the remainder vesting equally over the following 27 months such that the option would have vested in full on September 19, 2017 had Mr. Kallassy not resigned in March 2016. Pursuant to Mr. Kallassy's separation agreement, dated April 28, 2016, all of Mr. Kallassy's stock options that remained unvested as of the date of the separation agreement were immediately accelerated to become fully vested. Mr. Kallassy had 90 days following the date of the separation agreement to exercise such stock options, after which any unexercised options were cancelled. Dr. Waltzman's August 12, 2016 option vested 2/36th on the grant date, with 7/36th vesting on April 1, 2017 and the remainder vesting equally over the following 27 months such that the option would have vested in full on July 1, 2019 had Dr. Waltzman not resigned in April 2017. Dr. Waltzman's stock options that are vested as of the effective date of his resignation, April 3, 2017, must be exercised within 3 months of such resignation or such options are cancelled, pursuant to our 2014 Stock Incentive Plan. Any stock options that are unvested as of the effective date of his resignation are cancelled on such date of resignation.

- (2) Represents the dollar amounts recognized for financial statement reporting purposes with respect to the fiscal year (for restricted stock unit awards) determined under FASB ASC Topic 718 using assumptions set forth in the footnotes to our financial statements included in this proxy statement. The aggregate number of restricted stock units held by each executive officer at December 31, 2016 and 2015 was as follows: Ms. Conte—8,910 of the 17,820 units granted June 2, 2014; Dr. King—5,198 of the 10,395 units granted June 2, 2014; Mr. Kallassy—0 of the 8,910 units granted June 2, 2014 and 0 of the 1,484 units granted May 13, 2015. All of the restricted stock units vested and were exchanged for shares of common stock on 01/01/2016. The remaining 50% will vest and be issuable on 07/01/2017. Vesting is subject to the Reporting Person's continued employment with the Company through the applicable vesting dates. Each restricted stock unit represents the right to receive, at settlement, one (1) share of our Common Stock.
- (3) Amounts shown in this column reflect incremental health insurance premiums paid for such executive's family members. Mr. Kallassy also received \$6,954 in income associated with COBRA insurance premiums paid on his behalf in 2016.
- (4) Ms. Wright has served as Chief Financial Officer and Treasurer since December 15, 2015. Compensation includes all earnings since joining the Company on November 9, 2015.
- (5) Mr. Kallassy resigned as Chief Financial Officer and Treasurer on December 15, 2015.
- (6) Dr. Waltzman became the Chief Scientific Officer on July 1, 2016 and resigned on April 3, 2017.

Narrative to Summary Compensation Table

Understanding our history is key to the understanding of our compensation structure for 2015 and 2016. After our initial public offering closed on May 18, 2015, the executive officers of privately-held Jaguar Health, Inc. became our named executive officers.

Base Salary

On July 2, 2015, the Compensation Committee increased Ms. Conte's annual base salary from \$400,000 to \$440,000, Dr. King's annual base salary from \$255,000 to \$280,500, and Mr. Kallassy's annual base salary from \$245,000 to \$286,500. The pay increases were effective June 15, 2015. On December 15, 2015, upon receiving the resignation of Mr. Kallassy, Jaguar's Board of Directors appointed Karen S. Wright as Jaguar's new Chief Financial Officer. Ms. Wright's annual base salary is \$240,000. Dr. Waltzman's annual base salary is \$330,000.

Bonuses

On July 10, 2015, we paid discretionary bonuses to Ms. Conte, Dr. King and Mr. Kallassy of \$45,000, \$19,125 and \$17,913, respectively. We also paid an additional bonus of \$6,923 to Mr. Kallassy on February 6, 2015. The amount of each of these bonuses is set forth in the "Bonus" column in the Summary Compensation Table.

We paid sign-on bonuses to Dr. Waltzman of \$10,000 of which \$5,000 was paid on September 30, 2016 and \$5,000 was paid on October 15, 2016.

Severance

We paid discretionary severance to Mr. Kallassy of \$71,625, of which \$23,875 was remitted on May 13, 2016, June 15, 2016 and June 30, 2016, respectively. The amount of severance is set forth in the "Severance" column in the Summary Compensation Table.

Equity Compensation

Ms. Conte, Dr. King and Mr. Kallassy received stock option grants at the time they were hired by privately-held Jaguar Health, Inc. Such options generally vest over time, with 25% of the options vesting after nine months of employment and monthly vesting thereafter with full vesting after three years. Ms. Wright and Dr. Waltzman each received stock option grants with a similar vesting schedule at the time they were hired by us. Our board of directors periodically grants additional options to the current named executive officers that typically vest ratably over a three-year period.

Upon our initial public offering on May 18, 2015, the named executive officers received RSUs. Fifty percent of the RSUs shares vested and were issued on 01/01/2016, and, subject to the terms of the RSU award, the remaining 50% will vest and be issuable on 07/01/2017.

All stock options and restricted stock units issued to our current named executive officers vest and become exercisable upon a change in control.

Outstanding Equity Awards at 2016 Fiscal Year End

The following table provides information regarding outstanding equity awards held by our named executive officers as of December 31, 2016:

	Options Vesting Commencement Date	Number of Securities Underlying Unexercised Options		Option exercise price	Stock Option expiration date	Number of securities underlying unexercised RSUs(10)
		Exercisable	Unexercisable			
Lisa A. Conte	4/1/2014	142,562	17,821(1)	\$2.53	4/1/2024	8,910
	7/2/2015	40,429	45,187(4)	\$5.09	7/2/2025	—
	7/7/2015	53,460	59,752(5)	\$4.84	7/7/2025	—
	4/1/2016	15,548	54,422(7)	\$1.58	4/1/2026	—
	9/22/2016	26,500	291,500(8)	\$1.25	9/22/2026	—
	12/19/2016	—	16,998(9)	\$0.74	12/19/2026	—
Steven R. King, Ph.D.	4/1/2014	83,160	10,396(1)	\$2.53	4/1/2024	5,198
	7/2/2015	23,583	26,359(4)	\$5.09	7/2/2025	—
	4/1/2016	6,280	21,983(7)	\$1.58	4/1/2026	—
	9/22/2016	1,920	21,122(8)	\$1.25	9/22/2026	—
	12/19/2016	—	4,496(9)	\$0.74	12/19/2026	—
Karen S. Wright	11/9/2015	7,222	12,778(3)	\$2.04	11/23/2025	—
	4/1/2016	844	2,958(7)	\$1.58	4/1/2026	—
	9/22/2016	8,641	95,057(8)	\$1.25	9/22/2026	—
	12/19/2016	—	2,866(9)	\$0.74	12/19/2026	—
John A. Kallassy	4/1/2014	44,549	35,642(1)	\$2.53	4/1/2024	—
	9/19/2014	5,567	13,365(2)	\$7.00	5/13/2025	—
Roger Waltzman	7/1/2016	7,083	120,417(6)	\$1.47	8/12/2026	—
	12/19/2016	—	2,866(9)	\$0.74	12/19/2026	—

- (1) On January 1, 2015, 25% of each of such named executive officer's shares vested and became exercisable. The remainder of the shares vested in approximately equal monthly installments through April 1, 2017, subject to continued service with us through each relevant vesting date.
- (2) The shares were granted on May 18, 2015. On December 19, 2014, 1/12th of the options were retroactively vested and became exercisable, with the remainder of the shares vesting in equal monthly installments such that they would have vested in full on September 19, 2017 had Mr. Kallassy not resigned in March 2016.
- (3) The shares were granted on November 23, 2015. On August 9, 2016, 25% of such named executive officer's shares vested and became exercisable. The remainder of the shares is scheduled to vest in approximately equal monthly installments through November 9, 2018, subject to continued service with us through each relevant vesting date.
- (4) The shares were granted on July 2, 2015 contingent upon the approval of our stockholders at the June 14, 2016 annual stockholders' meeting and vest 1/36th per month beginning one month after grant date, with the remainder vesting equally over the following 35 months such that the option is vested in full on July 2, 2018, subject to continued service with us through each relevant vesting date.
- (5) The shares were granted on July 7, 2015 contingent upon the approval of our stockholders at the June 14, 2016 annual stockholders' meeting and vest 1/36th per month beginning one month after grant date, with the remainder vesting equally over the following 35 months such that the option is vested in full on July 7, 2018, subject to continued service with us through each relevant vesting date.

- (6) The shares were granted on August 12, 2016 and vest 2/36th on the grant date, 7/36th vested on April 1, 2017 with the remainder vesting equally over the following 27 months such that the option would have vested in full on July 1, 2019 had Dr. Waltzman not resigned in April 2017.
- (7) The options were granted on April 1, 2016, which became effective at the annual stockholders' meeting of June 14, 2016, and vest 1/36th per month beginning one month after grant, with the remainder vesting equally over the following 35 months such that the option is vested in full on April 1, 2019, subject to continued service with us through each relevant vesting date.
- (8) The options were granted on September 22, 2016 and vest 1/36th per month beginning one month after grant, with the remainder vesting equally over the following 35 months such that the option is vested in full on September 22, 2019, subject to continued service with us through each relevant vesting date.
- (9) The options were granted on December 19, 2016 and vest 1/36th per month beginning one month after grant, with the remainder vesting equally over the following 35 months such that the option is vested in full on December 19, 2019, subject to continued service with us through each relevant vesting date.
- (10) 50% of the shares of common stock underlying the RSUs vested and became issuable on January 1, 2016, and assuming compliance with the terms of the RSU award agreement, the remaining 50% of the shares of common stock underlying the RSUs will vest and be issuable on July 1, 2017.

Executive Employment Agreements

Lisa A. Conte

In March 2014, we entered into an offer letter with Ms. Conte to serve as our Chief Executive Officer, effective March 1, 2014, in an at-will capacity. Under this offer letter, Ms. Conte's annual base salary is \$400,000, and she is eligible for an annual target bonus of 30% of her base salary. Effective June 15, 2015, our board of directors has reviewed the terms of Ms. Conte's employment arrangement in connection with its annual compensation review, and has adjusted Ms. Conte's base salary to \$440,000. Ms. Conte is entitled to participate in all employee benefit plans, including group health care plans and all fringe benefit plans.

In April 2014, Ms. Conte was granted a stock option to purchase 160,383 shares of Common Stock at an exercise price of \$2.54 per share. The option has a 10-year term and vests as follows: 25% vested on January 1, 2015, 9 months after the grant date, with the remainder vesting equally over the next 27 months such that the option was vested in full on April 1, 2017. On June 2, 2014, Ms. Conte was granted 17,820 restricted stock units ("RSUs"). Fifty percent of the shares of Common Stock underlying the RSUs vested and were issued on January 1, 2016, and the remaining 50% will vest and be issuable on July 1, 2017 pursuant to the terms of the RSU agreement. In the event of a change in control, as defined in the Jaguar Health, Inc. 2013 Equity Incentive Plan (the "2013 Plan"), the vesting of all outstanding awards granted to Ms. Conte under the 2013 Plan will accelerate if Ms. Conte's service with us is terminated without cause within twelve months of the change in control.

Steven R. King, Ph.D.

In February 2014, we entered into an offer letter with Dr. King to serve as our Executive Vice President, Sustainable Supply, Ethnobotanical Research and Intellectual Property, effective March 1, 2014, in an at-will capacity. Under the offer letter, Dr. King's annual base salary of \$255,000, he is eligible for an annual target bonus of 30% of his base salary, and he is eligible to participate in the employee benefit plans Jaguar offers to its other employees. Effective June 15, 2015, our board of directors has reviewed the terms of Dr. King's employment arrangement in connection with its annual

compensation review, and has adjusted Dr. King's base salary to \$280,500. Dr. King is entitled to participate in all employee benefit plans, including group health care plans and all fringe benefit plans.

In April 2014, Dr. King was granted a stock option to purchase 93,556 shares of Common Stock at an exercise price of \$2.54 per share. The option has a 10-year term and vests as follows: 25% vested on January 1, 2015, 9 months after the grant date, with the remainder vesting equally over the next 27 months such that the option was vested in full on April 1, 2017. In June 2014, Dr. King was granted 10,395 RSUs. Fifty percent of the shares of Common Stock underlying the RSUs vested and were issued on January 1, 2016, and the remaining 50% will vest and be issuable on July 1, 2017 pursuant to the terms of the RSU agreement. In the event of a change in control, as defined in the 2013 Plan, the vesting of all outstanding awards granted to Dr. King under the 2013 Plan will accelerate if Dr. King's service with us is terminated without cause within twelve months of the change in control.

John A. Kallassy

In January 2014, we entered into an offer letter with Mr. Kallassy to serve as our Executive Vice President and Chief Operating Officer, effective as upon the closing of our first sale of Series A preferred stock on February 5, 2014. Effective as of September 19, 2014, we entered into a new offer letter with Mr. Kallassy in connection with his appointment to serve as our Chief Financial Officer. Under the current offer letter, Mr. Kallassy's annual base salary is \$245,000, and he is eligible for an annual target bonus of 30% of his base salary and is eligible to participate in the employee benefit plans that we offer to our other employees. Effective June 15, 2015, our board of directors has reviewed the terms of Mr. Kallassy's employment arrangement in connection with its annual compensation review, and has adjusted Mr. Kallassy's base salary to \$286,500 and his target bonus was increased to 35% of his base salary. Mr. Kallassy is entitled to participate in all employee benefit plans, including group health care plans and all fringe benefit plans.

In April 2014, Mr. Kallassy was granted a stock option to purchase 80,191 shares of Common Stock at an exercise price of \$2.54 per share. The option has a 10-year term and vests as follows: 25% vested on January 1, 2015, 9 months after the grant date, with the remainder vesting equally over the next 27 months such that the option would have vested in full on April 1, 2017 had Mr. Kallassy not resigned in March 2016. Pursuant to Mr. Kallassy's separation agreement, dated April 28, 2016, all of Mr. Kallassy's stock options that remained unvested as of the date of the separation agreement were immediately accelerated to become fully vested. Mr. Kallassy had 90 days following the date of the separation agreement to exercise such stock options. In June 2014, Mr. Kallassy was granted 8,910 RSUs and in February 2015, Mr. Kallassy was granted 1,484 RSUs. Fifty percent of the shares of common stock underlying the RSUs vested and were issued on January 1, 2016, and the remaining 50% would have vested and become issuable on July 1, 2017 pursuant to the terms of the RSU agreement had Mr. Kallassy not resigned in March 2016. We also agreed that Mr. Kallassy was eligible for the grant of an additional 1,484 RSUs, as well as an option to purchase an additional 13,365 shares of common stock, subject to approval by our board of directors. Accordingly, in February 2015, our board of directors granted Mr. Kallassy the additional 1,484 RSUs (which have the same terms as those granted in June 2014), and granted an option to purchase 13,365 shares of Common Stock at an exercise price equal to \$7.00, which was the initial public offering price of our Common Stock. This option had a 10-year term and vested as follows: 1/12 vested 3-months after the grant date, with the remainder vesting in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date, subject to continued service with us through each relevant vesting date.

Karen S. Wright

In October 2015, we entered into an offer letter with Ms. Wright to serve as our Executive Vice President, Finance, effective November 9, 2015, in an at-will capacity. On December 15, 2015, the Board of Directors approved Ms. Wright's appointment to serve as our Chief Finance Officer. Under

the offer letter, Ms. Wright's annual base salary is \$240,000, she is eligible for an annual target bonus of 25% of her base salary, and she is eligible to participate in the employee benefit plans we offer to our other employees.

In November 2015, Ms. Wright was granted a stock option to purchase 20,000 shares of Common Stock at an exercise price of \$2.04 per share. The option has a 10-year term and vested as follows: 25% vested on August 9, 2016, 9 months after the hire date, with the remainder vesting equally over the next 27 months such that the option is vested in full on November 9, 2018.

Roger Waltzman

In June 2016, we entered into an offer letter with Dr. Waltzman to serve as our Chief Scientific Officer, effective July 1, 2016, in an at-will capacity. Under the offer letter, Dr. Waltzman's annual base salary is \$330,000, he is eligible for an annual target bonus of 40% of his base salary, and he is eligible to participate in the employee benefit plans we offers to our other employees.

Dr. Waltzman also received a sign-on bonus of \$10,000 of which \$5,000 was paid on September 30, 2016 and \$5,000 was paid on October 15, 2016.

In August 2016, Dr. Waltzman was granted a stock option to purchase 127,500 shares of common stock at an exercise price of \$1.47 per share. The option has a 10-year term and vests as follows: 2/36th on the grant date, 7/36th on April 1, 2017, with the remainder vesting equally over the subsequent 27 months such that the option would have vested in full on July 1, 2019 had Dr. Waltzman not resigned in April 2017.

Compensation of Directors

The following table summarizes the total compensation earned in 2016 and 2015 for our non-management directors. Ms. Conte receives no additional compensation for her service as a director.

	Year	Fees Earned or Paid in Cash (\$)	Option awards (\$)(1)	Total (\$)
James J. Bochnowski	2016	—	63,644	63,644
	2015	—	58,377	58,377
Folkert W. Kamphuis	2016	—	17,625	17,625
	2015	—	145,944	145,944
Jiahao Qiu	2016	—	1,921	1,921
	2015	—	29,188	29,188
Zhi Yang	2016	—	1,921	1,921
	2015	—	29,188	29,188
John Micek III	2016	—	81,944	81,944
	2015	—	—	—
Ari Azhir	2016	—	35,678	35,678
	2015	—	—	—

Footnote to Compensation of Directors Table

(1) Represents the dollar amounts recognized for financial statement reporting purposes with respect to the fiscal year (for stock option awards) determined under FASB ASC Topic 718 using assumptions set forth in the footnotes to Jaguar's financial statements attached to this proxy statement. The aggregate number of options held by each non-management director officer as of December 31, 2016 was as follows: Mr. Bochnowski—39,410 shares granted June 2, 2014 and

20,000 shares granted June 2, 2015; Mr. Kamphuis—50,000 shares granted June 2, 2015; Mr. Qiu—10,000 shares granted June 2, 2015; Dr. Yang—10,000 shares granted June 2, 2015. The June 2, 2014 grant to Mr. Bochnowski vests 25% on March 2, 2015 (nine months from grant date), with the remainder vesting equally over the following 27 months such that the options are vested in full on June 2, 2017. All of the June 2, 2015 option grants vest in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

Narrative to Director Compensation Table

Jaguar currently does not pay its directors any cash compensation for their services on Jaguar's board of directors. Jaguar intends to make annual equity grants to directors serving on its board who are not employees nor serving as designees of its investors, along with an additional equity grant to the Chairperson of its board of directors. Jaguar may in the future determine to make additional equity grants or pay other equity compensation for service on its board of directors.

In June 2014, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 39,410 shares of common stock at an exercise price of \$4.83 per share, which expires 10 years after the grant date. The option vested as follows: 25% vested on March 2, 2015, 9 months after the grant date, with the remainder vesting equally over the next 27 months such that the option is vested in full on June 2, 2017.

In June 2015, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 20,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 11,293 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In September 2016, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 75,000 shares of common stock at an exercise price of \$1.25 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 16,378 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

Mr. Kamphuis provided consulting services through Kernel Management and Consulting AG from December 2015 through March 2016.

In June 2015, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 50,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 9,504 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In August 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 50,000 shares of common stock at an exercise price of \$1.47 per

share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In September 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 13,000 shares of common stock at an exercise price of \$1.25 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 13,771 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In June 2015, Jaguar granted Mr. Qui, a member of the Audit Committee, a stock option to acquire 10,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Qui, a member of the Audit Committee, a stock option to acquire 1,901 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In June 2015, Jaguar granted Dr. Yang, a member of the Audit Committee, a stock option to acquire 10,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Dr. Yang, a member of the Audit Committee, a stock option to acquire 1,901 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Micek, , a member of the Audit, Compensation and Nominating Committees, a stock option to acquire 96,824 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Mr. Micek, a member of the Audit, Compensation and Nominating Committees, a stock option to acquire 10,884 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Dr. Azhir, a member of the Audit and Compensation Committees, a stock option to acquire 98,050 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

DESCRIPTION OF CAPITAL STOCK

General

The following is a summary of the rights of our common stock and preferred stock and of certain provisions of our third amended and restated certificate of incorporation and amended and restated bylaws. This summary is not complete. For more detailed information, please see the third amended and restated certificate of incorporation and amended and restated bylaws.

Our authorized capital stock consists of 310,000,000 shares, all with a par value of \$0.0001 per share, of which 250,000,000 shares are designated as voting common stock, 50,000,000 shares are designated as non-voting common stock, and 10,000,000 shares are designated as preferred stock.

Voting Common Stock and Non-Voting Common Stock

As of February 15, 2018, we had 82,925,155 shares of voting common stock outstanding held by 27 stockholders of record, 42,617,893 shares of non-voting common stock outstanding held by 5 stockholders of record, and zero shares of preferred stock outstanding.

As of February 15, 2018, there were outstanding options to purchase 3,402,694 shares of our voting common stock with a weighted-average exercise price of \$1.89 per share and outstanding RSUs for 5,983,849 shares of our voting common stock.

As of February 15, 2018, there were outstanding warrants exercisable for 4,820,025 shares of our voting common stock with a weighted-average exercise price of \$1.08 per share.

Voting Rights

The holders of our voting common stock are entitled to one vote per share on all matters to be voted on by our stockholders. The holders of our non-voting common stock are not entitled to vote on matters submitted to our stockholders, other than in connection with a change of control of the Company.

Dividends

Subject to preferences that may be applicable to any outstanding our preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. We are required to obtain the prior written consent of Nantucket Investments Limited (“Nantucket”) before the issuance of dividends to holders of our voting common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of our non-voting common stock.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of our voting common stock and non-voting common stock will be entitled to share ratably in the net assets legally available for distribution to our stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of our preferred stock.

Rights and Preferences

Holders of our common stock have no preemptive, conversion or subscription rights. There are no redemption or sinking fund provisions applicable to our common stock.

Shares of our non-voting common stock are convertible into shares of our voting common stock on a one-for-one basis (i) at the option of the respective holders thereof, at any time and from time to time on or after April 1, 2018 or (ii) automatically, without any payment of additional consideration by the holder thereof, (x) upon a transfer of such shares to any person or entity that is neither an affiliate of Nantucket nor an investment fund, investment vehicle or other account, that is, directly or indirectly, managed or advised by Nantucket or any of its affiliates pursuant to a sale of such stock to a third-party for cash in accordance with the terms and condition set forth in the Investor Rights Agreement, dated March 31, 2017, between the Company and Nantucket, or (y) upon the release or transfer of such shares to the registered holders of Napo's outstanding shares of common stock immediately prior to the consummation of the Merger (the "Napo Legacy Stockholders").

The rights, preferences and privileges of the holders of our voting common stock and non-voting common stock are subject to and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are fully paid and nonassessable.

Preferred Stock

The Board has the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the number, rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and sinking fund terms, and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of our common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of our preferred stock could have the effect of delaying, deferring or preventing a change of control or other corporate action. We have no current plan to issue any shares of preferred stock.

Warrants

As of February 15, 2018, we had outstanding warrants to purchase an aggregate of 4,820,025 shares of our voting common stock, 207,664 of which are exercisable at a price of \$2.53 per share and expire on February 5, 2019; 16,666 of which are exercisable at a price of \$0.69 per share and expire on June 26, 2020; 178,569 of which are exercisable at a price of \$5.60 per share and expire on June 3, 2020; 143,000 of which are exercisable at a price of \$8.75 per share and expire on May 13, 2020; 120,000 of which are exercisable at a price of \$0.01 per share and expire on or before July 28, 2022; 1,800,001 of which are exercisable at a price of \$0.75 per share and expire on May 29, 2022; 758,334 of which are exercisable at a price of \$1.00 per share and expire on May 29, 2018; 370,916 of which are exercisable at a price of \$0.51 per share and expire on January 31, 2019; 145,457 of which are exercisable at a price of \$0.08 per share and expire on December 31, 2018; and 1,079,418 of which are exercisable at a price of \$0.08 per share and expire on December 31, 2025.

Registration Rights

Pursuant to the share purchase agreements, each entered on or about December 27, 2017, between us and the investors named therein, relating to the issuance of up to \$1.97 million of our voting common stock, we are required to file one or more registration statements as permissible and necessary to register under the Securities Act the resale of the shares of our voting common stock sold to the investors thereto.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Delaware Law

Certain provisions of Delaware law and our third amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids. These provisions are also designed in part to encourage anyone seeking to acquire control of us to negotiate with our board of directors. We believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Third Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Our third amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the chairman of our board of directors, the chief executive officer or the president;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- provide that directors may be removed only for cause;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- establish that our board of directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered terms;
- specify that no stockholder is permitted to cumulate votes at any election of our board of directors; and
- require approval of the stockholders of at least 75% of the shares and a majority of the board of directors to amend certain of the above-mentioned provisions.

Exclusive Jurisdiction

Under the provisions of our third amended and restated certificate of incorporation, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for: (i) any derivative action or proceeding brought on behalf of us; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees or agents to us or our stockholders; (iii) any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law or our third amended and restated certificate of incorporation or amended and restated bylaws; or (iv) any action asserting a claim against us governed by the internal affairs doctrine. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any action, a court could find the choice of

forum provisions contained in our third amended and restated certificate of incorporation to be inapplicable or unenforceable in such action.

Delaware Anti-Takeover Statute

We are subject to the provisions of Section 203 of the DGCL regulating corporate takeovers. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, our board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon the closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not for determining the outstanding voting stock owned by the interested stockholder, (1) shares owned by persons who are directors and also officers, and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to the date of the transaction, the business combination is approved by our board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 $\frac{2}{3}$ % of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may discourage business combinations or other attempts that might result in the payment of a premium over the market price for the shares of common stock held by our stockholders.

The provisions of Delaware law and our third amended and restated certificate of incorporation and amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company N.A. The transfer agent and registrar's address is 250 Royall St., Canton, MA 02021. The transfer agent's telephone number is (800) 962-4284.

Listing

Our Common Stock is listed on The NASDAQ Capital Market under the symbol "JAGX." The NASDAQ Capital Market imposes certain requirements for listing, one of which is a minimum bid

requirement. The closing bid price for our Common Stock must remain at or above \$1.00 per share to comply with NASDAQ's minimum bid requirement for continued listing. If the closing bid price for our Common Stock is less than \$1.00 per share for 30 consecutive business days, NASDAQ may send us a notice stating that we will be provided a period of 180 days to regain compliance with the minimum bid requirement or else NASDAQ may make a determination to delist our Common Stock. Our Common Stock traded for less than \$1.00 for 30 consecutive business days, and we received notice of this from The NASDAQ Capital Market on May 16, 2017. Since we did not regain compliance with the minimum bid price requirement during the initial 180 calendar day grace period, on November 13, 2017, we requested and were granted a second 180 calendar day grace period, or until May 14, 2018, to regain compliance with the minimum bid price requirement. The minimum bid price requirement will be met if our Common Stock has a minimum closing bid price of at least \$1.00 per share for a minimum of 10 consecutive business days during the 180 calendar day grace period. We are diligently working to evidence compliance with the minimum bid requirement for continued listing on NASDAQ; however, there can be no assurance that we will be able to regain compliance or that NASDAQ will grant us a further extension of time to regain compliance, if necessary.

FINANCIAL AND OTHER INFORMATION

Index

	<u>Page</u>
Report of Independent Registered Public Accounting Firm	43
Financial Information for the Years Ended December 31, 2016 and 2015	44
Financial Information for the Three and Nine Months Ended September 30, 2017 and 2016	80
Management’s Discussion and Anaylsis of Financial Condition and Results of Operations	122
For the years ended December 31, 2016 and 2015	
For the three and nine months ended September 30, 2017 and 2016	

Report of Independent Registered Public Accounting Firm

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

We have audited the accompanying balance sheets of Jaguar Animal Health, Inc. as of December 31, 2016 and 2015 and the related statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for each of the two years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As described in Note 1 to the financial statements, the Company has suffered recurring losses from operations and has an accumulated deficit that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our opinion is not modified with respect to this matter.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Jaguar Animal Health, Inc. at December 31, 2016 and 2015, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

/s/ BDO USA, LLP

San Francisco, California
February 15, 2017

Jaguar Animal Health, Inc.
Balance Sheets

	December 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	\$ 950,979	\$ 7,697,531
Restricted cash	511,293	—
Accounts receivable	4,963	55,867
Due from former parent	299,648	3,199
Inventory	412,754	229,871
Deferred offering costs	72,710	143,231
Prepaid expenses	302,694	324,083
Total current assets	2,555,041	8,453,782
Property and equipment, net	885,945	829,232
Restricted cash	—	3,000,000
Other assets	122,163	122,163
Total assets	\$ 3,563,149	\$ 12,405,177
Liabilities, Convertible Preferred Stock and Stockholders' Equity		
(Deficit)		
Current liabilities:		
Accounts payable	\$ 517,000	\$ 574,462
License fee payable to former parent	—	425,000
Deferred revenue	224,454	251,936
Convertible notes payable	150,000	150,000
Accrued expenses	582,522	798,434
Warrant liability	799,201	
Current portion of long-term debt	1,919,675	1,707,899
Total current liabilities	4,192,852	3,907,731
Long-term debt, net of discount	1,817,526	4,095,028
Deferred rent	6,956	3,321
Total liabilities	\$ 6,017,334	\$ 8,006,080
Commitments and Contingencies (See note 6)		
Stockholders' Equity (Deficit):		
Preferred stock: \$0.0001 par value, 10,000,000 shares authorized at December 31, 2016 and December 31, 2015; no shares issued and outstanding at December 31, 2016 and December 31, 2015.	—	—
Common stock: \$0.0001 par value, 50,000,000 shares authorized at December 31, 2016 and December 31, 2015; 14,007,132 and 8,124,923 shares issued and outstanding at December 31, 2016 and December 31, 2015, respectively.	1,401	812
Additional paid-in capital	37,980,522	30,100,613
Accumulated deficit	(40,436,108)	(25,702,328)
Total stockholders' equity (deficit)	(2,454,185)	4,399,097
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	\$ 3,563,149	\$ 12,405,177

The accompanying notes are an integral part of these financial statements.

Jaguar Animal Health, Inc.
Statements of Operations and Comprehensive Loss

	Years Ended December 31,	
	2016	2015
Revenue	\$ 141,523	\$ 258,381
Operating Expenses		
Cost of revenue	51,966	123,457
Research and development expense	7,206,864	6,475,851
Sales and marketing expense	485,440	765,091
General and administrative expense	5,983,238	5,339,351
Total operating expenses	<u>13,727,508</u>	<u>12,703,750</u>
Loss from operations	(13,585,985)	(12,445,369)
Interest expense, net	(985,549)	(3,317,287)
Other income/(expense)	(11,046)	(27,277)
Change in fair value of warrants	(43,200)	(501,617)
Loss on extinguishment of debt	(108,000)	—
Net loss and comprehensive loss	<u>(14,733,780)</u>	<u>(16,291,550)</u>
Accretion of redeemable convertible preferred stock	—	(346,374)
Net loss attributable to common stockholders	<u>\$(14,733,780)</u>	<u>\$(16,637,924)</u>
Net loss per share attributable to common stockholders, basic and diluted .	<u>\$ (1.35)</u>	<u>\$ (2.70)</u>
Weighted-average common shares outstanding, basic and diluted	<u>10,951,178</u>	<u>6,153,139</u>

The accompanying notes are an integral part of these financial statements.

Jaguar Animal Health, Inc.

**Statement of Changes in Common Stock, Convertible Preferred Stock and Stockholders' Equity
(Deficit)**

	Series A Convertible Preferred Stock		Common Stock		Additional paid-in capital	Accumulated deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount			
Balances—December 31, 2014	3,015,902	\$ 7,304,914	2,874,330	\$ 288	\$ 1,175,242	\$ (9,410,778)	\$ (8,235,248)
Issuance of common stock in initial public offering, net of discounts and commissions of \$1,209,802, offering costs of \$2,897,825 and offering costs in the form of common stock warrants of \$400,400	—	—	2,860,000	286	15,511,974	—	15,512,260
Warrant, issued in conjunction with the initial public offering	—	—	—	—	400,400	—	400,400
Conversion of preferred stock into common stock upon initial public offering	(3,015,902)	(7,651,288)	2,010,596	201	7,651,087	—	7,651,288
Conversion of preferred stock warrant liability into additional paid-in capital upon initial public offering	—	—	—	—	1,150,985	—	1,150,985
Conversion of convertible notes into common stock upon initial public offering	—	—	374,997	37	2,099,963	—	2,100,000
Stock-based compensation	—	—	—	—	992,165	—	992,165
Beneficial conversion feature on notes payable	—	—	—	—	1,202,521	—	1,202,521
Deemed dividends on Series A	—	263,060	—	—	(263,060)	—	(263,060)
Accretion of issuance costs	—	83,314	—	—	(83,314)	—	(83,314)
Napo license fee abatement	—	—	—	—	250,000	—	250,000
Issuance of common stock upon exercise of stock options	—	—	5,000	—	12,650	—	12,650
Net and comprehensive loss	—	—	—	—	—	(16,291,550)	(16,291,550)
Balances—December 31, 2015	—	\$ —	8,124,923	\$ 812	\$30,100,613	\$ (25,702,328)	\$ 4,399,097
Issuance of common stock in a secondary public offering, net of discounts and commissions of \$373,011 and offering costs of \$496,887 February 2016	—	—	2,000,000	200	4,129,902	—	4,130,102
Issuance of common stock in a private investment in public entities offering, net of offering costs of \$105,398 June 2016.	—	—	2,027,490	203	2,571,099	—	2,571,302
Issuance of common stock in a private investment in public entities offering October 2016	—	—	170,455	17	149,983	—	150,000
Issuance of common stock and equity warrants in a private investment in public entities offering, net of warrant liability of \$700,001 and net of offering costs of \$96,833 November 2016	—	—	1,666,668	167	203,000	—	203,167
Warrants, issued in conjunction with debt extinguishment	—	—	—	—	108,000	—	108,000
Issuance of common stock in exchange for vested restricted stock units	—	—	17,596	2	(2)	—	—
Stock-based compensation	—	—	—	—	717,927	—	717,927
Net and comprehensive loss	—	—	—	—	—	(14,733,780)	(14,733,780)
Balances—December 31, 2016	—	\$ —	14,007,132	\$1,401	\$37,980,522	\$ (40,436,108)	\$ (2,454,185)

The accompanying notes are an integral part of these financial statements.

Jaguar Animal Health, Inc.
Statements of Cash Flow

	Years Ended December 31,	
	2016	2015
Cash Flows from Operating Activities		
Net loss	\$(14,733,780)	\$(16,291,550)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation expense	47,494	5,155
Gain/loss on disposal of fixed assets	—	34,549
Loss on extinguishment of debt	108,000	—
Materials cost in connection with license activity	—	6,287
Issuance costs in connection with warrants issued in the November 2016 private investment in public entity	39,200	—
Stock-based compensation	717,927	992,165
Amortization of debt issuance costs and debt discount	510,085	2,720,668
Change in fair value of warrants	43,200	501,617
Changes in assets and liabilities		
Accounts receivable—trade	50,904	(55,867)
Inventory	(182,883)	(31,842)
Prepaid expenses	21,389	(299,913)
Deferred offering costs	(72,710)	—
Other long-term assets	—	(122,163)
Due from parent	(296,449)	(19,780)
Deferred revenue	(27,482)	228,134
Deferred rent	3,635	3,321
License fee payable	(425,000)	(1,200,000)
Accounts payable	(28,336)	(240,087)
Accrued expenses	(188,912)	(546,557)
Total cash used in operations	(14,413,718)	(14,315,863)
Cash Flows from Investing Activities		
Purchase of equipment	(104,207)	(23,300)
Sale of equipment	—	20,600
Change in restricted cash	2,488,707	(3,000,000)
Total cash provided by/(used in) investing activities	2,384,500	(3,002,700)
Cash Flows from Financing Activities		
Proceeds from issuance of long-term debt	—	5,615,543
Repayment of long-term debt	(2,488,706)	—
Proceeds from issuance of redeemable convertible notes payable, net	—	1,250,000
Repayment of convertible notes payable	—	(100,000)
Repayment of notes payable	—	(1,000,000)
Proceeds from issuance of common stock in initial public offering, net of commissions and discounts	—	18,810,484
Deferred offering costs	—	(417,775)
Proceeds from issuance of common stock in follow-on secondary public offering, net of commissions, discounts	5,000,000	—
Commissions, discounts and issuance costs associated with the follow-on secondary public offering	(869,898)	—
Proceeds from issuance of common stock in a private investment in public entities June 2016	2,676,746	—
Issuance costs associated with the proceeds from the issuance of common stock in a private investment in public entities June 2016	(105,444)	—
Proceeds from the issuance of common stock in a private investment in public entities October 2016	150,000	—
Proceeds from the issuance of common stock in a private investment in public entities November 2016	1,000,001	—
Issuance costs associated with the proceeds from the issuance of common stock in a private investment in public entities November 2016	(80,033)	—
Proceeds from the exercise of common stock options	—	12,650
Total Cash Provided by Financing Activities	5,282,666	24,170,902
Net increase in cash and cash equivalents	(6,746,552)	6,852,339
Cash and cash equivalents, beginning of period	7,697,531	845,192
Cash and cash equivalents, end of period	\$ 950,979	\$ 7,697,531
Supplemental Schedule of Non-Cash Financing and Investing Activities		
Interest paid on long-term debt	\$ 478,665	\$ 173,250
Warrants issued in connection with convertible notes payable	\$ —	\$ 47,479
Warrants issued in connection with notes payable	\$ 108,000	\$ —
Warrants issued in connection with the initial public offering	\$ —	\$ 400,400
Warrants issued in connection with private investment in public entity	\$ 756,001	—
Accretion of redeemable convertible preferred stock	\$ —	\$ 346,374
Abatement of license fee payable to Napo	\$ —	\$ 250,000
Conversion of convertible preferred stock to common stock	\$ —	\$ 7,651,288
Conversion of preferred stock warrant liability to common stock warrants	\$ —	\$ 1,150,985
Conversion of convertible notes to common stock	\$ —	\$ 2,100,000

The accompanying notes are an integral part of these financial statements.

Jaguar Animal Health, Inc.
Notes to Financial Statements

1. Organization and Business

Jaguar Animal Health, Inc. (“Jaguar” or the “Company”) was incorporated on June 6, 2013 (inception) in Delaware. The Company was a majority-owned subsidiary of Napo Pharmaceuticals, Inc. (“Napo” or the “Former Parent”) until the close of the Company’s initial public offering on May 18, 2015. The Company was formed to develop and commercialize first-in-class gastrointestinal products for companion and production animals and horses. The Company’s first commercial product, Neonorm Calf, was launched in 2014 and Neonorm Foal was launched in the first quarter of 2016. In September of 2016, the Company began selling the *Croton lechleri* botanical extract (the “botanical extract”) to an exclusive distributor for use in pigs in China. The Company’s activities are subject to significant risks and uncertainties, including failing to secure additional funding in order to timely compete the development and commercialization of products. The Company operates in one segment and is headquartered in San Francisco, California.

On June 11, 2013, Jaguar issued 2,666,666 shares of common stock to Napo in exchange for cash and services. On July 1, 2013, Jaguar entered into an employee leasing and overhead agreement (the “Service Agreement”) with Napo, under which Napo agreed to provide the Company with the services of certain Napo employees for research and development and the general administrative functions of the Company. On January 27, 2014, Jaguar executed an intellectual property license agreement with Napo pursuant to which Napo transferred fixed assets and development materials, and licensed intellectual property and technology to Jaguar. On February 28, 2014, the Service Agreement terminated and the associated employees became employees of Jaguar effective March 1, 2014. See Note 9 for additional information regarding the capital contributions and Note 4 for the Service Agreement and license agreement details. Effective July 1, 2016, Napo agreed to reimburse the Company for the use of the Company’s employee’s time and related expenses, including rent and a fixed overhead amount to cover office supplies and copier use.

On October 6, 2016, Jaguar signed a non-binding letter of intent (“LOI”) with Napo potentially to merge the two companies.

Reverse Stock Split

In October 2014, the Board of Directors and stockholders approved a 1-for-1.5 reverse stock split (the “Reverse Split”) of the Company’s outstanding shares of common stock and increased the number of authorized shares of common stock from 10,000,000 shares to 15,000,000 shares. The Company effected the Reverse Split on October 27, 2014. Under the terms of the Reverse Split, each share of common stock, issued and outstanding as of such effective date, was automatically reclassified and changed into two-thirds of one share of common stock, without any action by the stockholder. Fractional shares were rounded down to the nearest whole share. All share and per share amounts have been restated to reflect the Reverse Split.

Initial Public Offering

On May 18, 2015, the Company completed an initial public offering (“IPO”) of its common stock. In connection with its IPO, the Company issued and sold 2,860,000 shares of common stock at a price to the public of \$7.00 per share. As a result of the IPO, the Company received \$15.9 million in net proceeds, after deducting underwriting discounts and commissions of \$1.2 million and offering expenses of \$2.9 million (\$3.3 million including non-cash offering expenses) payable by the Company. In connection with the IPO, the Company’s outstanding shares of convertible preferred stock were automatically converted into

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

1. Organization and Business (Continued)

2,010,596 shares of common stock and the Company's outstanding warrants to purchase convertible preferred stock were all converted to warrants to purchase common stock.

Liquidity

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. The Company has incurred recurring operating losses since inception and has an accumulated deficit of \$40,436,108 as of December 31, 2016. The Company expects to incur substantial losses in future periods. Further, the Company's future operations are dependent on the success of the Company's ongoing development and commercialization efforts. There is no assurance that profitable operations, if ever achieved, could be sustained on a continuing basis.

The Company plans to finance its operations and capital funding needs through equity and/or debt financing as well as revenue from future product sales. However, there can be no assurance that additional funding will be available to the Company on acceptable terms on a timely basis, if at all, or that the Company will generate sufficient cash from operations to adequately fund operating needs or ultimately achieve profitability. If the Company is unable to obtain an adequate level of financing needed for the long-term development and commercialization of its products, the Company will need to curtail planned activities and reduce costs. Doing so will likely have an adverse effect on the Company's ability to execute on its business plan. These matters raise substantial doubt about the ability of the Company to continue in existence as a going concern within one year after issuance date of the financial statements. The accompanying financial statements do not include any adjustments that might result from the outcome of these uncertainties.

In June 2016, the Company entered into a common stock purchase agreement with a private investor (the "CSPA"), which provides that, upon the terms and subject to the conditions and limitations set forth therein, the investor is committed to purchase up to an aggregate of \$15.0 million of the Company's common stock over the approximately 30-month term of the agreement. As of December 31, 2016 the Company sold 2,027,490 shares for net cash proceeds of \$2,676,700. Under the CSPA, the Company cannot issue more than the 2,027,490 shares of common stock already issued unless the price per share is \$1.32 (the closing price on the date that the CSPA was signed).

2. Summary of Significant Accounting Policies

Basis of Presentation

The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP").

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires the Company's management to make judgments, assumptions and estimates that affect the amounts reported in its financial statements and the accompanying notes. The accounting policies that reflect the Company's more significant estimates and judgments and that the Company believes are the most critical to aid in fully understanding and evaluating its reported financial results are valuation of stock options; valuation of warrant liabilities; impairment of long lived assets; useful lives for depreciation; valuation adjustments for excess and obsolete inventory; deferred taxes and valuation allowances on deferred tax assets; and

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

evaluation and measurement of contingencies. Those estimates could change, and as a result, actual results could differ materially from those estimates.

Deferred Offering Costs

Deferred offering costs are costs incurred in filings of registration statements with the Securities and Exchange Commission. These deferred offering costs are offset against proceeds received upon the closing of the offerings. Deferred costs of \$143,231 as of December 31, 2015 include legal, accounting and filing fees associated with the follow-on registration offering as more fully described in Note 9. Deferred costs of \$72,710 as of December 31, 2016 include legal, accounting and filing fees associated with the Company's registration of unissued shares in the CSPA.

Concentration of Credit Risk and Cash and Cash Equivalents

Cash is the financial instrument that potentially subjects the Company to a concentration of credit risk as cash is deposited with a bank and cash balances are generally in excess of Federal Deposit Insurance Corporation ("FDIC") insurance limits. The carrying value of cash approximates fair value at December 31, 2016 and 2015.

Fair Values

The Company's financial instruments include, cash and cash equivalents, accounts payable, accrued expenses, amounts due to Napo, the former parent, warrant liabilities, and debt. Cash is reported at fair value. The recorded carrying amount of accounts payable, accrued expenses and amounts due to Napo approximates their fair value due to their short-term nature. The carrying value of the interest-bearing debt approximates fair value based upon the borrowing rates currently available to the Company for bank loans with similar terms and maturities. See Note 3 for the fair value measurements, and Note 7 for the fair value of the Company's warrant liabilities.

Restricted Cash

On August 18, 2015, the Company entered into a long-term loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. The loan agreement required the Company to maintain a base minimum cash balance of \$4.5 million until the Company met certain milestones and/or when the Company begins making principal payments. On December 22, 2015, the Company achieved certain milestones and the base minimum cash balance was reduced to \$3.0 million. Aggregate principal payments of \$2.5 million further reduced the restricted cash balance to \$511,294 as of December 31, 2016. Restricted cash has been classified within current assets as restrictions will be fully released on April 1, 2017.

Inventories

Inventories are stated at the lower of cost or market. The Company calculates inventory valuation adjustments when conditions indicate that the net realizable value is less than cost due to physical deterioration, usage, obsolescence, reductions in estimated future demand or reduction in selling price. Inventory write-downs are measured as the difference between the cost of inventory and estimated net realizable value. There have been no write-downs to date.

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Property and Equipment

Equipment is stated at cost, less accumulated depreciation. Equipment begins to be depreciated when it is placed into service. Depreciation is calculated using the straight-line method over the estimated useful lives of 3 to 10 years.

Expenditures for repairs and maintenance of assets are charged to expense as incurred. Costs of major additions and betterments are capitalized and depreciated on a straight-line basis over their estimated useful lives. Upon retirement or sale, the cost and related accumulated depreciation of assets disposed of are removed from the accounts and any resulting gain or loss is included in income (loss) from operations.

Long-Lived Assets

The Company regularly reviews the carrying value and estimated lives of all of its long-lived assets, including property and equipment to determine whether indicators of impairment may exist that warrant adjustments to carrying values or estimated useful lives. The determinants used for this evaluation include management's estimate of the asset's ability to generate positive income from operations and positive cash flow in future periods as well as the strategic significance of the assets to the Company's business objectives.

Should an impairment exist, the impairment loss would be measured based on the excess of the carrying amount over the asset's fair value. The Company has not recognized any impairment losses through December 31, 2016.

Research and Development Expense

Research and development expense consists of expenses incurred in performing research and development activities including related salaries, clinical trial and related drug and non-drug product costs, contract services and other outside service expenses. Research and development expense is charged to operating expense in the period incurred.

Revenue Recognition

Sales of Neonorm Calf and Foal to distributors are made under agreements that may provide distributor price adjustments and rights of return under certain circumstances. Until the Company develops sufficient sales history and pipeline visibility, revenue and costs of distributor sales will be deferred until products are sold by the distributor to the distributor's customers. Revenue recognition depends on notification either directly from the distributor that product has been sold to the distributor's customer, when the Company has access to the data. Deferred revenue on shipments to distributors reflect the estimated effects of distributor price adjustments, if any, and the estimated amount of gross margin expected to be realized when the distributor sells through product purchased from the Company. Company sales to distributors are invoiced and included in accounts receivable and deferred revenue upon shipment. Inventory is relieved and revenue recognized upon shipment by the distributor to their customer. The Company had Neonorm revenues of \$141,523 and \$258,381 for the years ended December 31, 2016, and 2015.

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Stock-Based Compensation

The Company's 2013 Equity Incentive Plan and 2014 Stock Incentive Plan (see Note 10) provides for the grant of stock options, restricted stock and restricted stock unit awards.

The Company measures stock awards granted to employees and directors at fair value on the date of grant and recognizes the corresponding compensation expense of the awards, net of estimated forfeitures, over the requisite service periods, which correspond to the vesting periods of the awards. The Company issues stock awards with only service-based vesting conditions, and records compensation expense for these awards using the straight-line method.

The Company uses the grant date fair market value of its common stock to value both employee and non-employee options when granted. The Company revalues non-employee options each reporting period using the fair market value of the Company's common stock as of the last day of each reporting period.

Classification of Securities

The Company applies the principles of ASC 480-10 "Distinguishing Liabilities from Equity" and ASC 815-40 "Derivatives and Hedging—Contracts in Entity's Own Equity" to determine whether financial instruments such as warrants, contingently issuable shares and shares subject to repurchase should be classified as liabilities or equity and whether beneficial conversion features exist. Financial instruments such as warrants that are evaluated to be classified as liabilities are fair valued upon issuance and are remeasured at fair value at subsequent reporting periods with the resulting change in fair value recorded in other income/(expense). The fair value of warrants is estimated using the Black Scholes Merton model and requires the input of subjective assumptions including expected stock price volatility and expected life.

Income Taxes

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the financial statements or in the Company's tax returns. Deferred taxes are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred tax assets is evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

The Company accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

reserves, or unrecognized tax benefits, that are considered appropriate, as well as the related net interest and penalties.

Comprehensive Loss

Comprehensive loss is defined as changes in stockholders' equity (deficit) exclusive of transactions with owners (such as capital contributions and distributions). For the years ended December 31, 2016 and 2015 there was no difference between net loss and comprehensive loss.

Segment Data

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company is an animal health company focused on developing and commercializing prescription and non-prescription products for companion and production animals.

Basic and Diluted Net Loss Per Common Share

Basic net loss per common share is computed by dividing net loss attributable to common stockholders for the period by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders for the period by the weighted-average number of common shares, including potential dilutive shares of common stock assuming the dilutive effect of potential dilutive securities. For periods in which the Company reports a net loss, diluted net loss per common share is the same as basic net loss per common share, because their impact would be anti-dilutive to the calculation of net loss per common share. Diluted net loss per common share is the same as basic net loss per common share for the years ended December 31, 2016 and 2015.

Recent Accounting Pronouncements

In November 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2016-18, Statement of Cash Flows: Restricted Cash, or ASU 2016-18, that will require entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents and restricted cash and restricted cash equivalents in the statement of cash flows. When cash, cash equivalents, restricted cash and restricted cash equivalents are presented in more than one line item on the balance sheet, the new guidance requires a reconciliation of the totals in the statement of cash flows to the related captions in the balance sheet. This reconciliation can be presented either on the face of the statement of cash flows or in the notes to the financial statements. Entities will also have to disclose the nature of their restricted cash and restricted cash equivalent balances. ASU 2016-18 becomes effective for fiscal years beginning after December 15, 2017, and interim periods within those years, with early adoption permitted. Any adjustments must be reflected as of the beginning of the fiscal year that includes that interim period. The adoption of this standard is not expected to have an impact on the Company's financial position or results of operations.

In August 2016, the FASB issued Accounting Standards Update, or ASU, No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments, which addresses the following cash flow issues: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

relation to the effective interest rate of the borrowing; (3) contingent consideration payments made after a business combination; (4) proceeds from the settlement of insurance claims; (5) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies; (6) distributions received from equity method investees; (7) beneficial interests in securitization transactions; and (8) separately identifiable cash flows and application of the predominance principle. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years and are effective for all other entities for fiscal years beginning after December 15, 2018 and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. The Company is currently evaluating the impact of the adoption of ASU No. 2016-15 on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, which simplifies several aspects of the accounting for employee stock-based payment transactions. The areas for simplification in ASU No. 2016-09 include the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The amendments in this ASU will be effective for annual periods beginning after December 15, 2016 and interim periods within those annual periods. Early adoption is permitted. The Company is currently evaluating the impact of the adoption of ASU No. 2016-09 on our consolidated financial statements.

In March 2016 the FASB issued ASU No. 2016-07, Investments—Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting. This new standard eliminates the requirement that when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence, an adjustment must be made to the investment, results of operations and retained earnings retroactively on a step-by-step basis as if the equity method had been in effect during all previous periods that the investment has been held. The ASU 2016-07 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. The Company is currently evaluating the potential effects of the adoption of this update on its financial statements.

In February 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2016-02, Leases (Topic 842), which provides guidance for accounting for leases. Under ASU 2016-02, the Company will be required to recognize the assets and liabilities for the rights and obligations created by leased assets. ASU 2016-02 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact of the adoption of ASU 2016-02 on our consolidated financial statements.

In November 2015, the FASB issued ASU No. 2015-17, Balance Sheet Classification of Deferred Taxes (Topic 740), which simplifies the presentation of deferred income taxes. Under ASU 2015-17, deferred tax assets and liabilities are required to be classified as noncurrent, eliminating the prior requirement to separate deferred tax assets and liabilities into current and noncurrent. The new guidance is effective for the Company beginning on January 1, 2017, with early adoption permitted. The standard may be adopted prospectively or retrospectively to all periods presented. The Company elected to early adopt the standard on a retrospective basis effective December 31, 2015, and all deferred tax assets and liabilities are classified as non-current on our balance sheet. Adoption had no effect on the Company’s balance sheet for 2016 and 2015 as presented.

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

In April 2015, the FASB issued ASU No. 2015-03, Interest—Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, to simplify the presentation of debt issuance costs by requiring debt issuance costs to be presented as a deduction from the corresponding debt liability. ASU 2015-03 will be effective for the Company beginning in its first quarter of 2016, however early adoption is permitted for financial statements that have not been previously issued. The guidance is to be applied retrospectively to all periods presented. The Company adopted ASU 2015-03 on December 31, 2015. The adoption of this guidance did not have an impact on the Company's financial condition, results of operations or cash flows.

In August 2014, the FASB issued ASU No. 2014-15, "Presentation of Financial Statements—Going Concern (Subtopic 205-40)—Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern", which provides guidance regarding management's responsibility to assess whether substantial doubt exists regarding the ability to continue as a going concern and to provide related footnote disclosures. In connection with preparing financial statements for each annual and interim reporting period, management should evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued (or within one year after the date that the financial statements are available to be issued when applicable). This ASU is effective for the annual period ending after December 15, 2016, and for annual periods and interim periods thereafter. The Company implemented this guidance for the annual period beginning after December 15, 2016. The adoption of this guidance did not have an impact on the Company's financial condition, results of operations or cash flows.

In June 2014, the FASB issued ASU No. 2014-12, "Compensation—Stock Compensation (Topic 718)", which requires that a performance target that affects vesting and that could be achieved after the requisite service period be treated as a performance condition. The performance target should not be reflected in estimating the grant-date fair value of the award. Compensation cost should be recognized in the period in which it becomes probable that the performance target will be achieved and should represent the compensation cost attributable to the period(s) for which the requisite service has already been rendered. If the performance target becomes probable of being achieved before the end of the requisite service period, the remaining unrecognized compensation cost should be recognized prospectively over the remaining requisite service period. The total amount of compensation cost recognized during and after the requisite service period should reflect the number of awards that are expected to vest and should be adjusted to reflect those awards that ultimately vest. The requisite service period ends when the employee can cease rendering service and still be eligible to vest in the award if the performance target is achieved. This guidance is effective for annual periods (and interim periods within those annual periods) beginning after December 15, 2015. The Company implemented this guidance for all interim and annual periods beginning after December 15, 2015. The adoption of this guidance did not have an impact on the Company's financial condition, results of operations or cash flows.

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers." The objective of ASU 2014-19 is to establish a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and will supersede most of the existing revenue recognition guidance, including industry-specific guidance. The core principle of the new standard is that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard is effective for annual reporting periods beginning after December 15, 2018 and allows for prospective or retrospective application. The Company currently anticipates utilizing the full retrospective

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

method of adoption allowed by the standard, in order to provide for comparative results in all periods presented, and plans to adopt the standard as of January 1, 2018. The Company is currently evaluating the new guidance, however it does not believe the impact will be significant.

3. Fair Value Measurements

ASC 820 “Fair Value Measurements,” defines fair value, establishes a framework for measuring fair value under generally accepted accounting principles and enhances disclosures about fair value measurements. Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

- Level 1—Quoted prices in active markets for identical assets or liabilities;
- Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data; and
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

The following table presents information about the Company’s warrant liabilities that were measured at fair value on a recurring basis as of December 31, 2016 and 2015 and indicates the fair value hierarchy of the valuation:

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
As of December 31, 2016 Warrant Liability	\$—	\$—	\$799,201	\$799,201

There were no warrant liabilities at December 31, 2015.

The change in the estimated fair value of level 3 liabilities is summarized below:

	<u>Beginning Value of Level 3 Liability</u>	<u>Issuance of Common Stock Warrants</u>	<u>Change in Fair Value of Level 3 Liability</u>	<u>Conversion into Additional Paid-in Capital</u>	<u>Ending Fair Value of Level 3 Liability</u>
For the year ended December 31, 2016 .	\$ —	\$756,001	\$ 43,200	\$ —	\$799,201
For the year ended December 31, 2015 .	\$601,889	\$ 47,479	\$501,617	\$(1,150,985)	\$ —

The warrants issued in 2016 were originally valued on November 29, 2016 using the Black-Scholes-Merton model with the following assumptions: stock price of \$0.69, exercise price of \$0.75, term of 5.5 years expiring May 2022, volatility of 71.92%, dividend yield of 0%, and risk-free interest rate of 1.87%. The warrants were revalued at December 31, 2016 using the Black-Scholes model with the following

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

3. Fair Value Measurements (Continued)

assumptions: stock price of \$0.716, exercise price of \$0.75, term of 5.41 years expiring May 2022, volatility of 73.62%, dividend yield of 0%, and risk-free interest rate of 2.0%.

The change in the fair value of the level 3 warrant liability is reflected in the statement of operations and comprehensive loss for the years ended December 31, 2016 and 2015.

4. Related Party Transactions

Due from former parent

The Company was a majority-owned subsidiary of Napo until May 18, 2015, the date of the Company's IPO. Additionally, Lisa A. Conte, Chief Executive Officer of the Company, is also the interim Chief Executive Officer of Napo Pharmaceuticals, Inc. The Company has total outstanding receivables (payables) from/to former parent ("Napo") at December 31, 2016 and December 31, 2015 as follows:

	December 31, 2016	December 31, 2015
Due from former parent	\$299,819	\$ 6,008
Royalty payable to former parent	(171)	(2,809)
Net receivable from former parent	\$299,648	\$ 3,199
	December 31, 2016	December 31, 2015
License fee payable to former parent	—	(425,000)

Due from former parent

Employee leasing and overhead allocation

Effective July 1, 2016, Napo agreed to reimburse the Company for the use of the Company's employee's time and related expenses, including rent and a fixed overhead amount to cover office supplies and copier use. The total amount of such services was \$627,529 for the six months ended December 31, 2016. Napo remitted \$350,000 in fiscal year 2016 and the remaining balance of \$277,529 is included in current assets in the Company's balance sheet.

Other transactions

In 2016, the Company made \$22,290 in payments for consulting, travel and computer equipment on behalf of Napo. In 2015, the Company made \$6,008 in net payments on behalf of Napo, including \$15,000 in Napo legal services paid by the Company, net of \$8,992 of Company consulting services paid by Napo.

The Company purchased from Napo \$37,355 of clinical trial material of which \$897 of unused material remains in prepaid expenses and other current assets on the Company's balance sheet, crofelemer API of \$174,299 all of which was used and expensed in 2016, and \$66,358 of crude plant latex in 2016 none of which has been used in operations and all of which is included in prepaid expenses and other current assets in the Company's balance sheet. All of these purchases were paid in 2016.

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

4. Related Party Transactions (Continued)

The Company sublet office space from Napo from March 1, 2014 through May 31, 2014. The Company paid Napo \$33,897 for rent related to the office space, which was included in general and administrative expense in the Company's statements of operations and comprehensive loss in 2014.

Royalty payable to former parent and license fee payable to former parent and related agreement

On July 11, 2013, Jaguar entered into an option to license Napo's intellectual property and technology (the "Option Agreement"). Under the Option Agreement, upon the payment of \$100,000 in July 2013, the Company obtained an option for a period of two years to execute an exclusive worldwide license to Napo's intellectual property and technology to use for the Company's animal health business. The option price was creditable against future license fees to be paid to Napo under the License Agreement (as defined below).

In January 2014, the Company exercised its option and entered into a license agreement (the "License Agreement") with Napo for an exclusive worldwide license to Napo's intellectual property and technology to permit the Company to develop, formulate, manufacture, market, use, offer for sale, sell, import, export, commercialize and distribute products for veterinary treatment uses and indications for all species of animals. The Company was originally obligated to pay a one-time non-refundable license fee of \$2,000,000, less the option fee of \$100,000. At the Company's option, the license fee could have been paid in common stock. In January 2015, the License Agreement was amended to decrease the one-time non-refundable license fee payable from \$2,000,000 to \$1,750,000 in exchange for acceleration of the payment of the fee. Given that Napo is a significant shareholder of the Company, the abatement of the license fee amount has been recorded as a capital contribution in the accompanying condensed financial statements. In the years ending December 31, 2016 and 2015, the Company made payments of \$425,000 and \$1.2 million, respectively.

Milestone payments aggregating \$3,150,000 may also be due to Napo based on regulatory approvals of various veterinary products. In addition to the milestone payments, the Company will owe Napo an 8% royalty on annual net sales of products derived from the *Croton lechleri* tree, up to \$30,000,000 and then, a royalty of 10% on annual net sales of \$30,000,000 or more. Additionally, if any other products are developed, the Company will owe Napo a 2% royalty on annual net sales of pharmaceutical prescription products that are not derived from *Croton lechleri* and a 1% royalty on annual net sales of non-prescription products that are not derived from *Croton lechleri*. The royalty term expires at the longer of 10 years from the first sale of each individual product or when there is no longer a valid patent claim covering any of the products and a competitive product has entered the market. However, because an IPO of at least \$10,000,000 was consummated prior to December 31, 2015, the royalty was reduced to 2% of annual net sales of its prescription products derived from *Croton lechleri* and 1% of net sales of its non-prescription products derived from *Croton lechleri* and no milestone payment will be due and no royalties will be owed on any additional products developed. The Company incurred \$1,015 and \$39,734 in royalties for the years ended December 31, 2016 and 2015, respectively, which are included in sales and marketing expense in the Company's statement of operations and comprehensive loss. The Company had unpaid royalties of \$171 and \$2,810 at December 31, 2016 and 2015, respectively, which are netted with other receivables due from the former parent and are included in current assets in the Company's balance sheet. The Company may, at its sole discretion, elect to remit any milestone payments and/or royalties in the form of the Company's common stock.

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

4. Related Party Transactions (Continued)

In addition to receiving a License Agreement to Napo's intellectual property and technology, the License also transferred to the Company certain materials and equipment. Raw materials of \$1.2 million transferred from Napo were included in research and development expense on the statements of operations and comprehensive loss during the year ended December 31, 2014. Equipment of \$811,087 related to the License is included in property and equipment on the Company's balance sheet at December 31, 2016 and 2015 at the cost paid by Napo, which approximates fair value.

The Company has agreed under the License Agreement to defend, indemnify and hold Napo, its affiliates, and the officers, directors, employees, consultants and contractors of Napo harmless from and against any losses, costs, damages, liabilities, fees and expenses arising out of any third-party claim related to the Company's gross negligence, breach of covenants or the manufacture, sale or use of the product or products.

5. Balance Sheet Components

Property and Equipment

Property and equipment at December 31, 2016 and 2015 consisted of the following:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Lab equipment	\$811,087	\$811,087
Clinical equipment	64,870	23,300
Software	62,637	—
Total property and equipment at cost	938,594	834,387
Accumulated Depreciation	<u>(52,649)</u>	<u>(5,155)</u>
Property and Equipment, net	<u>\$885,945</u>	<u>\$829,232</u>

Depreciation and amortization expense was \$47,494 and \$5,155 in the years ended December 31, 2016 and 2015 and was recorded in the statements of operations and comprehensive loss as follows:

	<u>Years Ended December 31,</u>	
	<u>2016</u>	<u>2015</u>
Depreciation—Lab Equipment—research and development expense	\$26,271	\$4,378
Depreciation—Clinical Equipment—research and development expense	10,203	777
Depreciation—Software—general and administrative expense	11,020	—
Total Depreciation Expense	<u>\$47,494</u>	<u>\$5,155</u>

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

5. Balance Sheet Components (Continued)

Accrued Expenses

Accrued expenses at December 31, 2016 and 2015 consist of the following:

	<u>December 31,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>
Accrued compensation and related:		
Accrued vacation	\$223,769	187,734
Accrued payroll	2,692	80,692
Accrued payroll tax	20,140	43,702
	<u>246,601</u>	<u>312,128</u>
Accrued interest	123,982	127,149
Accrued contract manufacturing costs	—	110,141
Accrued clinical	36,725	166,750
Accrued other	175,214	82,266
Total	<u>\$582,522</u>	<u>798,434</u>

6. Commitments and Contingencies

Operating Leases

Effective July 1, 2015, the Company leases its San Francisco, California headquarters under a non-cancelable sub-lease agreement that expires August 31, 2018. The Company provided cash deposits of \$122,163, consisting of a security deposit of \$29,539 and prepayment of the last three months of the lease of \$92,623, which are included in other assets on the Company's balance sheet.

Future minimum lease payments under non-cancelable operating leases as of December 31, 2016 are as follows:

<u>Years ending December 31,</u>	<u>Amount</u>
2017	363,486
2018	245,327
Total minimum lease payments	<u>608,813</u>

The Company recognizes rent expense on a straight-line basis over the non-cancelable lease period. Rent expense under the non-cancelable operating lease was \$361,114 for the year ended December 31, 2016 and \$180,557 for the six months ended December 31, 2015. Rent expense is included in general and administrative expense in the Company's statements of operations and comprehensive loss.

As discussed in Note 4 above, on March 1, 2014, the Company sublet office space in San Francisco, California from Napo. The Company paid Napo \$33,897 for rent related to the office space for the months of March, April and May of 2014, which was included in general and administrative expense in the Company's statements of operations and comprehensive loss. Beginning June 1, 2014, the Company assumed Napo's sublease from the landlord. The term of the assumed sublease was from June 1, 2014 through June 30, 2015. Rent expense under the sublease was \$69,580 and \$80,816 for the years ended

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

6. Commitments and Contingencies (Continued)

December 31, 2015 and 2014, respectively, which was included in general and administrative expense in the Company's statement of operations and comprehensive loss.

Contract Manufacturing Commitment

Effective June 26, 2014 the Company entered into a technology transfer and commercial manufacturing agreement (the "Transfer Agreement") with a contract manufacturer in Italy (the "Manufacturer"), whereby the Company and the Manufacturer will cooperate to develop and refine the manufacturing process for the Company's prescription and non-prescription products. Pursuant to the Transfer Agreement, the Company was to make prepayments to the Manufacturer as follows: (1) a start-up fee of €500,000, €250,000 of which was to be paid at the earlier to occur of September 15, 2014 or the closing date of an initial public offering and €250,000 of which was to be paid at the time of installation and qualification of the Company's equipment at their facility, (2) related to the technology transfer, €620,000, €310,000 of which was paid subsequent to the signature of the Transfer Agreement and €310,000 of which was to be paid after the delivery of a final study report, (3) for design of a portion of the Manufacturer's facility, €100,000 was to be paid within five days of the signature of the Transfer Agreement, and (4) a €300,000 bonus fee payable in two equal installments, the first of which is due by the end of March 2015, with the remainder paid by the end of December 2015. The first €150,000 of the bonus fee payable was paid in May 2015. Additionally, the Transfer Agreement stipulated that the Company was to pay the Manufacturer an aggregate of €500,000 upon the delivery of agreed-upon levels of satisfactory product. Further, the Company issued the Manufacturer warrants to purchase 16,666 shares of common stock with an exercise price of 90% of the initial public offering price, amended to \$6.30 in March 2015.

Effective February 12, 2015, March 25, 2015 and July 15, 2015 the Company entered into amendments delaying payments to the Manufacturer as follows: (i) the €500,000 start-up fee was due by the end of April 2015 and has been paid during the year ended December 31, 2015, (ii) related to the technology transfer, of the remaining €310,000, €215,000 was due April 2015 and €95,000 was due June 30, 2015, both of which were paid during the year ended December 31, 2015, (iii) related to the design of a portion of the Manufacturer's facility, the payment has increased to €170,000, €150,000 of which was due at the end of April 2015 and €20,000 was due on June 30, 2015, both of which have been paid during the year ended December 31, 2015 (iv) the fees linked to the deliverables are now due €250,000 on December 31, 2015 and €250,000 on March 31, 2016, 2015, (v) the bonus fee payable of €300,000, €150,000 was due at the end of April 2015 and has been paid during the year ended December 31, 2015 and €150,000 due at December 31, 2015. In May 2015, the Company entered into a Memorandum of Understanding ("MOU") with the contract manufacturer and paid the start-up fee of €500,000 and the technology transfer fee of €215,000. In accordance with the terms of the Memorandum of Understanding, the Manufacturer will supply 400Kg of the Company's API at no cost in anticipation of the future deduction by December 2015. The final €250,000 was paid on March 29, 2016.

In December 2015, we entered into an amendment to our technology transfer and commercial manufacturing agreement with our contract manufacturer in Italy delaying a €150,000 bonus fee payment which was originally due on December 31, 2015 to March 31, 2016. On April 4, 2016, the Company further amended the payment date to June 30, 2016. The Company paid the final €150,000 bonus fee on July 15, 2016.

The Company expensed the total cost of the contract ratably over the estimated life of the contract, or the total amount paid if greater. As of December 31, 2016 and December 31, 2015, the amortized costs

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

6. Commitments and Contingencies (Continued)

exceeded amounts paid by \$0 and \$110,141, respectively, which are included in accrued manufacturing costs in accrued liabilities in the Company's balance sheet.

Debt Obligations

See Note 7—Debt and Warrants.

Contingencies

From time to time, the Company may be involved in legal proceedings arising in the ordinary course of business. The Company believes there is no litigation pending that could have, individually or in the aggregate, a material adverse effect on the financial position, results of operations or cash flows.

7. Debt and Warrants

Convertible Notes and Warrants

2013 Convertible Notes

From July through September 2013, the Company issued four convertible promissory notes (collectively the "Notes") for gross aggregate proceeds of \$525,000 to various third-party lenders. The Notes bore interest at 8% per annum. The Notes automatically matured and the entire outstanding principal amount, together with accrued interest, was due and payable in cash at the earlier of July 8, 2015 (the "Maturity Date") or ten business days after the date of consummation of the initial closing of a first equity round of financing. The Company consummated a first equity round of financing prior to the Maturity Date with a pre-money valuation of greater than \$3.0 million, and, accordingly, principal and accrued interest was converted into shares of common stock at 75% of the purchase price paid by such equity investors. These notes were all converted to common stock in February 2014 upon the issuance of the convertible preferred stock. In February 2014, in connection with the first equity round of financing and issuance of the Series A convertible preferred stock, the noteholders exercised their option to convert their Notes into 207,664 shares of common stock and accrued interest was paid in cash to the noteholders. The accreted interest expense related to the discount on the Notes was \$1,443 for the period from January 1, 2014 to the conversion date of the Notes. Upon conversion, the entire remaining debt discount of \$4,071 was recorded as interest expense.

In connection with the Notes, the Company issued warrants to the noteholders, which became exercisable to purchase an aggregate of 207,664 shares of common stock as of the issuance of the first equity round of financing (the "Warrants"). The Warrants have a \$2.53 exercise price, are fully exercisable from the initial date of the first equity round of financing, and have a five-year term subsequent to that date.

2014 Convertible Notes

On June 2, 2014, pursuant to a convertible note purchase agreement, the Company issued convertible promissory notes in the aggregate principal amount of \$300,000 to two accredited investors, including a convertible promissory note for \$200,000 to a board member to which Series A preferred stock was sold. These notes accrued interest at 3% per annum and automatically were to mature on June 1, 2015. Interest expense for the year ended December 31, 2015 was \$3,237 and is included in interest expense in the statement of operations and comprehensive loss. Accrued interest is \$8,507 and is included in accrued

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

7. Debt and Warrants (Continued)

liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon the closing of the IPO, the outstanding principal amount automatically converted into 53,571 shares common stock at \$5.60, as amended in March 2015. Upon issuance, the Company analyzed the beneficial nature of the conversion terms and determined that a beneficial conversion feature (“BCF”) existed because the effective conversion price on issuance of the notes was less than the fair value at the time of the issuance. The Company calculated the value of the BCF using the intrinsic method and recorded a BCF of \$75,000 as a discount to notes payable and to additional paid-in capital. For the year ended December 31, 2015, the Company amortized \$31,250 of the discount as interest expense in the statements of operations and comprehensive loss.

On July 16, 2014, pursuant to a convertible note purchase agreement, the Company issued a convertible promissory note in the principal amount of \$150,000 to an accredited investor. This note accrued interest at 3% per annum and automatically was to mature on June 1, 2015. Interest expense for the year ended December 31, 2015 was \$1,627 and is included in interest expense in the statements of operations and comprehensive loss. Accrued interest is \$3,711 and is included in accrued liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon the closing of the IPO, the outstanding principal amount automatically converted into 26,785 shares of common stock at \$5.60, as amended in March 2015. Upon issuance, the Company analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. The Company calculated the value of the BCF using the intrinsic method and recorded a BCF of \$37,500 as a discount to the notes payable and to additional paid-in capital. For the year ended December 31, 2015, the Company amortized \$17,857 of the discount as interest expense in the statements of operations and comprehensive loss.

In connection with the Transfer Agreement (Note 6) the Company issued fully vested and immediately exercisable warrants to the Manufacturer to purchase 16,666 shares of common stock at 90% of the IPO price, amended to \$6.30 in March 2015, for a period of five years. The fair value of the warrants, \$37,840, was recorded as research and development expense and additional paid-in capital in June 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$4.83, exercise price of \$4.35, term of five years, volatility of 49%, dividend yield of 0%, and risk-free interest rate of 1.64%.

On December 23, 2014, pursuant to a convertible note purchase agreement, the Company issued convertible promissory notes in the aggregate principal amount of \$650,000 to three accredited investors, including a convertible promissory note for \$250,000 to the same board member to which the June 2, 2014 \$200,000 convertible promissory note was issued and to which Series A preferred stock was sold. These notes accrued interest at 12% per annum and became payable within thirty days following the IPO. Interest expense for the year ended December 31, 2015 was \$28,210 and is included in interest expense in the statements of operations and comprehensive loss. Accrued interest is \$30,132 and is included in accrued liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon consummation of the Company’s IPO, the noteholders converted the notes into 116,070 shares of common stock at a conversion price equal to 80% of the IPO price, amended to \$5.60 in March 2015. In connection with these notes, the Company also issued the lenders a fully vested warrant to purchase shares of the Company’s common stock at an exercise price equal to 80% of the IPO price, amended to \$5.60 in March 2015. These warrants entitle the noteholders to purchase 58,035 shares of common stock. The fair value of the warrants, \$147,943, was recorded as a debt discount and liability at December 23, 2014. The Company amortized \$141,890 of this discount in the year ended December 31, 2015 which has been recorded as

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

7. Debt and Warrants (Continued)

interest expense in the Company's statements of operations and comprehensive loss. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$4.59, exercise price of \$4.15, term of three years expiring December 2017, volatility of 49%, dividend yield of 0%, and risk-free interest rate of 1.10%. Based on the circumstances, the value derived using the Black-Scholes model approximated that which would be obtained using a lattice model. The debt discount was amortized as interest expense over the one hundred ninety days from issuance of the notes through their first maturity date of July 31, 2015, beginning in January 2015. The Company analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. The Company calculated the value of the BCF using the intrinsic method. A BCF of \$502,057 was recorded as a discount to the notes payable and to additional paid-in capital. For the year ended December 31, 2015, the Company amortized \$484,329 of the BCF as interest expense in the statements of operations and comprehensive loss.

2015 Convertible Notes

In February 2015, the Company issued convertible promissory notes to two accredited investors in the aggregate principal amount of \$250,000. These notes were issued pursuant to the convertible note purchase agreement dated December 23, 2014. In connection with the issuance of the notes, the Company issued the lenders warrants to purchase 22,320 shares at \$5.60 per share, which expire December 31, 2017. Principal and interest of \$103,912 was paid in May 2015 for \$100,000 of these notes. The Company analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. The Company calculated the value of the BCF using the intrinsic method. A BCF of for the full face value was recorded as a discount to the notes payable and to additional paid-in capital. For the years ended December 31, 2016 and 2015, the Company amortized \$0 and \$250,000 of the BCF as interest expense in the Company's statement of operations and comprehensive income.

Extinguishment of debt

The remaining outstanding note of \$150,000 is payable to the investor at an effective simple interest rate of 12% per annum, and was due in full on July 31, 2016. On July 28, 2016, the Company entered into an amendment to delay the repayment of the principal and related interest under the terms of the remaining note from July 31, 2016 to October 31, 2016. On November 8, 2016, the Company entered into an amendment to extend the maturity date of the remaining note from October 31, 2016 to January 1, 2017. In exchange for the extension of the maturity date, on November 8, 2016, the Company's board of directors granted the lender a warrant to purchase 120,000 shares of the Company's common stock for \$0.01 per share. The warrant is exercisable at any time on or before July 28, 2022, the expiration date of the warrant.

The amendment and related warrant issuance resulted in the Company treating the debt as having been extinguished and replaced with new debt for accounting purposes due to meeting the 10% cash flow test. The Company calculated a loss on the extinguishment of debt of \$108,000, or the equivalent to the fair value of the warrants granted, which is included in other expense in the Company's statements of operations and comprehensive loss.

The \$150,000 note is included in notes payable in the Company's balance sheet. The Company has accrued interest of \$33,929 and \$15,880, which is included in accrued liabilities in the Company's balance

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

7. Debt and Warrants (Continued)

sheet as of December 31, 2016 and 2015, respectively, and incurred \$18,049 and \$15,880 in interest expense in the years ended December 31, 2016 and 2015, respectively.

On December 28, 2016, the Company entered into an amendment to extend the maturity date of the note from January 1, 2017 to January 31, 2017. On January 31, 2017, the Company entered into an amendment to further extend the due date of the \$150,000 convertible note payable from January 31, 2017 to January 1, 2018.

In March 2015, the Company entered into a non-binding letter of intent with an investor. In connection therewith, the investor paid the Company \$1.0 million. At March 31, 2015, the Company had recorded this amount as a loan advance on the balance sheet. In April 2015, the investor purchased \$1.0 million of convertible promissory notes from the Company, the terms of which provided that such notes were to be converted into shares of the Company's common stock upon the closing of an IPO at a conversion price of \$5.60 per share. In connection with the purchase of the notes, the Company issued the investor a warrant to purchase 89,285 shares at \$5.60 per share, which expires December 31, 2017. The notes accrued simple interest of 12% per annum and, upon consummation of the Company's IPO in May 2015, converted into 178,571 shares of the Company's common stock. The Company analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. The Company calculated the value of the BCF using the intrinsic method. A BCF of for the full face value was recorded as a discount to the notes payable and to additional paid-in capital. For the year ended December 31, 2015, the Company amortized \$1,000,000 of the BCF as interest expense in the Company's statements of operations and comprehensive income. The Company has accrued interest of \$17,753, which is included in accrued liabilities in the Company's balance sheet, and has incurred \$17,753 and \$15,880 in interest expense in the years ended December 31, 2016 and 2015, respectively.

The outstanding convertible notes payable obligation was \$150,000 as of December 31, 2016 and 2015.

Interest expense on the convertible notes for the years ended December 31, 2016 and 2015 was as follows:

	Years Ended December 31,	
	2016	2015
Nominal Interest	\$18,049	\$ 70,619
Amortization of debt discount	—	1,925,326
	\$18,049	\$1,995,945

Interest payable on the convertible notes at December 31, 2016 and 2015 was as follows:

	December 31, 2016	December 31, 2015
Interest Payable:	\$94,048	\$75,999

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

7. Debt and Warrants (Continued)

Notes Payable—Bridge Loans

On October 30, 2014, the Company entered into a standby bridge financing agreement with two lenders, which was amended and restated on December 3, 2014, which provided a loan commitment in the aggregate principal amount of \$1.0 million (the “Bridge”). Proceeds to the Company were net of a \$100,000 debt discount under the terms of the Bridge and net of \$104,000 of debt issuance costs. This debt discount and debt issuance costs were recorded as interest expense using the effective interest method, over the six month term of the Bridge. The Bridge became payable upon the IPO. The Bridge was repaid in May 2015, including interest thereon in an amount of \$1,321,600. In connection with the Bridge, the lenders were granted warrants to purchase 178,569 shares of the Company’s common stock determined by dividing \$1.0 million by the exercise price of 80% of the IPO price, amended to \$5.60 in March 2015. The fair value of the warrants, \$505,348, was originally recorded as a debt discount and liability at December 3, 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$5.01, exercise price of \$5.23, term of five years expiring December 2019, volatility of 63%, dividend yield of 0%, and risk-free interest rate of 1.61%. Based on the circumstances, the value derived using the Black-Scholes model approximated that which would be obtained using a lattice model. The debt discount was recorded as interest expense over the six month term of the Bridge. Of the aggregate debt discount of \$605,348 (warrants and original \$100,000 discount), \$521,291 was recorded as interest expense during the year ended December 31, 2015. Additional financing costs of \$104,000 were incurred related to the Bridge and deferred on closing. These were recognized as interest expense over the six-month term of the Bridge using the effective interest method. The Company amortized the remaining \$86,667 of these deferred financing charges by the end of May 2015 was recorded the amortized amounts as interest expense. The Company fully extinguished the debt and accrued interest in May 2015.

Interest expense on the notes payable-bridge loans for the years ended December 31, 2016 and 2015 was as follows:

	Years Ended December 31,	
	2016	2015
Nominal Interest	\$—	\$100,000
Amortization of debt discount	—	521,291
Repayment premium	—	201,600
Debt issuance costs	—	86,667
	\$—	\$909,558

Standby Line of Credit

In August 2014, the Company entered into a standby line of credit with an accredited investor for up to \$1.0 million pursuant to a Line of Credit and Loan Agreement dated August 26, 2014. In connection with the entry into the standby line of credit, the Company issued the lender a fully vested warrant to purchase 33,333 shares of common stock at an exercise price equal to 80% of the IPO price, amended to \$5.60 in March 2015, which expires in August 2016. The fair value of the warrants, \$114,300, was recorded as interest expense and additional paid-in capital in August 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$8.00, exercise price of \$6.40, term of two years, volatility of 52%, dividend yield of 0%, and risk-free interest rate of 0.52%. The line of credit

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

7. Debt and Warrants (Continued)

expired on March 31, 2015 and there were no drawdowns under the facility. The warrants expired in August 2016.

Long-term Debt

In August 2015, the Company entered into a loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. The loan agreement requires the Company to maintain \$4.5 million of the proceeds in cash, which may be reduced or eliminated on the achievement of certain milestones. An additional \$2.0 million is available contingent on the achievement of certain further milestones. The agreement has a term of three years, with interest only payments through February 29, 2016. Thereafter, principal and interest payments will be made with an interest rate of 9.9%. Additionally, there will be a balloon payment of \$560,000 on August 1, 2018. This amount is being recognized over the term of the loan agreement and the effective interest rate, considering the balloon payment, is 15.0%. Proceeds to the Company were net of a \$134,433 debt discount under the terms of the loan agreement. This debt discount is being recorded as interest expense, using the interest method, over the term of the loan agreement. Under the agreement, the Company is entitled to prepay principal and accrued interest upon five days prior notice to the lender. In the event of prepayment, the Company is obligated to pay a prepayment charge. If such prepayment is made during any of the first twelve months of the loan agreement, the prepayment charge will be (a) during such time as the Company is required to maintain a minimum cash balance, 2% of the minimum cash balance amount plus 3% of the difference between the amount being prepaid and the minimum cash balance, and (b) after such time as the Company is no longer required to maintain a minimum cash balance, 3% of the amount being prepaid. If such prepayment is made during any time after the first twelve months of the loan agreement, 1% of the amount being prepaid.

On April 21, 2016, the loan and security was amended upon which the Company repaid \$1.5 million of the debt out of restricted cash. The amendment modified the repayment amortization schedule providing a four-month period of interest only payments for the period from May through August 2016.

As of December 31, 2016 and 2015, the net long-term debt obligation was as follows:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Debt and unpaid accrued end-of-term payment	\$3,894,320	\$6,115,797
Unamortized note discount	(42,493)	(106,635)
Unamortized debt issuance costs	<u>(114,626)</u>	<u>(206,235)</u>
Net debt obligation	<u>\$3,737,201</u>	<u>\$5,802,927</u>
Current portion of long-term debt	\$1,919,675	\$1,707,899
Long-term debt, net of discount	1,817,526	\$4,095,028
Total	<u>\$3,737,201</u>	<u>\$5,802,927</u>

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

7. Debt and Warrants (Continued)

Future principal payments under the long-term debt are as follows:

<u>Years ending December 31</u>	<u>Amount</u>
2017	\$2,032,048
2018	1,479,246
Total future principal payments	3,511,294
2018 end-of-term payment	560,000
	<u>4,071,294</u>
Less: unaccreted end-of-term payment at December 31, 2016	(176,974)
Debt and unpaid accrued end-of-term payment	<u>\$3,894,320</u>

The obligation at December 31, 2015 includes an end-of-term payment of \$560,000, which accretes over the life of the loan as interest expense. As a result of the debt discount and the end-of-term payment, the effective interest rate for the loan differs from the contractual rate.

Interest expense on the long-term debt for the years ended December 31, 2016 and 2015 was as follows:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Nominal Interest	\$457,448	\$224,400
Amortization of debt discount	64,142	27,798
Accretion of end-of-term payment	267,230	115,797
Debt issuance costs	178,713	43,789
	<u>\$967,533</u>	<u>\$411,784</u>

At the IPO, the Company's outstanding warrants to purchase convertible preferred stock were all converted to warrants to purchase common stock.

Warrants

On November 22, 2016, the Company entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which the Company sold securities to such investors in a private placement transaction, which we refer to herein as the 2016 Private Placement. In the 2016 Private Placement, the Company sold an aggregate of 1,666,668 shares of the Company's common stock at a price of \$0.60 per share for gross proceeds of approximately \$1.0 million. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668 shares of the Company's common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, and the Placement Agent received warrants to purchase 133,333 shares of our common stock in lieu of cash for service fees with the same terms as the investors; (ii) warrants to purchase up to an aggregate 1,666,668 shares of the Company's common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

7. Debt and Warrants (Continued)

Series B Warrants, the 2016 Warrants. The warrants were granted in three series with different terms. The warrants were valued using the Black-Scholes-Merton warrant pricing model as follows:

- Series A Warrants and Placement Agent Warrants: 1,666,668 warrant shares with a strike price of \$0.75 per share and an expiration date of May 29, 2022; and 133,333 warrant shares to the placement agent with a strike price of \$0.75 and an expiration date of May 29, 2022; the expected life is 5.5 years, the volatility is 71.92% and the risk free rate is 1.87% in valuing these warrants.
- Series B Warrants: 1,666,668 warrant shares with a strike price of \$0.90 per share and an expiration date of November 29, 2017; the expected life is one year, the volatility is 116.65% and the risk free rate is 0.78% in valuing these warrants.
- Series C Warrants: 1,666,668 warrant shares with a strike price of \$1.00 per share and an expiration date of May 29, 2018; the expected life is 1.5 years, the volatility is 116.92% and the risk free rate is 0.94%.

The warrant valuation date was November 29, 2016 and the closing price of \$0.69 per share was used in determining the fair value of the warrants. The series A warrants and placement agent warrants were valued at \$756,001 and were classified as a warrant liability in the Company's balance sheet. The series A warrants and placement agent warrants were revalued on December 31, 2016 at \$799,201 which is included in the Company's balance sheet, and the \$43,200 increase is included in the Company's statements of operations and comprehensive loss. The strike price was \$0.75 per share, the expected life was 5.41 years, the volatility was 73.62% and the risk free rate was 2.0%. The series B and C warrants were classified as equity, and as such were not subject to revaluation at year end. Costs incurred in connection with the issuance were allocated based on the relative fair values of the Series A and the Series B and C warrants.

The Company's warrant activity is summarized as follows:

	December 31, 2016	December 31, 2015
Beginning balance at January 1	748,872	494,267
Warrants granted	5,253,337	254,605
Warrants cancelled	(33,333)	—
Ending balance at December 31	5,968,876	748,872

8. Redeemable Convertible Preferred Stock

In February, April and May of 2014, the Company issued 3,015,902 shares of convertible preferred stock in exchange for \$6,777,338. The redemption value of the convertible preferred stock was \$9.0 million. The differences between the respective redemption values/liquidation preference and carrying values are being accreted over the period from the date of issuance to the earliest possible redemption date, February 2017. The Company has recorded accretion of \$263,060 for the year ended December 31, 2015.

Costs incurred in connection with the issuance of Series A redeemable convertible preferred stock during the year ended December 31, 2014 were \$119,097 which have been recorded as a reduction to the carrying amounts of convertible preferred stock and are being accreted to the carrying value of the applicable preferred stock to the redemption date. The Company has recorded accretion of \$83,334 for the year ended December 31, 2015.

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

8. Redeemable Convertible Preferred Stock (Continued)

On May 18, 2015, the Company completed its IPO. In connection with the IPO, all of the Company's 3,015,902 outstanding shares of convertible preferred stock were automatically converted into 2,010,596 shares of common stock. Prior to this conversion event, Convertible Preferred Stock had been classified outside of stockholders' (deficit) in accordance with authoritative guidance for the classification and measurement of potentially redeemable securities.

9. Stockholders' Equity

Common Stock

The Company's second amended and restated certificate of incorporation authorizes the Company to issue 50,000,000 shares of common stock \$0.0001 par value. The holders of common stock are entitled to one vote for each share of common stock held at all meetings of stockholders. The number of authorized shares of common stock may be increased or decreased by the affirmative vote of the holders of shares of capital stock of the Company representing a majority of the votes represented by all shares (including Preferred Stock) entitled to vote.

In February 2016, the Company completed a secondary public offering of its common stock. In connection with its secondary public offering, the Company issued and sold 2,000,000 shares of common stock at a price to the public of \$2.50 per share. As a result of the secondary public offering, the Company received \$4.1 million in net proceeds, after deducting underwriting discounts and commissions of \$373,011 and offering expenses of \$496,887.

In June 2016, the Company entered into a common stock purchase agreement with a private investor (the "CSPA"), which provides that, upon the terms and subject to the conditions and limitations set forth therein, the investor is committed to purchase up to an aggregate of \$15.0 million of the Company's common stock over the approximately 30-month term of the agreement. Upon execution of the CSPA, the Company sold 222,222 shares of its common stock to the investor at \$2.25 per share for net proceeds of \$394,534, reflecting gross proceeds of \$500,000 and offering expenses of \$105,398. In consideration for entering into the CSPA, the Company issued 456,667 shares of its common stock to the investor. Concurrently with entering into the CSPA, the Company also entered into a registration rights agreement with the investor (the "Registration Agreement"), in which the Company agreed to file one or more registration statements, as permissible and necessary to register under the Securities Act of 1933, as amended, the sale of the shares of the Company's common stock that have been and may be issued to the investor under the CSPA. On June 22, 2016 and September 22, 2016, the Company filed registration statements on Form S-1 (File Nos. 333-212173 and 333-213751) pursuant to the terms of the Registration Agreement, which registration statements were declared effective on July 8, 2016 and October 5, 2016, respectively. In the year ended December 31, 2016, pursuant to the CSPA, the Company sold an additional 1,348,601 shares of the Company's common stock in exchange for \$2,176,700 of cash proceeds. Of the \$15.0 million available under the CSPA, the Company has received \$2,676,700 as of December 31, 2016. Under the CSPA, the Company cannot issue more than the 2,027,490 shares of common stock already issued unless the price per share is \$1.32 (the closing price on the date that the CSPA was signed).

In October 2016, the Company entered into a Common Stock Purchase Agreement with an existing private investor. Upon execution of the agreement the Company sold 170,455 shares of its common stock in exchange for \$150,000 in cash proceeds.

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

9. Stockholders' Equity (Continued)

On November 22, 2016, the Company entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which the Company sold securities to such investors in a private placement transaction, which is referred to herein as the 2016 Private Placement. In the 2016 Private Placement, the Company sold an aggregate of 1,666,668 shares of its common stock at a price of \$0.60 per share for net proceeds of \$677,224 or gross proceeds of approximately \$1.0 million less \$322,777 in issuance costs. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668 shares of our common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, (ii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the Series B Warrants, the 2016 Warrants. The issuance costs were allocated to common stock, series A warrants, and Series B and C warrants based on the relative fair value of each:

<u>Instruments</u>	<u>Fair Value</u>	<u>% Allocation</u>	<u>Issuance Costs (allocated)</u>
Common Stock	\$ 156,522	16%	\$ 50,522
Warrants (Series A)	700,001	70%	225,944
Warrants (Series B and C)	143,478	14%	46,311
Total	<u>\$1,000,001</u>	<u>100%</u>	<u>\$322,777</u>

Common stock of a net \$106,000 (fair value less issuance costs) was included in equity in the company's balance sheet. Series A warrants of \$756,001, consisting of the series A warrants of \$700,001 and the series A placement agent warrants of \$56,000, are included in current liabilities in the company's balance sheet and the \$225,944 of issuance cost was expensed and is in general and administrative expense on the company's statement of operations and comprehensive loss. Series B and C warrants of a net \$97,167 (fair value less issuance costs) were classified in equity in the company's balance sheet.

In exchange for the extension of the maturity date of the outstanding 2015 Convertible Note, on, November 8, 2016, the Company's board of directors granted the lender a warrant to purchase 120,000 shares of the Company's common stock for \$0.01 per share. The warrant is exercisable at any time on or before July 28, 2022, the expiration date of the warrant. The amendment and related warrant issuance resulted in the Company treating the debt as having been extinguished and replaced with new debt for accounting purposes due to meeting the 10% cash flow test. The Company calculated a loss on the extinguishment of debt of \$108,000, or the equivalent to the fair value of the warrants granted, which is included in other expense in the Company's statements of operations and comprehensive loss. The warrants were valued on November 8, 2016 using the Black-Scholes-Merton model with the following assumptions: stock price of \$0.91, exercise price of \$0.01, term of 5.72 years expiring July 2022, volatility of 70.35%, dividend yield of 0%, and risk-free interest rate of 1.45%.

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

9. Stockholders' Equity (Continued)

As of December 31, 2016 and 2015, the Company had reserved shares of common stock for issuance as follows:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Options issued and outstanding	2,571,220	919,506
Options available for grant	39,988	106,833
RSUs issued and outstanding	20,789	55,536
Warrants issued and outstanding	5,968,876	748,872
Convertible notes	<u>67,655</u>	<u>26,785</u>
Total	<u>8,668,528</u>	<u>1,857,532</u>

Preferred Stock

The Company's second amended and restated certificate of incorporation authorizes the Company to issue 10,000,000 shares of preferred stock \$0.0001 par value. No shares of preferred stock were issued or outstanding at December 31, 2016 or December 31, 2015.

10. Stock Incentive Plans

2013 Equity Incentive Plan

Effective November 1, 2013, the Company's board of directors and sole stockholder adopted the Jaguar Animal Health, Inc. 2013 Equity Incentive Plan (the "2013 Plan"). The 2013 Plan allows the Company's board of directors to grant stock options, restricted stock awards and restricted stock unit awards to employees, officers, directors and consultants of the Company. As of December 31, 2013, the Company had reserved 300,000 shares of its common stock for issuance under the 2013 Plan. In April 2014, the board of directors amended the 2013 Plan to increase the shares reserved for issuance to 847,533 shares. Following the effective date of the IPO and after effectiveness of any grants under the 2013 Plan that were contingent on the IPO, no additional stock awards will be granted under the 2013 Plan. Outstanding grants continue to be exercisable, however any unissued shares under the plan and any forfeitures of outstanding options do not rollover to the 2014 Stock Incentive Plan.

2014 Stock Incentive Plan

Effective May 12, 2015, the Company adopted the Jaguar Animal Health, Inc. 2014 Stock Incentive Plan ("2014 Plan"). The 2014 Plan provides for the grant of options, restricted stock and restricted stock units to eligible employees, directors and consultants to purchase the Company's common stock. The Company reserved 333,333 shares of common stock for issuance pursuant to the 2014 Plan. The Company added 162,498 shares to the plan in accordance with the Plan that provides for automatic share increases on the first day of each fiscal year in the amount of 2% of the outstanding number of shares of the Company's common stock on last day of the preceding calendar year. The 2014 Plan replaces the 2013 Plan except that all outstanding options under the 2013 Plan remain outstanding until exercised, cancelled or until they expire.

In July 2015, the Company amended the 2014 Plan reserving an additional 550,000 shares under the plan contingent upon approval by the Company's stockholders at the June 2016 annual stockholders

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

10. Stock Incentive Plans (Continued)

meeting. In June 2016, the Company amended the 2014 Plan once again, modifying the increase from 550,000 shares to 1,550,000 shares, which was approved at the 2016 annual stockholders meeting.

Stock Options and Restricted Stock Units (“RSUs”)

The following table summarizes incentive plan activity for the years ended December 31, 2016 and 2015:

	Shares Available for Grant	Stock Options Outstanding	RSUs Outstanding	Weighted Average Stock Option Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
2013 Equity Incentive Plan Balance—						
December 31, 2014	119,077	659,554	68,902	\$2.67		
Additional shares authorized	—					
Options granted	(176,364)	176,364	—	\$7.00		
Options cancelled	95,784	(95,784)	—	\$2.53		
Options available for grant cancelled upon IPO	(51,863)	—				
Options cancelled post-IPO not rolled back into the 2013 Plan	—	(42,128)				
Options exercised	—	(5,000)	—	\$2.53		
RSUs granted	(1,484)	—	1,484			
RSUs cancelled	14,850	—	(14,850)			
2013 Equity Incentive Plan Balance—						
December 31, 2015	—	693,006	55,536	\$3.74		
2014 Stock Incentive Plan Balance—December 31, 2014						
Shares authorized	333,333					
Options granted	(241,500)	241,500		\$4.32		
Options cancelled	15,000	(15,000)		\$5.09		
Combined Incentive Plan Balance—						
December 31, 2015	106,833	919,506	55,536	\$3.87	8.81	\$—
2013 Equity Incentive Plan Activity:						
Options cancelled not rolled back into the 2013 Plan		(127,629)		\$4.19		
RSUs vested and released			(27,768)			
RSUs cancelled			(6,979)			
2014 Stock Incentive Plan Activity:						
Additional shares authorized	1,712,498					
Options granted	(1,927,121)	1,927,121		\$1.97		
Options cancelled	147,778	(147,778)		\$2.28		
Combined Incentive Plan Balance—						
December 31, 2016	<u>39,988</u>	<u>2,571,220</u>	<u>20,789</u>	<u>\$2.52</u>	<u>8.77</u>	
Options vested and exercisable—December 31, 2016						
		<u>983,147</u>		<u>\$3.41</u>	<u>8.25</u>	\$—
Options vested and expected to vest—						
December 31, 2016		<u>2,163,246</u>		<u>\$2.52</u>	<u>8.73</u>	\$—

The weighted average grant date weighted average fair value of stock options granted was \$0.86 and \$2.90 per share during the years ended December 31, 2016 and 2015.

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

10. Stock Incentive Plans (Continued)

The number of option shares that vested in the years ended December 31, 2016 and 2015 was 655,481 shares and 413,063 shares, respectively. The grant date weighted average fair value of option shares that vested in the years ended December 31, 2016 and 2015 was \$722,134 and \$893,974, respectively.

The grant date weighted-average fair value of options exercised was \$0.43 in the year December 31, 2015 of which there was no intrinsic value. No options were exercised in the year ended December 31, 2016.

The Company granted RSUs in 2014 and 2015 under the 2013 Equity Incentive Plan. The units granted vest upon the occurrence of both a liquidity event and satisfaction of the service-based requirement. The time-based vesting provides that 50% of the RSU will vest on January 1, 2016 and the remaining 50% vest on July 1, 2017. The Company began recording stock-based compensation expense relating to the RSU grants effective May 18, 2015, the date of the Company's initial public offering, and the date the liquidity condition was met. The stock-based compensation expense is based on the grant date fair value which is the equivalent to the fair market value on the date of grant, and is amortized over the vesting period using the straight-line method, net of estimated forfeitures. On January 1, 2016, the Company issued 17,546 shares of its common stock in exchange for 27,768 vested and released RSUs, net of 10,172 RSU shares used to pay withholding taxes.

Stock-Based Compensation

The following table summarizes stock-based compensation expense related to stock options and RSUs for the three months ended December 31, 2016 and 2015, and are included in the statements of operations and comprehensive loss as follows:

	Years Ended December 31,	
	2016	2015
Research and development expense	\$181,489	\$472,145
Sales and marketing expense	73,679	54,115
General and administrative expense	462,759	465,905
Total	\$717,927	\$992,165

As of December 31, 2016, the Company had \$1,263,950 of unrecognized stock-based compensation expense for options and restricted stock units outstanding, which is expected to be recognized over a weighted-average period of 1.9 years.

The estimated grant-date fair value of employee stock options was calculated using the Black-Scholes option-pricing model using the following assumptions:

	Years Ended December 31,	
	2016	2015
Weighted-average volatility	66.25 - 72.08%	55.43 - 61.51%
Weighted-average expected term (years)	5.00 - 5.82	5.15 - 5.82
Risk-free interest rate	1.10 - 2.15%	1.60 - 1.84%
Expected dividend yield	—	—

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

10. Stock Incentive Plans (Continued)

The estimated grant-date fair value of non-employee stock options was calculated using the Black-Scholes option-pricing model using the following assumptions:

	Years Ended December 31,	
	2016	2015
Weighted-average volatility	78.30 - 80.04%	76.63%
Weighted-average expected term (years)	9.19 - 10.00	9.69
Risk-free interest rate	1.32 - 2.46%	2.25%
Expected dividend yield	—	—

11. Net Loss Per Share Attributable to Common Stockholders

The following table presents the calculation of basic and diluted net loss per common share for the years ended December 31, 2016 and 2015:

	December 31, 2016	December 31, 2015
Net loss attributable to common shareholders	\$(14,733,780)	\$(16,637,924)
Shares used to compute net loss per common share, basic and diluted	10,951,178	6,153,139
Net loss per share attributable to common shareholders, basic and diluted	\$ (1.35)	\$ (2.70)

Basic net loss per share is calculated by dividing net loss by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing net loss by the weighted-average number of common shares and common share equivalents outstanding for the period. Common stock equivalents are only included when their effect is dilutive. The Company's potentially dilutive securities which include stock options, convertible preferred stock and common stock warrants have been excluded from the computation of diluted net loss per share as they would be anti-dilutive. For all periods presented, there is no difference in the number of shares used to compute basic and diluted shares outstanding due to the Company's net loss position.

The following outstanding common stock equivalents have been excluded from diluted net loss per common share for the years ended December 31, 2016 and 2015 because their inclusion would be anti-dilutive:

	December 31, 2016	December 31, 2015
Options issued and outstanding	2,571,220	919,506
Warrants to purchase common stock	5,968,876	748,872
Restricted stock units	20,789	55,536
Total	8,560,885	1,723,914

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

12. Income Taxes

The Company's loss before provision for income taxes during the years ended December 31, 2016 and 2015, was a domestic loss of \$14,733,780 and \$16,291,550, respectively.

Due to continued losses for the year ending December 31, 2016, and a full valuation allowance, the Company has not recorded a provision for income taxes for the years ending December 31, 2016 or 2015.

The components of the provision for income taxes during the years ended December 31, 2016 and 2015 is as follows:

	<u>December 31,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>
Current:		
Federal	\$ —	\$ —
State	—	—
Foreign	—	—
Total Current	<u>—</u>	<u>—</u>
Deferred:		
Federal	(4,387,544)	(4,197,007)
State	(1,249,149)	(587,696)
Foreign	—	—
Total Deferred	<u>(5,636,693)</u>	<u>(4,784,703)</u>
Valuation Allowance	5,636,693	4,784,703
Total Provision for Income Taxes	<u>\$ —</u>	<u>\$ —</u>

The Company's effective tax during the years ended December 31, 2016 and 2015, differed from the federal statutory rate as follows:

	<u>December 31,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>
Statutory Rate	(34.0)%	(34.0)%
State Taxes	(5.6)%	(3.6)%
Tax Credits	(0.5)%	5.2%
Other	1.8%	1.7%
Valuation Allowance	<u>38.3%</u>	<u>30.7%</u>
Effective Tax Rate	<u>0.0%</u>	<u>0.0%</u>

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

12. Income Taxes (Continued)

Net deferred tax assets as of December 31, 2016 and 2015 consist of the following:

	December 31, 2016	December 31, 2015
Non-current Deferred Tax Assets:		
Net Operating Costs	\$ 9,626,610	\$ 7,459,489
Tax Credits	374,605	261,851
Stock Compensation	297,438	188,602
Fixed Assets and Intangibles	3,700,557	470,577
Other	93,434	75,432
	14,092,644	8,455,951
Valuation Allowance	(14,092,644)	(8,455,951)
Net Non-current Deferred Tax Assets	\$ —	\$ —

A valuation allowance is provided when it is more likely than not that the deferred tax assets will not be realized. The Company has established a valuation allowance to offset net deferred tax assets as of December 31, 2016 and 2015, due to the uncertainty of realizing future tax benefits from its net operating loss carryforwards and other deferred tax assets.

The valuation allowance increased by \$5,636,693 during the year ended December 31, 2016.

As of December 31, 2016, the Company had federal and California net operating loss carryovers of approximately \$24,543,368 and \$17,103,817, respectively. The federal and California net operating losses will begin to expire in 2033.

As of December 31, 2016, the Company had federal and California research credit carryovers of approximately \$279,793 and \$285,554, respectively. The federal research credits will begin to expire in 2033. The California research credits carry forward indefinitely.

Utilization of the domestic NOL and tax credit forwards may be subject to a substantial annual limitation due to ownership change limitations that may have occurred or that could occur in the future, as required by the Internal Revenue Code Section 382, as well as similar state provisions. In general, an “ownership change,” as defined by the code, results from a transaction or series of transactions over a three-year period resulting in an ownership change of more than 50 percentage points of the outstanding stock of a company by certain stockholders or public groups. Any limitation may result in expiration of all or a portion of the NOL or tax credit carryforwards before utilization.

In November 2015, the FASB issued Accounting Standards Update 2015-17, which simplifies the presentation of deferred income taxes by requiring that deferred tax assets and liabilities be presented as non-current. The standard impacts presentation only. The Company elected to early adopt the standard on a retrospective basis effective December 31, 2015, and all deferred tax assets and liabilities are classified as non-current on the Company’s consolidated balance sheets. Adoption of this ASU had no effect on the Company’s balance sheet for 2015 as presented.

Uncertain Tax Positions

The Company has adopted the provisions of ASC 740, “Income Taxes Related to Uncertain Tax Positions.” Under these principals, tax positions are evaluated in a two-step process. The Company first

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

12. Income Taxes (Continued)

determines whether it is more-likely-than-not that a tax positions will be sustained upon examination. If a tax position meets the more-likely-than-not recognition threshold it is then measured to determine the amount of benefit to be recognized in the financial statements. The tax position is measured as the largest amount of benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement.

The following is a reconciliation of the beginning and ending amount of our total gross unrecognized tax benefit liabilities:

	December 31, 2016	December 31, 2015
Gross Unrecognized Tax Benefit—Beginning Balance	\$ 78,930	\$31,006
Increases Related to Tax Positions from Prior Years	—	5,920
Increases Related to Tax Positions Taken During t the Current Year	34,143	42,004
Gross Unrecognized Tax Benefit—Beginning Balance	<u>\$113,073</u>	<u>\$78,930</u>

There are no liabilities from unrecognized tax benefits included in the Company’s balance sheet as of December 31, 2016 and 2015, and therefore the Company has not accrued for any penalties or interest.

The Company files income tax returns in the United States and various states, where the statute of limitations are 3 years and 4 years, respectively. The Company remains open for audit by the United States Internal Revenue Service and states state tax jurisdictions since inception.

The Company is not currently under examination by income tax authorities in federal or state jurisdictions.

13. 401(k) Plan

The Company sponsors a 401(k) defined contribution plan covering all employees. There were no employer contributions to the plan from plan inception through December 31, 2016.

14. Subsequent Events

The Company completed an evaluation of the impact of subsequent events through February 15, 2017, the date these financial statements were issued.

Commercialization Agreement

On January 27, 2017, the Company announced it entered into a licensing, development, co-promotion and commercialization agreement with Elanco US Inc. (“Elanco”) to license, develop and commercialize Canalevia, a Company drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals (collectively, the “Licensed Products”). The Elanco Agreement grants Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco will have exclusive rights globally outside the U.S. and co-exclusive rights with the Company in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products.

Jaguar Animal Health, Inc.
Notes to Financial Statements (Continued)

14. Subsequent Events (Continued)

Under the terms of the Elanco Agreement, the Company received a \$1.5 million upfront payment and will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well as product development expense reimbursement, and royalty payments on global sales. The Elanco Agreement specifies that the Company will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. The Elanco Agreement also contains provisions regarding payment terms, confidentiality and indemnification, as well as other customary provisions. Elanco will also reimburse the Company for Canalevia-related expenses, including reimbursement for Canalevia-related expenses in Q4 2016, certain development and regulatory expenses related to the Company's planned target animal safety study and the completion of the Company's field study of Canalevia for acute diarrhea in dogs.

2015 Convertible Notes Payable

On January 31, 2017, the Company entered into an amendment to extend the due date of the \$150,000 convertible note payable from January 31, 2017 to January 1, 2018. In exchange for the extension of the maturity date, on January 31, 2017, the Company's board of directors granted the convertible note holder a warrant to purchase 370,916 shares of the Company's common stock for \$0.51 per share. The warrant is exercisable at any time on or before January 31, 2019, the expiration date of the warrant.

Merger Agreement

On February 8, 2017, the Company announced that it had entered into a binding agreement of terms (the "Agreement") to merge with Napo Pharmaceuticals, Inc., the Company's former parent. The transaction was approved by the unanimous vote of independent and disinterested members of each of Jaguar's and Napo's Board of Directors. Napo will operate as a wholly-owned subsidiary of Jaguar, focused on human health. The binding financial terms of the merger include a 3-to-1 Napo-to-Jaguar value ratio to calculate the relative ownership of the combined entity. As of January 31, 2017, Napo owned approximately 19% of Jaguar's outstanding shares of common stock. The Agreement sets forth the financial terms of the merger and customary conditions to closing, which include but are not limited to completion of due diligence, receipt of a fairness opinion, and stockholder and other approvals. Additionally, the financial terms of the merger and conditions to closing include provisions that (i) Napo's secured convertible debt shall not exceed \$10.0 million and its unsecured debt shall not exceed \$3.0 million, and (ii) a third party will invest \$3.0 million in the Company for approximately four million shares of newly issued common stock of the Company with the investment proceeds loaned to Napo immediately prior to the consummation of the merger. The Agreement also provides that if the merger fails to close for any reason on or prior to July 31, 2017, other than as a result directly or indirectly of (x) lack of stockholder approval by either party or (y) Napo (i) failing to perform in accordance with the terms and conditions of the Agreement or (ii) failing to abide by or breaching the provisions or representations, warranties and covenants of the Agreement or the merger documents, then, on or before the close of business on August 7, 2017, the Company will be required to issue 2,000,000 shares of its restricted common stock to Napo.

Jaguar Health, Inc.
CONDENSED CONSOLIDATED BALANCE SHEETS

	<u>September 30, 2017</u>	<u>December 31, 2016</u>
	(Unaudited)	(1)
Assets		
Current assets:		
Cash and cash equivalents	\$ 220,590	\$ 950,979
Restricted cash	500,000	511,293
Accounts receivable	759,177	4,963
Other receivable	17,349	—
Due from former parent	—	299,648
Inventory	1,831,662	412,754
Deferred offering costs	303,963	72,710
Prepaid expenses and other current assets	609,506	302,694
	<hr/>	<hr/>
Total current assets	4,242,247	2,555,041
Property and equipment, net	840,852	885,945
Goodwill	18,389,821	—
Intangible assets, net	36,118,889	—
Other assets	396,246	122,163
	<hr/>	<hr/>
Total assets	\$ 59,988,055	\$ 3,563,149
Liabilities and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable	\$ 7,857,404	\$ 517,000
Deferred collaboration revenue	814,589	—
Deferred product revenue	224,448	224,454
Deferred rent	5,928	—
Convertible notes payable	3,213,209	150,000
Accrued expenses	1,927,301	582,522
Warrant liability	163,080	799,201
Derivative liability	19,000	—
Current portion of long-term debt	1,801,227	1,919,675
	<hr/>	<hr/>
Total current liabilities	16,026,186	4,192,852
Long-term debt, net of discount	—	1,817,526
Convertible notes payable	11,161,000	—
Deferred tax liability	990,549	—
Deferred rent	—	6,956
	<hr/>	<hr/>
Total liabilities	\$ 28,177,735	\$ 6,017,334
Commitments and Contingencies (See Note 7)		
Stockholders' Equity (Deficit):		
Preferred stock: \$0.0001 par value, 10,000,000 shares authorized at September 30, 2017 and December 31, 2016; no shares issued and outstanding at September 30, 2017 and December 31, 2016.	—	—
Common stock: \$0.0001 par value, 250,000,000 and 50,000,000 shares authorized at September 30, 2017 and December 31, 2016, respectively; 24,627,367 and 14,007,132 shares issued and outstanding at September 30, 2017 and December 31, 2016, respectively.	2,463	1,401
Common stock—non-voting: \$0.0001 par value, 50,000,000 and 0 shares authorized at September 30, 2017 and December 31, 2016; 43,173,288 and 0 shares issued and outstanding at September 30, 2017 and December 31, 2016, respectively.	4,317	—
Additional paid-in capital	74,000,804	37,980,522
Accumulated deficit	(42,197,264)	(40,436,108)
	<hr/>	<hr/>
Total stockholders' equity (deficit)	31,810,320	(2,454,185)
	<hr/>	<hr/>
Total liabilities and stockholders' equity (deficit)	\$ 59,988,055	\$ 3,563,149

(1) The condensed balance sheet at December 31, 2016 is derived from the audited financial statements at that date included in the Company's Form 10-K filed with the Securities and Exchange Commission on February 15, 2017.

The accompanying notes are an integral part of these condensed consolidated financial statements.

JAGUAR HEALTH, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Product revenue	\$ 445,665	\$ 50,357	\$ 581,654	\$ 112,646
Collaboration revenue	654,549	—	\$ 2,237,491	—
Total revenue	<u>1,100,214</u>	<u>50,357</u>	<u>2,819,145</u>	<u>112,646</u>
Operating Expenses				
Cost of product revenue	206,228	9,858	247,135	36,867
Research and development expense	851,608	1,967,128	3,033,851	5,672,516
Sales and marketing expense	663,765	136,882	943,908	355,345
General and administrative expense	3,070,702	1,115,312	8,512,195	4,319,856
Impairment of goodwill	3,648,000	—	3,648,000	—
Total operating expenses	<u>8,440,303</u>	<u>3,229,180</u>	<u>16,385,089</u>	<u>10,384,584</u>
Loss from operations	(7,340,089)	(3,178,823)	(13,565,944)	(10,271,938)
Interest expense	(464,684)	(235,191)	(800,885)	(774,185)
Other expense	(14,876)	(1,476)	(13,428)	(11,046)
Change in fair value of warrants	388,800	—	636,121	—
Loss on extinguishment of debt	—	—	(207,713)	—
Net loss before income tax	(7,430,849)	(3,415,490)	(13,951,849)	(11,057,169)
Income tax benefit	<u>12,190,693</u>	<u>—</u>	<u>12,190,693</u>	<u>—</u>
Net income (loss) and comprehensive income (loss)	<u>\$ 4,759,844</u>	<u>\$ (3,415,490)</u>	<u>\$ (1,761,156)</u>	<u>\$ (11,057,169)</u>
Net income (loss) per share—basic	<u>\$ 0.09</u>	<u>\$ (0.30)</u>	<u>\$ (0.06)</u>	<u>\$ (1.07)</u>
Net income (loss) per share—diluted	<u>\$ 0.07</u>	<u>\$ (0.30)</u>	<u>\$ (0.06)</u>	<u>\$ (1.07)</u>
Weighted average shares outstanding:				
Basic	<u>55,434,898</u>	<u>11,264,886</u>	<u>28,246,721</u>	<u>10,298,987</u>
Diluted	<u>67,203,530</u>	<u>11,264,886</u>	<u>28,246,721</u>	<u>10,298,987</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

JAGUAR HEALTH, INC.
CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN COMMON STOCK,
CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)
(Unaudited)

	Series A Convertible Preferred Stock		Common Stock— voting		Common stock— non-voting		Additional paid-in capital	Accumulated deficit	Total stockholders' equity (deficit)
	Shares	Amount	Shares	Amount	Shares	Amount			
Balances—December 31, 2016	—	\$—	14,007,132	\$1,401	—	\$ —	\$37,980,522	\$(40,436,108)	\$(2,454,185)
Issuance of common stock associated with private investment in public entities offering, net of offering costs of \$72,710 June 2016	—	—	3,972,510	397	—	—	2,313,977	—	2,314,374
Issuance of common stock in a private investment in public entities offering, net of offering costs of \$6,000 June 2017	—	—	200,000	20	—	—	93,980	—	94,000
Issuance of common stock -voting in the Napo merger	—	—	2,282,445	228	—	—	1,277,941	—	1,278,169
Issuance of common stock in a July 2017 CSPA	—	—	3,243,243	325	—	—	2,999,675	—	3,000,000
Issuance of common stock—non-voting in the Napo merger	—	—	—	—	43,173,288	4,317	24,172,725	—	24,177,042
Issuance of warrants in the Napo merger	—	—	—	—	—	—	630,859	—	630,859
Issuance of stock options in the Napo merger	—	—	—	—	—	—	5,691	—	5,691
Issuance of RSUs in the Napo merger	—	—	—	—	—	—	3,300,555	—	3,300,555
Issuance of common stock -voting on exercise of warrants	—	—	908,334	91	—	—	386,243	—	386,334
Stock-based compensation	—	—	—	—	—	—	630,924	—	630,924
Warrants, issued in conjunction with debt extinguishment	—	—	—	—	—	—	207,713	—	207,713
Issuance of common stock -voting in exchange for vested restricted stock units	—	—	13,703	1	—	—	(1)	—	—
Net and comprehensive loss	—	—	—	—	—	—	—	(1,761,156)	(1,761,156)
Balances—September 30, 2017	—	\$—	24,627,367	\$2,463	43,173,288	\$4,317	\$74,000,804	\$(42,197,264)	\$31,810,320

The accompanying notes are an integral part of these condensed consolidated financial statements.

JAGUAR HEALTH, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Nine Months Ended September 30,	
	2017	2016
Cash Flows from Operating Activities		
Net loss	\$ (1,761,156)	\$(11,057,169)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization expense	326,204	32,463
Impairment of goodwill	3,648,000	—
Deferred income tax benefit	(12,190,693)	—
Loss on extinguishment of debt	207,713	—
Stock issued in Napo merger for services	151,351	—
Charge in relation to modification of warrants	23,000	—
Stock-based compensation	630,924	478,442
Amortization of debt issuance costs and debt discount	367,891	396,107
Change in fair value of warrants	(636,121)	—
Change in fair value of derivative liability	(1,000)	—
Changes in assets and liabilities		
Accounts receivable—trade	(457,576)	50,904
Other receivable	(17,349)	—
Inventory	369,155	(46,356)
Prepaid expenses and other current assets	(256,057)	(331,124)
Deferred offering costs	(231,253)	—
Other non-current assets	122,163	—
Due from former parent	(164,647)	(269,863)
Deferred collaboration revenue	814,589	—
Deferred product revenue	(6)	(5,701)
Deferred rent	(1,028)	3,478
License fee payable	—	(425,000)
Accounts payable	4,691,363	(151,912)
Accrued expenses	(130,255)	(360,776)
Total cash used in operations	(4,494,788)	(11,686,507)
Cash Flows from Investing Activities		
Purchase of equipment	—	(104,207)
Cash paid in Napo merger, net of cash acquired	(1,557,340)	—
Change in restricted cash	11,293	2,011,420
Total cash (used in)/ provided by investing activities	(1,546,047)	1,907,213
Cash Flows from Financing Activities		
Repayment of long-term debt	(2,161,262)	(2,011,420)
Proceeds from issuance of convertible debt	1,700,000	—
Proceeds from issuance of common stock in follow-on secondary public offering, net of commissions, discounts	—	5,000,000
Commissions, discounts and issuance costs associated with the follow-on secondary public offering	—	(869,898)
Proceeds from issuance of common stock in a private investment in public entities June 2016	2,376,155	1,881,890
Issuance costs associated with the proceeds from the issuance of common stock in a private investment in public entities June 2016	(61,781)	(105,398)
Proceeds from issuance of common stock in a private investment in public entities June 2017	100,000	—
Issuance costs associated with the proceeds from the issuance of common stock in a private investment in public entities June 2017	(6,000)	—
Proceeds from issuance of common stock in a July 2017 CSPA	3,000,000	—
Proceeds from the issuance of common stock through the exercise of common stock warrants	363,334	—
Total Cash Provided by Financing Activities	5,310,446	3,895,174
Net decrease in cash and cash equivalents	(730,389)	(5,884,120)
Cash and cash equivalents, beginning of period	950,979	7,697,531
Cash and cash equivalents, end of period	\$ 220,590	\$ 1,813,411
Supplemental Schedule of Non-Cash Financing and Investing Activities		
Interest paid on long-term debt	\$ 201,835	\$ 382,810
Fair value of common stock issued in a merger	\$ 25,303,859	\$ —
Fair value of replacement of common stock warrants issued in a merger	\$ 630,859	\$ —
Fair value of replacement restricted stock units issued in a merger	\$ 3,300,555	\$ —
Fair value of replacement stock options issued in a merger	\$ 5,691	\$ —

The accompanying notes are an integral part of these condensed consolidated financial statements.

JAGUAR HEALTH, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Business

Jaguar Health, Inc. (“Jaguar” or the “Company”), formerly known as Jaguar Animal Health, Inc., was incorporated on June 6, 2013 (inception) in Delaware. The Company was a majority-owned subsidiary of Napo Pharmaceuticals, Inc. (“Napo” or the “Former Parent”) until the close of the Company’s initial public offering on May 18, 2015. The Company was formed to develop and commercialize first-in-class gastrointestinal products for companion and production animals and horses. The Company’s first commercial product, Neonorm Calf, was launched in 2014 and Neonorm Foal was launched in the first quarter of 2016. In September of 2016, the Company began selling the *Croton lechleri* botanical extract (the “botanical extract”) to an exclusive distributor for use in pigs in China. The Company’s activities are subject to significant risks and uncertainties, including failing to secure additional funding in order to timely compete the development and commercialization of products. The Company manages its operations through two segments—human health and animal health and is headquartered in San Francisco, California.

On June 11, 2013, Jaguar issued 2,666,666 shares of common stock to Napo in exchange for cash and services. On July 1, 2013, Jaguar entered into an employee leasing and overhead agreement (the “Service Agreement”) with Napo, under which Napo agreed to provide the Company with the services of certain Napo employees for research and development and the general administrative functions of the Company. On January 27, 2014, Jaguar executed an intellectual property license agreement with Napo pursuant to which Napo transferred fixed assets and development materials, and licensed intellectual property and technology to Jaguar. On February 28, 2014, the Service Agreement terminated and the associated employees became employees of Jaguar effective March 1, 2014. See Note 10 for additional information regarding the capital contributions and Note 5 for the Service Agreement and license agreement details. Effective July 1, 2016, Napo agreed to reimburse the Company for the use of the Company’s employee’s time and related expenses, including rent and a fixed overhead amount to cover office supplies and copier use (Note 5).

On July 31, 2017, Jaguar completed a merger with Napo pursuant to the Agreement and Plan of Merger dated March 31, 2017 by and among Jaguar, Napo, Napo Acquisition Corporation (“Merger Sub”), and Napo’s representative (the “Merger Agreement”). In accordance with the terms of the Merger Agreement, upon the completion of the merger, Merger Sub merged with and into Napo, with Napo surviving as our wholly-owned subsidiary (the “Merger” or “Napo Merger”). Immediately following the Merger, Jaguar changed its name from “Jaguar Animal Health, Inc.” to “Jaguar Health, Inc.” Napo now operates as a wholly-owned subsidiary of Jaguar focused on human health and the ongoing commercialization of Mytesi, a Napo drug product approved by the U.S. FDA for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy.

Liquidity

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern. The Company has incurred recurring operating losses since inception and has an accumulated deficit of \$42,197,264 as of September 30, 2017. The Company expects to incur substantial losses in future periods. Further, the Company’s future operations are dependent on the success of the Company’s ongoing development and commercialization efforts, as well as the securing of additional financing. There is no assurance that profitable operations, if ever achieved, could be sustained on a continuing basis.

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Organization and Business (Continued)

The Company plans to finance its operations and capital funding needs through equity and/or debt financing, collaboration arrangements with other entities, as well as revenue from future product sales. However, there can be no assurance that additional funding will be available to the Company on acceptable terms on a timely basis, if at all, or that the Company will generate sufficient cash from operations to adequately fund operating needs or ultimately achieve profitability. If the Company is unable to obtain an adequate level of financing needed for the long-term development and commercialization of its products, the Company will need to curtail planned activities and reduce costs. Doing so will likely have an adverse effect on the Company's ability to execute on its business plan. These matters raise substantial doubt about the ability of the Company to continue in existence as a going concern within one year after issuance date of the financial statements. The accompanying financial statements do not include any adjustments that might result from the outcome of these uncertainties.

In June 2016, the Company entered into a common stock purchase agreement with a private investor (the "CSPA"), which provides that, upon the terms and subject to the conditions and limitations set forth therein, the investor is committed to purchase up to an aggregate of \$15.0 million of the Company's common stock over the approximately 30-month term of the agreement. Through September 30, 2017 the Company sold 6,000,000 shares for gross cash proceeds of \$5,063,785. The CSPA limited the number of shares that the Company can sell thereunder to 2,027,490 shares, which equals 19.99% of the Company's outstanding shares as of the date of the CSPA (such limit, the "19.99% exchange cap"), unless either (i) the Company obtains stockholder approval to issue more than such 19.99% exchange cap or (ii) the average price paid for all shares of the Company's common stock issued under the CSPA is equal to or greater than \$1.32 per share (the closing price on the date the CSPA was signed), in either case in compliance with Nasdaq Listing Rule 5635(d). At the 2017 Annual Stockholders' Meeting on May 8, 2017, the Company's stockholders voted on the approval, pursuant to Nasdaq Listing Rule 5635(d), of the issuance of an additional 3,555,514 shares of the Company's common stock under the CSPA, which when combined with the 2,444,486 shares that the Company has already sold pursuant to the CSPA, equals an aggregate of 6,000,000 shares.

2. Summary of Significant Accounting Policies

Basis of Presentation

The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and applicable rules and regulations of the Securities and Exchange Commission ("SEC"). Our unaudited condensed financial statements reflect all adjustments, which are, in the opinion of management, necessary for a fair presentation of our financial position and results of operations. Such adjustments are of a normal recurring nature, unless otherwise noted. The balance sheet as of September 30, 2017 and the results of operations for the three and nine months ended September 30, 2017 are not necessarily indicative of the results to be expected for the entire year.

Principles of Consolidation

The consolidated financial statements have been prepared in accordance with US GAAP and applicable rules and regulations of the Securities and Exchange Commission ("SEC") and include the accounts of the Company and its wholly owned subsidiaries. All inter-company transactions and balances have been eliminated in consolidation.

JAGUAR HEALTH, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires the Company's management to make judgments, assumptions and estimates that affect the amounts reported in its financial statements and the accompanying notes. The accounting policies that reflect the Company's more significant estimates and judgments and that the Company believes are the most critical to aid in fully understanding and evaluating its reported financial results are valuation of stock options; valuation of warrant liabilities; valuation of derivative liability, impairment testing of goodwill, IPR&D, and long lived assets; useful lives for depreciation and amortization; valuation adjustments for excess and obsolete inventory; allowance for doubtful accounts; deferred taxes and valuation allowances on deferred tax assets; evaluation and measurement of contingencies; and recognition of revenue. Those estimates could change, and as a result, actual results could differ materially from those estimates.

Deferred Offering Costs

Deferred offering costs are costs incurred in filings of registration statements with the Securities and Exchange Commission. These deferred offering costs are offset against proceeds received upon the closing of the offerings. Deferred costs of \$303,963 as of September 30, 2017 include legal, accounting, printer, and filing fees associated with follow-on public offering in October 2017. Deferred costs of \$72,710 as of December 31, 2016, include legal, accounting, printer and filing fees associated with the Company's registration of unissued shares in the CSPA.

Concentration of Credit Risk and Cash and Cash Equivalents

Cash is the financial instrument that potentially subjects the Company to a concentration of credit risk as cash is deposited with a bank and cash balances are generally in excess of Federal Deposit Insurance Corporation ("FDIC") insurance limits. The carrying value of cash approximates fair value at September 30, 2017 and December 31, 2016.

Fair Values

The Company's financial instruments include, cash and cash equivalents, accounts receivable, accounts payable, accrued expenses, warrant liabilities, derivative liability, and debt. Cash is reported at fair value. The recorded carrying amount of accounts receivable, accounts payable and accrued expenses reflect their fair value due to their short-term nature. The carrying value of the interest-bearing debt approximates fair value based upon the borrowing rates currently available to the Company for bank loans with similar terms and maturities. See Note 4 for the fair value measurements, and Note 8 for the fair value of the Company's warrant liabilities and derivative liability.

Restricted Cash

On August 18, 2015, the Company entered into a long-term loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. The loan agreement required the Company to maintain a base minimum cash balance of \$4.5 million until the Company met certain milestones and/or when the Company begins making principal payments. On December 22, 2015, the Company achieved certain milestones and the base minimum cash balance was reduced to \$3.0 million. Aggregate principal payments of \$3.0 million further reduced the restricted cash balance to \$0 as of September 30, 2017. Restrictions were fully released on April 1, 2017. On July 7, 2017, the Company

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

entered into the third amendment to the Loan Agreement upon which the Company paid \$1.0 million of the outstanding loan balance, and the Lender waived the Prepayment Charge associated with such prepayment. The Third Amendment modified the repayment schedule providing a three-month period of interest only payments for the period from August 2017 through October 2017, and reduced the required cash amount that the Company must keep on hand to \$500,000, which will be reduced following the Lender's receipt of each principal repayment subsequent to the \$1.0 million payment.

Inventories

Inventories are stated at the lower of cost or market. The Company calculates inventory valuation adjustments when conditions indicate that market is less than cost due to physical deterioration, usage, obsolescence, reductions in estimated future demand or reduction in selling price. Inventory write-downs are measured as the difference between the cost of inventory and market. There have been no write-downs to date.

Property and Equipment

Equipment is stated at cost, less accumulated depreciation. Equipment begins to be depreciated when it is placed into service. Depreciation is calculated using the straight-line method over the estimated useful lives of 3 to 10 years.

Expenditures for repairs and maintenance of assets are charged to expense as incurred. Costs of major additions and betterments are capitalized and depreciated on a straight-line basis over their estimated useful lives. Upon retirement or sale, the cost and related accumulated depreciation of assets disposed of are removed from the accounts and any resulting gain or loss is included in the statements of operations and comprehensive loss.

Long-Lived Assets

The Company regularly reviews the carrying value and estimated lives of all of its long-lived assets, including property and equipment to determine whether indicators of impairment may exist that warrant adjustments to carrying values or estimated useful lives. The determinants used for this evaluation include management's estimate of the asset's ability to generate positive income from operations and positive cash flow in future periods as well as the strategic significance of the assets to the Company's business objectives.

Definite-lived intangible assets are amortized on a straight-line basis over the estimated periods benefited, and are reviewed when appropriate for possible impairment.

Should an impairment exist, the impairment loss would be measured based on the excess of the carrying amount over the asset's fair value. The Company has not recognized any impairment losses through September 30, 2017.

Goodwill and Indefinite-lived Intangible Assets

Goodwill is tested for impairment on an annual basis and in between annual tests if events or circumstances indicate that an impairment loss may have occurred. The test is based on a comparison of the reporting unit's book value to its estimated fair market value. The Company performs annual impairment test during the fourth quarter of each fiscal year using the opening consolidated balance sheet

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

as of the first day of the fourth quarter, with any resulting impairment recorded in the fourth quarter of the fiscal year.

If the carrying value of a reporting unit's net assets exceeds its fair value, the goodwill would be considered impaired and would be reduced to its fair value. The goodwill was entirely allocated to the human health reporting unit as the goodwill relates to the Napo Merger. The decline in market capitalization during the three months ended September 30, 2017 was determined to be a triggering event for potential goodwill impairment. Accordingly the Company performed the goodwill impairment analysis. The Company utilized the market capitalization plus a reasonable control premium in the performance of its impairment test. The market capitalization was based on the outstanding shares and the average market share price for the 30 days prior to September 30, 2017. Based on the results of the Company's impairment test, the Company recorded an impairment charge of \$3,648,000 during the three and nine months ended September 30, 2017. If the market capitalization decreases in the future, a reasonable possibility exists that goodwill could be further impaired in the near term and that such impairment may be material to the financial statements.

Fair value determinations require considerable judgment and are sensitive to changes in underlying assumptions, estimates and market factors. Estimating the fair value of individual reporting units and indefinite-lived intangible assets requires us to make assumptions and estimates regarding our future plans, as well as industry and economic conditions. These assumptions and estimates include projected revenues and income growth rates, terminal growth rates, competitive and consumer trends, market-based discount rates, and other market factors. If current expectations of future growth rates are not met or market factors outside of our control, such as discount rates, change significantly, this may lead to a further goodwill impairment in the future.

Additionally, as goodwill and intangible assets associated with recently acquired businesses are recorded on the balance sheet at their estimated acquisition date fair values, those amounts are more susceptible to an impairment risk if business operating results or macroeconomic conditions deteriorate. Acquired in-process research and development (IPR&D) are intangible assets initially recognized at fair value and classified as indefinite-lived assets until the successful completion or abandonment of the associated research and development efforts. During the development period, these assets will not be amortized as charges to earnings; instead these assets will be tested for impairment on an annual basis or more frequently if impairment indicators are identified.

Research and Development Expense

Research and development expense consists of expenses incurred in performing research and development activities including related salaries, clinical trial and related drug and non-drug product costs, contract services and other outside service expenses. Research and development expense is charged to operating expense in the period incurred.

Revenue Recognition

The Company recognizes revenue in accordance with ASC 605 "Revenue Recognition", subtopic ASC 605-25 *Revenue with Multiple Element Arrangements* and subtopic ASC 605-28 "*Revenue Recognition—Milestone Method*", which provides accounting guidance for revenue recognition for arrangements with multiple deliverables and guidance on defining the milestone and determining when the use of the milestone method of revenue recognition for research and development transactions is appropriate,

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

respectively. For multiple-element arrangements, each deliverable within a multiple deliverable revenue arrangement is accounted for as a separate unit of accounting if both of the following criteria are met: (1) the delivered item or items have value to the customer on a standalone basis and (2) for an arrangement that includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially in our control. If a deliverable in a multiple element arrangement is not deemed to have a stand-alone value, consideration received for such a deliverable is recognized ratably over the term of the arrangement or the estimated performance period, and it will be periodically reviewed based on the progress of the related product development plan. The effect of a change made to an estimated performance period and therefore revenue recognized ratably would occur on a prospective basis in the period that the change was made.

The Company recognizes revenue under its licensing, development, co-promotion and commercialization agreement from milestone payments when: (i) the milestone event is substantive and its achievability has substantive uncertainty at the inception of the agreement, and (ii) it does not have ongoing performance obligations related to the achievement of the milestone earned. Milestone payments are considered substantive if all of the following conditions are met: the milestone payment (a) is commensurate with either the Company's performance subsequent to the inception of the arrangement to achieve the milestone or the enhancement of the value of the delivered item or items as a result of a specific outcome resulting from the Company's performance subsequent to the inception of the arrangement to achieve the milestone, (b) relates solely to past performance, and (c) is reasonable relative to all of the deliverables and payment terms (including other potential milestone consideration) within the arrangement.

The Company records revenue related to the reimbursement of costs incurred under the collaboration agreement where the company acts as principal, controls the research and development activities and bears credit risk. Under the agreement, the Company is reimbursed for associated out-of-pocket costs and for certain employee costs. The gross amount of these pass-through costs is reported in revenue in the accompanying statements of operations and comprehensive loss, while the actual expense for which the Company is reimbursed are reflected as research and development costs.

Determining whether and when some of these revenue recognition criteria have been satisfied often involves assumptions and judgments that can have a significant impact on the timing and amount of revenue the Company will report. Changes in assumptions or judgments or changes to the elements in an arrangement could cause a material increase or decrease in the amount of revenue that the Company reports in a particular period.

Product Revenue

Sales of Neonorm Calf and Foal to distributors are made under agreements that may provide distributor price adjustments and rights of return under certain circumstances. Until the Company develops sufficient sales history and pipeline visibility, revenue and costs of distributor sales will be deferred until products are sold by the distributor to the distributor's customers. Revenue recognition depends on notification either directly from the distributor that product has been sold to the distributor's customer, when the Company has access to the data. Deferred revenue on shipments to distributors reflect the estimated effects of distributor price adjustments, if any, and the estimated amount of gross margin expected to be realized when the distributor sells through product purchased from the Company. Company sales to distributors are invoiced and included in accounts receivable and deferred revenue upon shipment.

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

Inventory is relieved and revenue recognized upon shipment by the distributor to their customer. The Company had Neonorm revenues of \$33,611 and \$26,357 for the three months ended September 30, 2017 and 2016, and \$139,600 and \$88,646 for the nine months ended September 30, 2017 and 2016.

Sales of Botanical Extract are recognized as revenue when delivered to the customer. The Company had Botanical Extract revenues of \$48,000 and \$24,000 in the three months ended September 30, 2017 and 2016, and \$78,000 and \$24,000 in the nine months ended September 30, 2017 and 2016.

The Company's subsidiary—Napo sells its drug product, Mytesi through one distributor that in turn sells to various wholesalers in the United States. Sales are recognized as revenue when delivered to the wholesalers. Mytesi revenue included in the Company's revenue for the nine months months ended September 2017 and 2016 is \$364,054 and \$0, respectively. Mytesi revenue included in the Company's revenue for the three months ended September 2017 and 2016 is \$364,054 and \$0, respectively. The Company records a reserve for estimated product returns under terms of agreements with wholesalers based on its historical returns experience. Reserves for returns at September 30, 2017 were immaterial. If actual returns differed from the Company's historical experience, changes to the reserved could be required in future periods.

Collaboration Revenue

On January 27, 2017, the Company entered into a licensing, development, co-promotion and commercialization agreement (the "Elanco Agreement") with Elanco US Inc. ("Elanco") to license, develop and commercialize Canalevia ("Licensed Product"), our drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals. The Company grants Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco will have exclusive rights globally outside the U.S. and co-exclusive rights with the Company in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products.

Under the terms of the Elanco Agreement, the Company received an initial upfront payment of \$2,548,689, inclusive of reimbursement of past product and development expenses of \$1,048,689, and will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well as product development expense reimbursement for any additional product development expenses incurred, and royalty payments on global sales. The \$61.0 million development and commercial milestones consist of \$1.0 million for successful completion of a dose ranging study; \$2.0 million for the first commercial sale of license product for acute indications of diarrhea; \$3.0 million for the first commercial sale of a license product for chronic indications of diarrhea; \$25.0 million for aggregate worldwide net sales of licensed products exceeding \$100.0 million in a calendar year during the term of the agreement; and \$30.0 million for aggregate worldwide net sales of licensed products exceeding \$250.0 million in a calendar year during the terms of the agreement. Each of the development and commercial milestones are considered substantive. No revenues associated with the achievement of the milestones has been recognized to date. The Elanco Agreement specifies that the Company will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. The \$2,548,689 upfront payment, inclusive of reimbursement of past product and

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

development expenses of \$1,048,689 is recognized as revenue ratably over the estimated development period of one year resulting in \$637,200 and \$1,734,100 in collaboration revenue in the three and nine months ended September 30, 2017 which are included in the Company's statements of operations and comprehensive loss. The difference of \$814,589 is included in deferred collaboration revenue in the Company's balance sheet.

In addition to the upfront payments, Elanco reimburses the Company for certain development and regulatory expenses related to our planned target animal safety study and the completion of the Canalevia field study for acute diarrhea in dogs. These are recognized as revenue in the month in which the related expenses are incurred. The Company has \$17,349 of unreimbursed expenses as of September 30, 2017, which is included in Other Receivables on the Company's balance sheet. The Company included the \$17,349 and \$503,391 in collaboration revenue in the three and nine months ended September 30, 2017 which are included in the Company's statements of operations and comprehensive loss.

Stock-Based Compensation

The Company's 2013 Equity Incentive Plan and 2014 Stock Incentive Plan (see Note 11) provides for the grant of stock options, restricted stock and restricted stock unit awards.

The Company measures stock awards granted to employees and directors at fair value on the date of grant and recognizes the corresponding compensation expense of the awards, net of estimated forfeitures, over the requisite service periods, which correspond to the vesting periods of the awards. The Company issues stock awards with only service-based vesting conditions, and records compensation expense for these awards using the straight-line method.

The Company uses the grant date fair market value of its common stock to value both employee and non-employee options when granted. The Company revalues non-employee options each reporting period using the fair market value of the Company's common stock as of the last day of each reporting period.

Classification of Securities

The Company applies the principles of ASC 480-10 "Distinguishing Liabilities from Equity" and ASC 815-40 "Derivatives and Hedging—Contracts in Entity's Own Equity" to determine whether financial instruments such as warrants should be classified as liabilities or equity and whether beneficial conversion features exist. Financial instruments such as warrants that are evaluated to be classified as liabilities are fair valued upon issuance and are remeasured at fair value at subsequent reporting periods with the resulting change in fair value recorded in other income/(expense). The fair value of warrants is estimated using the Black-Scholes-Merton model and requires the input of subjective assumptions including expected stock price volatility and expected life.

Income Taxes

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the financial statements or in the Company's tax returns. Deferred taxes are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes. The Company assesses the

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred tax assets is evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

The Company accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate, as well as the related net interest and penalties.

Comprehensive Loss

Comprehensive loss is defined as changes in stockholders' equity (deficit) exclusive of transactions with owners (such as capital contributions and distributions). For the three and nine months ended September 30, 2017 and 2016 there was no difference between net loss and comprehensive loss.

Segment Data

Prior to the merger with Napo, the Company managed its operation as a single segment for the purposes of assessing performance and making operating decisions. The Company reorganized their segments to reflect the change in the organizational structure resulting from the merger with Napo. Post-merger with Napo, the Company manages its operations through two segments. The Company has two reportable segments—human health and animal health. The animal health segment is focused on developing and commercializing prescription and non-prescription products for companion and production animals. The human health segment is focused on developing and commercializing of human products and the ongoing commercialization of Mytesi™, which is approved by the U.S. FDA for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy.

JAGUAR HEALTH, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

The Company's reportable segments net sales and net income consisted of:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Revenue from external customers				
Human Health	\$ 364,054	\$ —	\$ 364,054	\$ —
Animal Health	736,160	50,357	2,455,091	112,646
Consolidated Totals	<u>\$1,100,214</u>	<u>\$ 50,357</u>	<u>\$ 2,819,145</u>	<u>\$ 112,646</u>
Interest expense				
Human Health	\$ (192,120)	\$ —	\$ (192,120)	\$ —
Animal Health	(272,564)	(235,191)	(608,765)	(774,185)
Consolidated Totals	<u>\$ 464,684</u>	<u>\$ (235,191)</u>	<u>\$ (800,885)</u>	<u>\$ (774,185)</u>
Depreciation and amortization				
Human Health	\$ 281,111	\$ —	\$ 281,111	\$ —
Animal Health	15,031	15,031	45,093	32,463
Consolidated Totals	<u>\$ 296,142</u>	<u>\$ 15,031</u>	<u>\$ 326,204</u>	<u>\$ 32,463</u>
Segment profit				
Human Health	\$ 996,493	\$ —	\$ 996,493	\$ —
Animal Health	3,763,351	(3,415,490)	(2,757,649)	(11,057,169)
Total	<u>\$4,759,844</u>	<u>\$(3,415,490)</u>	<u>\$(1,761,156)</u>	<u>\$(11,057,169)</u>

The Company's reportable segments assets consisted of the following:

	September 30, 2017	December 31, 2016
Segment assets		
Human Health	\$57,568,731	\$ —
Animal Health	34,754,604	3,563,149
Total	<u>\$92,323,335</u>	<u>\$3,563,149</u>

The reconciliation of segments assets to the consolidated assets is as follows:

	September 30, 2017	December 31, 2016
Total assets for reportable segments	\$ 92,323,335	\$3,563,149
Less: investment in subsidiary	(29,240,965)	—
Less: Intercompany loan	(2,000,000)	—
Less: Intercompany receivable	(1,094,315)	—
Consolidated Totals	<u>\$ 59,988,055</u>	<u>\$3,563,149</u>

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

Basic and Diluted Net Loss Per Common Share

Basic net loss per common share is computed by dividing net loss attributable to common stockholders for the period by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders for the period by the weighted-average number of common shares, including potential dilutive shares of common stock assuming the dilutive effect of potential dilutive securities. For periods in which the Company reports a net loss, diluted net loss per common share is the same as basic net loss per common share, because their impact would be anti-dilutive to the calculation of net loss per common share. Diluted net loss per common share is the same as basic net loss per common share for the three and nine months ended September 30, 2017 and 2016.

Recent Accounting Pronouncements

In July 2017, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2017-11, “Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Non-controlling Interests with a Scope Exception” (“ASU 2017-11”), which addresses the complexity of accounting for certain financial instruments with down round features. Down round features are features of certain equity-linked instruments (or embedded features) that result in the strike price being reduced on the basis of the pricing of future equity offerings. Current accounting guidance creates cost and complexity for entities that issue financial instruments (such as warrants and convertible instruments) with down round features that require fair value measurement of the entire instrument or conversion option. The amendments in Part I of this ASU are effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact of the adoption of ASU 2017-11 on its consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, “Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting” (“ASU 2017-09”), which provides guidance on determining which changes to the terms and conditions of share-based payment awards require an entity to apply modification accounting under Topic 718. The amendments in this ASU are effective for all entities for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim period, for (1) public business entities for reporting periods for which financial statements have not yet been issued and (2) all other entities for reporting periods for which financial statements have not yet been made available for issuance. The amendments in this ASU should be applied prospectively to an award modified on or after the adoption date. The Company does not expect the adoption of ASU 2017-09 to have a material impact on our consolidated financial statements.

In February 2017, the FASB issued ASU No. 2017-05, “Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets” (“ASU 2017-05”), which clarifies the scope of the nonfinancial asset guidance in Subtopic 610-20. This ASU also clarifies that the derecognition of all businesses and nonprofit activities (except those related to conveyances of oil and gas mineral rights or contracts with customers) should be accounted for in accordance with the derecognition and

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

deconsolidation guidance in Subtopic 810-10. The amendments in this ASU also provide guidance on the accounting for what often are referred to as partial sales of nonfinancial assets within the scope of Subtopic 610-20 and contributions of nonfinancial assets to a joint venture or other noncontrolled investee. The amendments in this ASU are effective for annual reporting reports beginning after December 15, 2017, including interim reporting periods within that reporting period. Public entities may apply the guidance earlier but only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. The Company does not expect the adoption of ASU 2017-05 to have a material impact on our consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04 related to goodwill impairment testing. This ASU eliminates Step 2 from the goodwill impairment test. Under the new guidance, if a reporting unit's carrying amount exceeds its fair value, the entity will record an impairment charge based on that difference. The impairment charge will be limited to the amount of goodwill allocated to that reporting unit. Previously, if the fair value of a reporting unit was lower than its carrying amount (Step 1), an entity was required to calculate any impairment charge by comparing the implied fair value of goodwill with its carrying amount (Step 2). Additionally, under the new standard, entities that have reporting units with zero or negative carrying amounts will no longer be required to perform the qualitative assessment to determine whether to perform Step 2 of the goodwill impairment test. As a result, reporting units with zero or negative carrying amounts will generally be expected to pass the simplified impairment test; however, additional disclosure will be required of those entities. This ASU will be effective beginning in the first quarter of our fiscal year 2020. Early adoption is permitted for annual and interim goodwill impairment testing dates after January 1, 2017. The new guidance must be adopted on a prospective basis. The Company early adopted this ASU in 2017. For impact of the adoption of this standard, refer to Note 6 "Goodwill".

In November 2016, the FASB issued ASU No. 2016-18, Statement of Cash Flows: Restricted Cash, or ASU 2016-18, that will require entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents and restricted cash and restricted cash equivalents in the statement of cash flows. When cash, cash equivalents, restricted cash and restricted cash equivalents are presented in more than one line item on the balance sheet, the new guidance requires a reconciliation of the totals in the statement of cash flows to the related captions in the balance sheet. This reconciliation can be presented either on the face of the statement of cash flows or in the notes to the financial statements. Entities will also have to disclose the nature of their restricted cash and restricted cash equivalent balances. ASU 2016-18 becomes effective for fiscal years beginning after December 15, 2017, and interim periods within those years, with early adoption permitted. Any adjustments must be reflected as of the beginning of the fiscal year that includes that interim period. The adoption of this standard is not expected to have an impact on the Company's financial position or results of operations.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments, which addresses the following cash flow issues: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; (3) contingent consideration payments made after a business combination; (4) proceeds from the settlement of insurance claims; (5) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies; (6) distributions received from equity method investees; (7) beneficial interests in securitization transactions; and (8) separately identifiable cash flows and application of the predominance principle. The amendments in this ASU are effective for public

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

business entities for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years and are effective for all other entities for fiscal years beginning after December 15, 2018 and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. The Company is currently evaluating the impact of the adoption of ASU No. 2016-15 on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, which simplifies several aspects of the accounting for employee stock-based payment transactions. The areas for simplification in ASU No. 2016-09 include the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Effective January 1, 2017, the Company adopted ASU No. 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. Among other requirements, the new guidance requires all tax effects related to share-based payments at settlement (or expiration) to be recorded through the income statement. Previously, tax benefits in excess of compensation cost (“windfalls”) were recorded in equity, and tax deficiencies (“shortfalls”) were recorded in equity to the extent of previous windfalls, and then to the income statement. Under the new guidance, the windfall tax benefit is to be recorded when it arises, subject to normal valuation allowance considerations. The adoption of this standard did not have any impact to the Statement of Operations or the Statement of Cash Flows. As of December 31, 2016, the Company had no unrecognized deferred tax assets related to excess tax benefits, and as such, there was no cumulative-effect adjustment to the beginning accumulated deficit. Additionally, the treatment of forfeitures has not changed as the Company is electing to continue its current process of estimating the number of forfeitures. As such, this has no cumulative effect on accumulated deficit.

In March 2016, the FASB issued ASU No. 2016-06, Derivatives and Hedging (Topic 815): Contingent Put and Call Options in Debt Instruments. ASU 2016-06 clarifies that an entity will only need to consider the four-step decision sequence, as provided by the amended ASC 815-15-25-42, to assess whether the economic characteristics and risks of embedded put or call options are clearly related to those of their hosts. ASU 2016-16 is effective for public business entities for financial statements issued for fiscal years beginning after December 15, 2016; accordingly, the Company adopted this guidance during 2017.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), which replaces the current lease accounting standard. ASU 2016-02 establishes a right-of-use (“ROU”) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the statements of operations. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. The Company is currently evaluating the impact of the new standard on its financial statements.

In May 2014, the FASB issued ASU No. 2014-09, “Revenue from Contracts with Customers.” The objective of ASU 2014-09 is to establish a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and will supersede most of the existing revenue recognition guidance, including industry-specific guidance. The core principle of the new standard is that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard is effective for annual reporting periods beginning after December 15, 2017 and allows for prospective or retrospective application. The Company currently anticipates utilizing the full retrospective method of adoption allowed by the standard, in order to provide for comparative results in all periods presented, and plans to adopt the standard as of January 1, 2018. The Company is in the process of evaluating the impact of the new standard and related guidance on the Company's consolidated financial statements and related disclosures including the impact of the new standard on its accounting policies, processes, and system requirements. While the Company continues to assess all potential impacts under the new standard, there is the potential for significant impacts to our revenue recognition policy relating to royalty revenues and certain other revenues that are currently recognized on a cash basis or sell through method. Upon adoption of these standards, these revenues will be recognized in the periods in which the sales occur, subject to the constraint on variable consideration. We currently do not expect that adopting these standards will have a material impact on our Condensed Consolidated Financial Statements.

3. Business Combination

As discussed in Note 1—Organization and Business, the Company completed a merger with Napo on July 31, 2017. Napo now operates as a wholly-owned subsidiary of Jaguar focused on human health and the ongoing commercialization of Mytesi, a Napo drug product approved by the U.S. FDA for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy.

The merger was accounted for under the acquisition method of accounting for business combinations and Jaguar was considered to be the acquiring company. Under the acquisition method of accounting, total consideration exchanged was:

	(Unaudited)
Fair value of Jaguar common stock	\$25,303,859
Fair value of Jaguar common stock warrants	630,859
Fair value of replacement restricted stock units	3,300,555
Fair value of replacement stock options	5,691
Cash	2,000,000
Effective settlement of receivable from Napo	464,295
Total consideration exchanged	\$31,705,259

The purchase price allocation to assets and liabilities assumed in the transaction was:

Current assets	\$ 2,578,114
Non-current assets	396,247
Identifiable intangible assets	36,400,000
Current liabilities	(4,052,180)
Convertible notes payable	(12,473,501)
Deferred tax liability	(13,181,242)
Net assets acquired	9,667,438
Goodwill on acquisition	22,037,821
Total consideration	\$ 31,705,259

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. Business Combination (Continued)

Under the acquisition method of accounting, certain identifiable assets and liabilities of Napo including identifiable intangible assets, inventory, debt and deferred revenue were recorded based on their estimated fair values as of the effective time of the Napo Merger. Tangible and other assets and liabilities were valued at their respective carrying amounts, which management believes approximate their fair values.

The Developed Technology (DT) is for the development and commercial processing of Mytesi™ (crofelemer 125mg delayed-release tablets), which is an antidiarrheal indicated for the symptomatic relief of noninfectious diarrhea in adult patients with HIV/AIDS on antiretroviral therapy. The DT is a definite lived asset and is being amortized over a 15-year estimated useful life.

The acquired trademarks include Mytesi product trademark, domain names, and other brand related intellectual property. Trademark is a definite lived asset and is being amortized over a 15-year estimated useful life.

The acquired IPR&D projects relate to developing the incomplete technology into a commercially viable product for the several indications related to Mytesi. Mytesi is in development for follow-on indications in cancer therapy-related diarrhea (CTD), an important supportive care indication for patients undergoing primary or adjuvant therapy for cancer treatment. Mytesi is also in development for rare disease indications for infants and children with congenital diarrheal disorders (CDD) and short bowel syndrome (SBS); for irritable bowel syndrome (IBS); as supportive care for post-surgical inflammatory bowel disease patients (IBD); and as a second-generation anti-secretory agent for use in cholera patients. IPR&D is not amortized during the development period.

The fair value of IPR&D, trademark, and DT was determined using the income approach, which was based on forecasts prepared by management.

The Napo Merger resulted in \$22,037,821 of goodwill relating principally to synergies expected to be achieved from the combined operations and planned growth in new markets. Goodwill has been allocated to the human health segment.

As none of the goodwill, IPR&D, and developed technology acquired are expected to be deductible for income tax purposes, it was determined that a deferred income tax liability of \$14,498,120 was required to reflect the book to tax differences of the merger. A deferred tax asset of \$1,316,878 was accounted as an element of consideration for the replacement share-based payment awards as the replacement awards are expected to result in a future tax deduction.

The Company valued finished goods using a net realizable value approach, which resulted in a step-up of \$84,806. Raw material was valued using the replacement cost approach.

The Company valued convertible debt assumed in the Napo Merger based on the value of the debt and the conversion option at \$12,473,501 (see note 8). The Company incurred acquisition related costs of \$1,103,331 and \$3,554,250 during the three months ended September 30, 2017 and nine months ended September 30, 2017, respectively. The acquisition related costs for the three and nine months ended September 30, 2017 includes the fair value of \$151,351 for 270,270 shares of Company's common stock issued to a former creditor of Napo towards reimbursement of acquisition related costs. Acquisition related costs are expensed as incurred to general and administrative expenses in the condensed consolidated statements of operations and comprehensive loss.

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. Business Combination (Continued)

The following table provides unaudited proforma results, prepared in accordance with ASC 805, for the three and nine months ended September 30, 2017 and September 30, 2016, as if Napo was acquired on January 1, 2016.

	For the three months ended September 30,		For the nine months ended September 30,	
	2017	2016	2017	2016
Net sales	1,253,447	496,476	3,894,222	677,310
Net income (loss)	5,281,573	(3,698,298)	(2,905,689)	(16,092,681)
Net income (loss) per share, basic	0.10	(0.33)	(0.10)	(1.56)
Net income (loss) per share, diluted	0.08	(0.33)	(0.10)	(1.56)

The unaudited proforma results include adjustments to eliminate the interest on Napo’s historical convertible debt not assumed by Jaguar and debt exchanged for Jaguar common stock, record interest on convertible debt assumed by Jaguar, eliminate Napo impairment of investment in related party, and eliminate Napo’s loss from investment in related party. The Company made proforma adjustments to exclude the acquisition related costs for the three and nine months ended September 30, 2017 and to exclude the acquisition related costs in the results for the three and nine months ended September 30, 2016, because such costs are nonrecurring and are directly related to the Napo Merger.

The unaudited pro forma condensed results do not give effect to the potential impact of current financial conditions, regulatory matters, operating efficiencies or other savings or expenses that may be associated with the Napo Merger. The unaudited proforma results do not include any anticipated cost savings or other effects of future integration efforts. Unaudited pro forma amounts are not necessarily indicative of results had the Napo Merger occurred on January 1, 2016 or of future results.

4. Fair Value Measurements

ASC 820 “Fair Value Measurements,” defines fair value, establishes a framework for measuring fair value under generally accepted accounting principles and enhances disclosures about fair value measurements. Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

- Level 1—Quoted prices in active markets for identical assets or liabilities;
- Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data; and
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

4. Fair Value Measurements (Continued)

The following table presents information about the Company's derivative and warrant liabilities that were measured at fair value on a recurring basis as of September 30, 2017 and December 31, 2016 and indicates the fair value hierarchy of the valuation:

	September 30, 2017			
	Level 1	Level 2	Level 3	Total
Warrant liability	\$—	\$—	\$163,080	\$163,080
Derivative liability	—	—	19,000	19,000
Total fair value	<u>\$—</u>	<u>\$—</u>	<u>\$182,080</u>	<u>\$182,080</u>

	December 31, 2016			
	Level 1	Level 2	Level 3	Total
Warrant liability	\$—	\$—	\$799,201	\$799,201
Derivative liability	—	—	—	—
Total fair value	<u>\$—</u>	<u>\$—</u>	<u>\$799,201</u>	<u>\$799,201</u>

The change in the estimated fair value of level 3 liabilities is summarized below:

	For the three months ended			
	September 30, 2017		September 30, 2016	
	Warrant liability	Derivative liability	Warrant liability	Derivative liability
Beginning value of level 3 liability	\$ 551,880	\$20,000	\$—	\$—
Issuance	—	—	—	—
Change in fair value of level 3 liability	<u>(388,800)</u>	<u>(1,000)</u>	<u>—</u>	<u>—</u>
Ending fair value of level 3 liability	<u>\$ 163,080</u>	<u>\$19,000</u>	<u>\$—</u>	<u>\$—</u>

	For the nine months ended			
	September 30, 2017		September 30, 2016	
	Warrant liability	Derivative liability	Warrant liability	Derivative liability
Beginning value of level 3 liability	\$ 799,201	\$ —	\$—	\$—
Issuance	—	20,000	—	—
Change in fair value of level 3 liability	<u>(636,121)</u>	<u>(1,000)</u>	<u>—</u>	<u>—</u>
Ending fair value of level 3 liability	<u>\$ 163,080</u>	<u>\$19,000</u>	<u>\$—</u>	<u>\$—</u>

The warrants associated with the level 3 liability were issued in 2016 and were originally valued on November 29, 2016 using the Black-Scholes-Merton model with the following assumptions: stock price of \$0.69, exercise price of \$0.75, term of 5.5 years expiring May 2022, volatility of 71.92%, dividend yield of 0%, and risk-free interest rate of 1.87%. The warrants were revalued at December 31, 2016 using the Black-Scholes-Merton model with the following assumptions: stock price of \$0.72, exercise price of \$0.75, term of 5.41 years expiring May 2022, volatility of 73.62%, dividend yield of 0%, and risk-free interest rate of 2.0%. The warrants were again revalued at September 30, 2017 using the Black-Scholes-Merton model

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

4. Fair Value Measurements (Continued)

with the following assumptions: stock price of \$0.20, exercise price of \$0.75, term of 4.67 years expiring May 2022, volatility of 90.77%, dividend yield of 0%, and risk-free interest rate of 1.87%.

The Company computed fair values at June 30, 2017 of \$15,000 and \$5,000 for the repayment and the interest rate increase feature, respectively, for the June 2017 Convertible Note, using the Binomial Lattice Model, which was based on the generalized binomial option pricing formula. The \$20,000 combined fair value was carved out and is included as a derivative liability on the Balance Sheet. The derivatives were revalued at September 30, 2017 using the same Model resulting in a combined fair value of \$19,000. The \$1,000 gain is included in other income and expense in the Company's statement of income and comprehensive income.

The change in the fair value of the level 3 derivative and warrant liabilities is reflected in the statement of operations and comprehensive loss for the nine months ended September 30, 2017.

5. Related Party Transactions

The Company was a majority-owned subsidiary of Napo until May 18, 2015, the date of the Company's IPO. Additionally, Lisa A. Conte, Chief Executive Officer of the Company, was also the Interim Chief Executive Officer of Napo Pharmaceuticals, Inc. The Company completed a merger with Napo on July 31, 2017, from which date Napo operates as a wholly-owned subsidiary of the Company—see Note 3—Business Combination.

The Company has total outstanding receivables (payables) from Napo at December 31, 2016 as follows:

	<u>December 31, 2016</u>
Due from former parent	\$299,819
Royalty payable to former parent	(171)
Net receivable (payable) to former parent	<u>\$299,648</u>

Due from Napo

Employee leasing and overhead allocation

Effective July 1, 2016, Napo agreed to reimburse the Company for the use of the Company's employee's time and related expenses, including rent and a fixed overhead amount to cover office supplies and copier use. The balance of unpaid employee leasing charges due from Napo was \$277,529 at December 31, 2016. The total amount of such services was \$913,068 and Napo remitted \$838,723 for the seven months ended July 31, 2017. The remaining unpaid balance of \$351,870 was included in the receivable from Napo at July 31, 2017. Receivable from Napo was effectively settled on merger and is included in the purchase consideration for the acquisition of Napo.

Loan to Napo

The Company loaned \$2.0 million from proceeds of shares issued to an investor in connection with the merger to Napo, to partially extinguish Napo's debt. The Company accounted for this amount as purchase consideration for the acquisition of Napo.

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. Related Party Transactions (Continued)

Other transactions

The Company periodically made purchases on behalf of Napo, primarily including travel expenses and investor relations expenses. The balance of unpaid non-employee leasing charges due from Napo was \$22,290 at December 31, 2016. The total amount of such purchases was \$157,877 and Napo remitted \$67,262 for the seven month ended July 31, 2017. The remaining unpaid balance of \$112,905 was included in receivable from Napo at July 31, 2017. Receivable from Napo was effectively settled on merger and is included in the purchase consideration for the acquisition of Napo.

Royalty payable to former parent and license fee payable to former parent and related agreement

On July 11, 2013, Jaguar entered into an option to license Napo's intellectual property and technology (the "Option Agreement"). Under the Option Agreement, upon the payment of \$100,000 in July 2013, the Company obtained an option for a period of two years to execute an exclusive worldwide license to Napo's intellectual property and technology to use for the Company's animal health business. The option price was creditable against future license fees to be paid to Napo under the License Agreement (as defined below).

In January 2014, the Company exercised its option and entered into a license agreement (the "License Agreement") with Napo for an exclusive worldwide license to Napo's intellectual property and technology to permit the Company to develop, formulate, manufacture, market, use, offer for sale, sell, import, export, commercialize and distribute products for veterinary treatment uses and indications for all species of animals. The Company was originally obligated to pay a one-time non-refundable license fee of \$2,000,000, less the option fee of \$100,000. At the Company's option, the license fee could have been paid in common stock. In January 2015, the License Agreement was amended to decrease the one-time non-refundable license fee payable from \$2,000,000 to \$1,750,000 in exchange for acceleration of the payment of the fee. Given that Napo was a significant shareholder of the Company, the abatement of the license fee amount was recorded as a capital contribution in the accompanying condensed financial statements. The Company paid the final \$425,000 in the three months ended March 31, 2016.

Milestone payments aggregating \$3,150,000 were also potentially due to Napo based on regulatory approvals of various veterinary products. In addition to the milestone payments, the Company would owe Napo an 8% royalty on annual net sales of products derived from the *Croton lechleri* tree, up to \$30,000,000 and then, a royalty of 10% on annual net sales of \$30,000,000 or more. Additionally, if any other products are developed, the Company would owe Napo a 2% royalty on annual net sales of pharmaceutical prescription products that are not derived from *Croton lechleri* and a 1% royalty on annual net sales of non-prescription products that are not derived from *Croton lechleri*. The royalty term expires at the longer of 10 years from the first sale of each individual product or when there is no longer a valid patent claim covering any of the products and a competitive product has entered the market. However, because an IPO of at least \$10,000,000 was consummated prior to December 31, 2015, the royalty was reduced to 2% of annual net sales of its prescription products derived from *Croton lechleri* and 1% of net sales of its non-prescription products derived from *Croton lechleri* and no milestone payment will be due and no royalties will be owed on any additional products developed.

The Company had unpaid royalties of \$171 at December 31, 2016, which are netted with other receivables due from former parent in current assets in the Company's balance sheet. The Company incurred \$765 in royalties during the seven months ended July 31, 2017, which are included in sales and marketing expense in the Company's statement of operations and comprehensive loss, and paid \$455 to

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. Related Party Transactions (Continued)

Napo in the seven months ended July 31, 2017. The remaining balance of unpaid royalties of \$481 are netted with receivables due from Napo. The net receivable balance at July 31, 2017 of \$464,295 was effectively settled on merger and is included in the purchase consideration for the acquisition of Napo.

6. Balance Sheet Components

Property and Equipment

Property and equipment at September 30, 2017 and December 31, 2016 consisted of the following:

	<u>September 30, 2017</u>	<u>December 31, 2016</u>
Lab equipment	\$811,087	\$811,087
Clinical equipment	64,870	64,870
Software	<u>62,637</u>	<u>62,637</u>
Total property and equipment at cost	938,594	938,594
Accumulated depreciation	<u>(97,742)</u>	<u>(52,649)</u>
Property and equipment, net	<u>\$840,852</u>	<u>\$885,945</u>

Depreciation and amortization expense was \$15,031 and \$15,031 in the three months ended September 30, 2017 and 2016, and \$45,093 and \$32,463 in the nine months ended September 30, 2017 and 2016, which are included in the statements of operations and comprehensive loss as follows:

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2017</u>	<u>2016</u>	<u>2017</u>	<u>2016</u>
Depreciation—lab equipment—research and development expense	\$ 6,568	\$ 6,568	\$19,704	\$19,704
Depreciation—clinical equipment—research and development expense	3,243	3,243	9,730	6,959
Depreciation—software—general and administrative expense	5,220	5,220	15,659	5,800
Total depreciation expense	<u>\$15,031</u>	<u>\$15,031</u>	<u>\$45,093</u>	<u>\$32,463</u>

Intangible assets

Intangible assets at September 30, 2017 and December 31, 2016 consisted of the following:

	<u>September 30, 2017</u>	<u>December 31, 2016</u>
Developed technology	\$25,000,000	\$—
IPR&D	11,100,000	—
Trademarks	<u>300,000</u>	<u>—</u>
Total intangible assets	36,400,000	—
Less: Accumulated amortization	<u>(281,111)</u>	<u>—</u>
Total intangible assets, net	<u>\$36,118,889</u>	<u>\$—</u>

JAGUAR HEALTH, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

6. Balance Sheet Components (Continued)

Amortization expense was \$281,111 and \$0 in the three months ended September 30, 2017 and 2016 and was \$281,111 and \$0 in the nine months ended September 30, 2017 and 2016.

Goodwill

The change in the carrying amount of goodwill for the nine months ended September 2017 was as follows:

Balance at December 31, 2016	\$	—
Goodwill acquired in conjunction with Napo Merger		22,037,821
Impairment		(3,648,000)
Balance at September 30, 2017		<u>\$18,389,821</u>

Accrued Expenses

Accrued expenses at September 30, 2017 and December 31, 2016 consist of the following:

	September 30, 2017	December 31, 2016
Accrued compensation and related:		
Accrued vacation	\$ 264,223	\$223,769
Accrued payroll	150	2,692
Accrued payroll tax	20,312	20,140
	284,685	246,601
Accrued interest	422,179	123,982
Accrued clinical	17,045	36,725
Accrued research and development costs	668,850	—
Accrued legal costs	—	92,500
Accrued audit	—	37,000
Marketing advance	168,525	—
Accrued other	366,017	45,714
Total	\$1,927,301	\$582,522

7. Commitments and Contingencies

Operating Leases

Effective July 1, 2015, the Company leases its San Francisco, California headquarters under a non-cancelable sub-lease agreement that expires August 31, 2018. The Company provided cash deposits of \$122,163, consisting of a security deposit of \$29,539 and prepayment of the last three months of the lease of \$92,623, which are included in prepaid expenses and other current assets on the Company's balance sheet.

JAGUAR HEALTH, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

7. Commitments and Contingencies (Continued)

Future minimum lease payments under non-cancelable operating leases as of September 30, 2017 are as follows:

<u>Years ending December 31,</u>	<u>Amount</u>
2017—October through December	\$ 91,622
2018	245,327
Total minimum lease payments	<u>\$336,949</u>

The Company recognizes rent expense on a straight-line basis over the non-cancelable lease period. Rent expense under the non-cancelable operating lease was \$90,278 for the three months ended September 30, 2017 and 2016, and \$270,835 for the nine months ended September 30, 2017 and 2016. Rent expense is included in general and administrative expense in the Company's statements of operations and comprehensive loss.

Asset transfer and transition commitment

On September 25, 2017, Napo entered into the Termination, Asset Transfer and Transition Agreement dated September 22, 2017 with Glenmark Pharmaceuticals Ltd. ("Glenmark"). As a result of the agreement, Napo now controls commercial rights for Mytesi® for all indications, territories and patient populations globally, and also holds commercial rights to the existing regulatory approvals for crofelemer in Brazil, Ecuador, Zimbabwe and Botswana. In exchange, Napo agrees to pay Glenmark 25% of any payment it receives from a third party to whom Napo grants a license or sublicense or with whom Napo partners in respect of, or sells or otherwise transfers any of the transferred assets, subject to certain exclusions, until Glenmark has received a total of \$7 million.

Purchase Commitment

As of September 30, 2017, the Company had issued non-cancelable purchase orders to a vendor for \$1.3 million.

Debt Obligations

See Note 8—Debt and Warrants.

Contingencies

Legal Proceedings.

On July 20, 2017, a putative class action complaint was filed in the United States District Court, Northern District of California, Civil Action No. 3:17-cv-04102, by Tony Plant on behalf of pre-Merger shareholders of Jaguar who held shares on June 30, 2017 and were entitled to vote at the 2017 Special Shareholders Meeting, against us and certain individuals who were directors as of the date of the vote, in a matter captioned Tony Plant v. Jaguar Animal Health, Inc., et al. The plaintiff attempts to assert claims arising under Section 14(a) and Section 20(a) of the Exchange Act and Rule 14a-9, 17 C.F.R. § 240.14a-9, promulgated thereunder by the SEC. The plaintiff alleges that material omissions and misstatements were contained in the Joint Proxy Statement/Prospectus on Form S-4 (File No. 333-217364) declared effective by the SEC on July 6, 2017 related to the solicitation of votes from shareholders to approve the Merger

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

7. Commitments and Contingencies (Continued)

and certain transaction related thereto. We believe the claims are without merit. While no monetary damages have been quantified, we intend to vigorously contest this complaint.

The plaintiff has not yet served the complaint and summons on any of the defendants. If the plaintiff elected to proceed with the litigation and made service on the defendants, the defendants would move to dismiss the complaint for failure to state a claim on which relief may be granted.”

8. Debt and Warrants

Convertible Notes and Warrants

Convertible notes and related interest payable at September 30, 2017 and December 31, 2016 consist of the following:

	Notes Payable	
	September 30, 2017	December 31, 2016
February 2015 convertible notes payable	150,000	150,000
June 2017 convertible note payable	2,135,000	—
Napo convertible notes	12,473,501	—
	\$14,758,501	\$150,000
Less: unamortized debt discount and debt issuance costs	(384,292)	—
Net convertible notes payable obligation	\$14,374,209	\$150,000
Convertible notes payable—non-current	11,161,000	—
Convertible notes payable—current	\$ 3,213,209	\$150,000

Interest expense on the convertible notes for the three and nine months ended September 30, 2017 and 2016 follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
February 2015 convertible note nominal interest	\$ 4,537	\$4,537	\$ 13,463	\$13,512
June 2017 convertible note nominal interest	43,900	—	44,372	—
June 2017 convertible note accretion of debt discount	123,362	—	124,708	—
Napo convertible note nominal interest	175,798	—	175,798	—
Total interest expense on convertible debt	\$347,597	\$4,537	\$358,341	\$13,512

Interest expense is classified as such in the statements of operations and comprehensive income.

February 2015 Convertible Note

In February 2015, the Company issued convertible promissory notes to two accredited investors in the aggregate principal amount of \$250,000. These notes were issued pursuant to the convertible note purchase agreement dated December 23, 2014. In connection with the issuance of the notes, the Company issued the lenders warrants to purchase 22,320 shares at \$5.60 per share, which expire December 31, 2017.

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Debt and Warrants (Continued)

Principal and interest of \$103,912 was paid in May 2015 for \$100,000 of these notes. The Company analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. The Company calculated the value of the BCF using the intrinsic method. A BCF for the full face value was recorded as a discount to the notes payable and to additional paid-in capital. The full amount of the BCF was amortized to interest expense by the end of June 2015.

The remaining outstanding note of \$150,000 is payable to an investor at an effective simple interest rate of 12% per annum, and was due in full on July 31, 2016. On July 28, 2016, the Company entered into an amendment to delay the repayment of the principal and related interest under the terms of the remaining note from July 31, 2016 to October 31, 2016.

On November 8, 2016, the Company entered into an amendment to extend the maturity date of the remaining note from October 31, 2016 to January 1, 2017. In exchange for the extension of the maturity date, on November 8, 2016, the Company's board of directors granted the lender a warrant to purchase 120,000 shares of the Company's common stock for \$0.01 per share. The warrant is exercisable at any time on or before July 28, 2022, the expiration date of the warrant. The amendment and related warrant issuance resulted in the Company treating the debt as having been extinguished and replaced with new debt for accounting purposes due to meeting the 10% cash flow test.

Extinguishment of debt

On January 31, 2017, the Company entered into another amendment to extend the maturity date of the remaining note from January 1, 2017 to January 1, 2018. In exchange for the extension of the maturity date, on January 31, 2017, the Company's board of directors granted the lender a warrant to purchase 370,916 shares of the Company's common stock for \$0.51 per share. The warrant is exercisable at any time on or before January 31, 2019, the expiration date of the warrant. The amendment and related warrant issuance resulted in the Company treating the debt as having been extinguished and replaced with new debt for accounting purposes due to meeting the 10% cash flow test. The Company calculated a loss on the extinguishment of debt of \$207,713, or the equivalent to the fair value of the warrants granted, which is included in loss on extinguishment of debt in the Company's statements of operations and comprehensive loss in the nine months ended September 30, 2017.

The \$150,000 note is included in notes payable in current liabilities on the Company's balance sheet. The Company has unpaid accrued interest of \$47,392 and \$33,929, which is included in accrued expenses on the Company's balance sheet as of September 30, 2017 and December 31, 2016, respectively, and incurred interest expense of \$4,537 in the three months ended September 30, 2017 and 2016, respectively, and \$13,463 and \$13,512 in the nine months ended September 30, 2017 and 2016 which are included in interest expense in the statement of operations and comprehensive loss.

June 2017 Convertible Note

On June 29, 2017, the Company issued a secured convertible promissory note ("Note") to a lender in the aggregate principal amount of \$2,155,000 less an original issue discount of \$425,000 and less \$30,000 to cover the lender's legal fees for net cash proceeds of \$1,700,000. Interest on the outstanding balance will be paid 8% per annum from the purchase price date until the balance is paid in full. All interest calculations are computed on the basis of a 360-day year comprised of twelve (12) thirty (30) day months compounded daily and payable in accordance with the terms of the Note. All principal and interest on the debt is due in

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Debt and Warrants (Continued)

full on August 2, 2018. The Company accrued interest of \$44,372 at September 30, 2017 which is included in accrued expenses on the Company's balance sheet, and incurred interest expense of \$43,900 and \$44,372 in interest expense in the three and nine months ended September 30, 2017 which are included in interest expense in the Company's statement of operations and comprehensive loss. The Company also recorded \$123,362 and \$124,708 in interest expense in the three and nine months ended September 30, 2017 which are included in the Company's statement of operations and comprehensive loss for the accretion of the debt discount. The lender has the right to convert all or any portion of the outstanding balance into the Company's common stock at \$1.00 per share.

The Note provides the lender with an optional monthly redemption that allows for the monthly payment of up to \$350,000 at the creditor's option commencing on the earlier of six months after the purchase price date, June 29, 2017, or the effective date of the registration statement which is expected to be before December 2017. ASC 470-10-45-9 and 45-10 provide that debt that is due on demand or will be due on demand within one year from the balance sheet date should be classified as a current liability, even though the liability may not be expected to be paid within that period or the liability has scheduled repayment dates that extend beyond one year but nevertheless is callable by the creditor within one year. As such, despite the fact that the Note is due in full on August 2, 2018, the full amount of the Note balance has been classified as a current liability in the balance sheet.

The Note provides for two separate features that result in a derivative liability:

1. Repayment of mandatory default amount upon an event of default—upon the occurrence of any event of default, the lender may accelerate the Note resulting in the outstanding balance becoming immediately due and payable in cash; and
2. Automatic increase in the interest rate on and during an event of default—during an event of default, the interest rate will increase to the lesser of 17% per annum or the maximum rate permitted under applicable law.

The Company computed fair values at June 30, 2017 of \$15,000 and \$5,000 for the repayment and the interest rate increase feature, respectively, using the Binomial Lattice Model, which was based on the generalized binomial option pricing formula. The \$20,000 combined fair value was carved out and is included as a derivative liability on the Balance Sheet. The derivatives were revalued at September 30, 2017 using the same Model resulting in a combined fair value of \$19,000. The \$1,000 gain is included in other income and expense in the Company's statement of income and comprehensive income.

The balance of the note payable of \$1,750,708, consisting of the \$2,155,000 face value of the note less note discounts and debt issuance costs of \$509,000, less the \$20,000 derivative liability, plus the accretion of the debt discount and debt issuance costs of \$124,708 in the nine months ended September 30, 2017, is included in notes payable in current liabilities on the balance sheet.

Napo convertible notes

In December 2016, Napo entered into a note purchase agreement which provided for the sale of up to \$12,500,000 face amount of notes and issued convertible promissory notes (the Napo December 2016 Notes) in the aggregate face amount of \$2,500,000 to three lenders and received proceeds of \$2,000,000 which resulted in \$500,000 of original issue discount. In July 2017, Napo issued convertible promissory notes (the Napo July 2017 Notes) in the aggregate face amount of \$7,500,000 to four lenders and received proceeds of \$6,000,000 which resulted in \$1,500,000 of original issue discount. The Napo December 2016

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Debt and Warrants (Continued)

Notes and the Napo July 2017 Notes mature on December 30, 2019 and bear interest at 10% with interest due each six-month period after December 30, 2016. On June 30, 2017, the accrued interest of \$125,338 was added to principal of the Napo December Notes, and the new principal balance became \$2,625,338. Interest may be paid in cash or in the stock of Jaguar per terms of the note purchase agreement. In each one year period beginning December 30, 2016, up to one-third of the principal and accrued interest on the notes may be converted into the common stock of the merged entity at a conversion price of \$0.925 per share. The Company assumed these convertible notes at fair value of \$11,161,000 as part of the Napo Merger. At September 30, 2017, the balance of the note payable is \$11,161,000 and the accrued interest on these notes is \$193,565.

In March 2017, Napo entered into an exchangeable note purchase agreement with two lenders for the funding of face amount of \$1,312,500 in two \$525,000 tranches of face amount \$656,250. The notes bear interest at 3% and mature on December 1, 2017. Interest may be paid at maturity in either cash or shares of Jaguar per terms of the exchangeable note purchase agreement. The notes may be exchanged for up to 2,343,752 shares of Jaguar common stock, prior to maturity date. The Company assumed the notes at fair value of \$1,312,500 as part of the Napo Merger. At September 30, 2017, the accrued interest on these notes is \$19,957.

Long term Debt

In August 2015, the Company entered into a loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. The loan agreement requires the Company to maintain \$4.5 million of the proceeds in cash, which may be reduced or eliminated on the achievement of certain milestones. An additional \$2.0 million is available contingent on the achievement of certain further milestones. The agreement has a term of three years, with interest only payments through February 29, 2016. Thereafter, principal and interest payments will be made with an interest rate of 9.9%. Additionally, there will be a balloon payment of \$560,000 on August 1, 2018. This amount is being recognized over the term of the loan agreement and the effective interest rate, considering the balloon payment, is 15.0%. Proceeds to the Company were net of a \$134,433 debt discount under the terms of the loan agreement. This debt discount is being recorded as interest expense, using the interest method, over the term of the loan agreement. Under the agreement, the Company is entitled to prepay principal and accrued interest upon five days prior notice to the lender. In the event of prepayment, the Company is obligated to pay a prepayment charge. If such prepayment is made during any of the first twelve months of the loan agreement, the prepayment charge will be (a) during such time as the Company is required to maintain a minimum cash balance, 2% of the minimum cash balance amount plus 3% of the difference between the amount being prepaid and the minimum cash balance, and (b) after such time as the Company is no longer required to maintain a minimum cash balance, 3% of the amount being prepaid. If such prepayment is made during any time after the first twelve months of the loan agreement, 1% of the amount being prepaid.

On April 21, 2016, the loan and security was amended upon which the Company repaid \$1.5 million of the debt out of restricted cash. The amendment modified the repayment amortization schedule providing a four-month period of interest only payments for the period from May through August 2016.

On July 7, 2017, the Company entered into the third amendment to the Loan Agreement upon which the Company paid \$1.0 million of the outstanding loan balance, and the Lender waived the Prepayment Charge associated with such prepayment. The Third Amendment modified the repayment schedule

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Debt and Warrants (Continued)

providing a three-month period of interest only payments for the period from August 2017 through October 2017, and reduced the required cash amount that the Company must keep on hand to \$500,000, which will be reduced following the Lender's receipt of each principal repayment subsequent to the \$1.0 million. As the present value of the cash flows under the terms of the third amendment is less than 10% different from the remaining cash flows under the terms of the loan agreement prior to the amendment, the third amendment was accounted as a debt modification.

As of September 30, 2017 and December 31, 2016, the net long-term debt obligation was as follows:

	<u>September 30, 2017</u>	<u>December 31, 2016</u>
Debt and unpaid accrued end-of-term payment	\$1,855,328	\$3,894,320
Unamortized note discount	(13,141)	(42,493)
Unamortized debt issuance costs	(40,960)	(114,626)
Net debt obligation	\$1,801,227	\$3,737,201
Current portion of long-term debt	\$1,801,227	\$1,919,675
Long-term debt, net of discount	—	1,817,526
Total	<u>\$1,801,227</u>	<u>\$3,737,201</u>

Future principal payments under the long-term debt are as follows:

<u>Years ending December 31</u>	<u>Amount</u>
2017—October through December	\$ 260,832
2018	<u>1,089,199</u>
Total future principal payments	1,350,031
2018 end-of-term payment	<u>560,000</u>
	1,910,031
Less: unaccreted end-of-term payment at September 30, 2017	<u>(54,703)</u>
Debt and unpaid accrued end-of-term payment	<u>\$1,855,328</u>

The debt obligation includes an end-of-term payment of \$560,000, which accretes over the life of the loan as interest expense. As a result of the debt discount and the end-of-term payment, the effective interest rate for the loan differs from the contractual rate.

Interest expense on the long-term debt for the three and nine months ended September 30, 2017 and 2016 was as follows:

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2017</u>	<u>2016</u>	<u>2017</u>	<u>2016</u>
Nominal interest	\$ 36,906	\$103,566	\$183,040	\$364,566
Accretion of debt discount	7,712	15,337	29,351	50,388
Accretion of end-of-term payment	32,109	63,897	122,269	209,924
Accretion of debt issuance costs	24,038	47,855	91,562	135,795
	<u>\$100,765</u>	<u>\$230,655</u>	<u>\$426,222</u>	<u>\$760,673</u>

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Debt and Warrants (Continued)

Warrants

On November 22, 2016, the Company entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which the Company sold securities to such investors in a private placement transaction, which we refer to herein as the 2016 Private Placement. In the 2016 Private Placement, the Company sold an aggregate of 1,666,668 shares of the Company's common stock at a price of \$0.60 per share for gross proceeds of approximately \$1.0 million. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668 shares of the Company's common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, and the Placement Agent received warrants to purchase 133,333 shares of our common stock in lieu of cash for service fees with the same terms as the investors; (ii) warrants to purchase up to an aggregate 1,666,668 shares of the Company's common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the Series B Warrants, the 2016 Warrants. The warrants were granted in three series with different terms. The warrants were valued using the Black-Scholes-Merton warrant pricing model as follows:

- Series A Warrants and Placement Agent Warrants: 1,666,668 warrant shares with a strike price of \$0.75 per share and an expiration date of May 29, 2022; and 133,333 warrant shares to the placement agent with a strike price of \$0.75 and an expiration date of May 29, 2022; the expected life is 5.5 years, the volatility is 71.92% and the risk free rate is 1.87% in valuing these warrants.
- Series B Warrants: 1,666,668 warrant shares with a strike price of \$0.90 per share and an expiration date of November 29, 2017; the expected life is one year, the volatility is 116.65% and the risk free rate is 0.78% in valuing these warrants.
- Series C Warrants: 1,666,668 warrant shares with a strike price of \$1.00 per share and an expiration date of May 29, 2018; the expected life is 1.5 years, the volatility is 116.92% and the risk free rate is 0.94%.

The warrant valuation date was November 29, 2016 and the closing price of \$0.69 per share was used in determining the fair value of the warrants. The series A warrants and placement agent warrants were valued at \$756,001 and were classified as a warrant liability in the Company's balance sheet. The series A warrants and placement agent warrants were revalued on December 31, 2016 at \$799,201 which is included in the Company's balance sheet, and the \$43,200 increase is included in the Company's statements of operations and comprehensive loss. The stock price was \$0.716, the strike price was \$0.75 per share, the expected life was 5.41 years, the volatility was 73.62% and the risk free rate was 2.0%. The series B and C warrants were classified as equity, and as such were not subject to revaluation at year end. Costs incurred in connection with the issuance were allocated based on the relative fair values of the Series A and the Series B and C warrants. . The series A warrants and placement agent warrants were revalued on September 30, 2017 at \$163,080 and is included in the Company's balance sheet. The valuation reflects a reduction of \$388,800 from the June 30, 2017 valuation of \$551,880, and a decrease of \$636,121 decrease from the \$799,201 December 31, 2016 valuation. The changes are included in the Company's statements of operations and comprehensive loss. The \$163,080 valuation at September 30, 2017 was computed using the Black-Scholes-Merton pricing model using a stock price of \$0.20, the strike price was \$0.75 per share, the expected life was 4.67 years, the volatility was 90.77% and the risk free rate was 1.87%.

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Debt and Warrants (Continued)

On July 31, 2017, the Company entered into Warrant Exercise Agreements (the “Exercise Agreements”) with certain holders of Series C Warrants (the “Exercising Holders”), which Exercising Holders own, in the aggregate, Series C Warrants exercisable for 908,334 shares of the Company’s common stock. Pursuant to the Exercise Agreements, the Exercising Holders and the Company agreed that the Exercising Holders would exercise their Series C Warrants with respect to 908,334 shares of common stock underlying such Series C Warrants for a reduced exercise price equal to \$0.40 per share. The Company received aggregate gross proceeds of approximately \$363,334 from the exercise of the Series C Warrants by the Exercising Holders. The difference between the pre-modification and post-modification fair value of \$23,000 was expensed in general and administrative expense in the statements of operations and comprehensive income. The pre-modification fair value was computed using the Black-Scholes-Merton model using a stock price of \$0.56 (fair market value on modification date), original strike price of \$1.00, expected life of 0.83 years, volatility of 115.28%, risk-free rate of 1.20% to arrive at a fair value of \$0.1347 per share. The post-modification fair value was computed using the intrinsic value on the date of modification or \$0.16 per share.

The Company granted warrants to purchase the 1,224,875 shares of common stock of the Company at an exercise price price of \$0.08 per share to replace Napo warrants upon the consummation of the Merger. Of the 1,224,875 warrants, 145,457 warrants expire on December 31, 2018 and 1,079,418 warrants expire on December 31, 2025. The warrants were valued at \$630,859, using the Black-Scholes-Merton warrant pricing model as follows: exercise price of \$0.08 per share, stock price of \$0.56 per share, expected life ranging from 1.42 years to 8.42 years, volatility ranging from 75.07% to 110.03%, and risk free rate ranging from 1.28% to 2.14%. The warrants were accounted in equity.

The Company’s warrant activity is summarized as follows:

	Nine Months Ended September 30, 2017	Year Ended December 31, 2016
Beginning balance	5,968,876	748,872
Warrants granted	1,595,791	5,253,337
Warrants exercised	(908,334)	—
Warrants cancelled	—	(33,333)
Ending balance	6,656,333	5,968,876

9. Stockholders’ Equity

Common Stock

On July 31, 2017, the Company filed a third amended and restated certificate of incorporation authorizing the Company to issue 250,000,000 shares of common stock \$0.0001 par value and 50,000,000 of convertible non-voting common stock, \$0.0001 par value per share. The holders of common stock are entitled to one vote for each share of common stock held at all meetings of stockholders. The holders of non-voting common stock are not entitled to vote, except on an as converted basis with respect to any change of control of the Company that is submitted to the stockholders of the Company for approval. The number of authorized shares of common stock may be increased or decreased by the affirmative vote of the holders of shares of capital stock of the Company representing a majority of the votes represented by all shares (including Preferred Stock) entitled to vote. Shares of Jaguar non-voting common stock have the

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. Stockholders' Equity (Continued)

same rights to dividends and other distributions and are convertible into shares of Jaguar common stock on a one-for-one basis upon transfers to non-affiliates of Nantucket ("former creditor of Napo"), upon the release from escrow of certain non-voting shares held by the former creditors of Napo to the legacy stockholders of Napo under specified conditions and at any time on or after April 1, 2018 at the option of the respective holders thereof.

On May 18, 2015, the Company completed an initial public offering ("IPO") of its common stock. In connection with its IPO, the Company issued and sold 2,860,000 shares of common stock at a price to the public of \$7.00 per share. As a result of the IPO, the Company received \$15.9 million in net proceeds, after deducting underwriting discounts and commissions of \$1.2 million and offering expenses of \$2.9 million (\$3.3 million including non-cash offering expenses) payable by the Company. In connection with the IPO, the Company's outstanding shares of convertible preferred stock were automatically converted into 2,010,596 shares of common stock and the Company's outstanding warrants to purchase convertible preferred stock were all converted to warrants to purchase common stock.

In February 2016, the Company completed a secondary public offering of its common stock. In connection with its secondary public offering, the Company issued and sold 2,000,000 shares of common stock at a price to the public of \$2.50 per share. As a result of the secondary public offering, the Company received \$4.1 million in net proceeds, after deducting underwriting discounts and commissions of \$373,011 and offering expenses of \$496,887.

In June 2016, the Company entered into a common stock purchase agreement with a private investor (the "CSPA"), which provides that, upon the terms and subject to the conditions and limitations set forth therein, the investor is committed to purchase up to an aggregate of \$15.0 million of the Company's common stock over the approximately 30-month term of the agreement. Upon execution of the CSPA, the Company sold 222,222 shares of its common stock to the investor at \$2.25 per share for net proceeds of \$394,534, reflecting gross proceeds of \$500,000 and offering expenses of \$105,398. In consideration for entering into the CSPA, the Company issued 456,667 shares of its common stock to the investor. Concurrently with entering into the CSPA, the Company also entered into a registration rights agreement with the investor (the "Registration Agreement"), in which the Company agreed to file one or more registration statements, as permissible and necessary to register under the Securities Act of 1933, as amended, the sale of the shares of the Company's common stock that have been and may be issued to the investor under the CSPA. On June 22, 2016 and September 22, 2016, the Company filed registration statements on Form S-1 (File Nos. 333-212173 and 333-213751) pursuant to the terms of the Registration Agreement, which registration statements were declared effective on July 8, 2016 and October 5, 2016, respectively. In the year ended December 31, 2016, pursuant to the CSPA, the Company sold an additional 1,348,601 shares of the Company's common stock in exchange for \$2,176,700 of cash proceeds. And in the nine months ended September 30, 2017, the Company sold another 3,972,510 shares of the Company's common stock in exchange for \$2,387,085 of cash proceeds. Of the \$15.0 million available under the CSPA, the Company has received \$4,748,017 as of March 31, 2017. The CSPA limits the number of shares that the Company can sell thereunder to 2,027,490 shares, which equals 19.99% of the Company's outstanding shares as of the date of the CSPA (such limit, the "19.99% exchange cap"), unless either (i) the Company obtains stockholder approval to issue more than such 19.99% exchange cap or (ii) the average price paid for all shares of the Company's common stock issued under the CSPA is equal to or greater than \$1.32 per share (the closing price on the date the CSPA was signed), in either case in compliance with Nasdaq Listing Rule 5635(d). The Company held its 2017 Annual Meeting on May 8, 2017. At the 2017 Annual Meeting, the Company's stockholders voted on the approval, pursuant to Nasdaq Listing Rule 5635(d), of the

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. Stockholders' Equity (Continued)

issuance of an additional 3,555,514 shares of the Company's common stock under the CSPA, which when combined with the 2,444,486 shares that the Company has already sold pursuant to the CSPA, equals an aggregate of 6,000,000 shares.

In October 2016, the Company entered into a Common Stock Purchase Agreement with an existing private investor. Upon execution of the agreement the Company sold 170,455 shares of its common stock in exchange for \$150,000 in cash proceeds.

On November 22, 2016, the Company entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which the Company sold securities to such investors in a private placement transaction, which is referred to herein as the 2016 Private Placement. In the 2016 Private Placement, the Company sold an aggregate of 1,666,668 shares of its common stock at a price of \$0.60 per share for net proceeds of \$677,224 or gross proceeds of approximately \$1.0 million less \$322,777 in issuance costs. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668 shares of our common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, (ii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the Series B Warrants, the 2016 Warrants. The issuance costs were allocated to common stock, series A warrants, and Series B and C warrants based on the relative fair value of each:

<u>Instruments</u>	<u>Fair Value</u>	<u>% Allocation</u>	<u>Issuance Costs (allocated)</u>
Common Stock	\$ 156,522	16%	\$ 50,522
Warrants (Series A)	700,001	70%	225,944
Warrants (Series B and C)	143,478	14%	46,311
Total	<u>\$1,000,001</u>	<u>100%</u>	<u>\$322,777</u>

Common stock of a net \$106,000 (fair value less issuance costs) was included in equity in the company's balance sheet. Series A warrants of \$756,001, consisting of the series A warrants of \$700,001 and the series A placement agent warrants of \$56,000, are included in current liabilities in the company's balance sheet and the \$225,944 of issuance cost was expensed and is in general and administrative expense on the company's statement of operations and comprehensive loss. Series B and C warrants of a net \$97,167 (fair value less issuance costs) were classified in equity in the company's balance sheet.

In exchange for the extension of the maturity date of the outstanding 2015 Convertible Note, on, November 8, 2016, the Company's board of directors granted the lender a warrant to purchase 120,000 shares of the Company's common stock for \$0.01 per share. The warrant is exercisable at any time on or before July 28, 2022, the expiration date of the warrant. The amendment and related warrant issuance resulted in the Company treating the debt as having been extinguished and replaced with new debt for accounting purposes due to meeting the 10% cash flow test. The Company calculated a loss on the extinguishment of debt of \$108,000, or the equivalent to the fair value of the warrants granted, which is included in other expense in the Company's statements of operations and comprehensive loss. The warrants were valued on November 8, 2016 using the Black-Scholes-Merton model with the following assumptions: stock price of \$0.91, exercise price of \$0.01, term of 5.72 years expiring July 2022, volatility of 70.35%, dividend yield of 0%, and risk-free interest rate of 1.45%.

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. Stockholders' Equity (Continued)

On June 28, 2017, the Company entered into a Common Stock Purchase Agreement with an existing private investor. Upon execution of the agreement the Company sold 100,000 shares of its common stock in exchange for \$50,000 in cash proceeds.

On July 31, 2017, the Company entered into a Common Stock Purchase Agreement with an existing investor. Upon execution of the agreement the Company sold 3,243,243 shares of voting common stock in exchange for \$3.0 million in cash proceeds.

On July 31, 2017, the Company completed the merger with Napo and changed its name to Jaguar Health, Inc. The Company issued 2,282,445 shares of voting common stock and 43,173,288 shares of non-voting stock at the time the merger was consummated.

As of September 30, 2017 and 2016, the Company had reserved shares of common stock for issuance as follows:

	September 30, 2017	September 30, 2016
Options issued and outstanding	2,984,304	2,444,375
Options available for grant	513,385	166,833
RSUs issued and outstanding	5,893,849	20,789
Warrants issued and outstanding	6,656,333	715,539
Convertible notes	15,550,753	26,785
Total	31,598,624	3,374,321

Preferred Stock

The Company's third amended and restated certificate of incorporation authorizes the Company to issue 10,000,000 shares of preferred stock \$0.0001 par value. No shares of preferred stock were issued or outstanding at September 30, 2017 or December 31, 2016.

10. Stock Incentive Plans

2013 Equity Incentive Plan

Effective November 1, 2013, the Company's board of directors and sole stockholder adopted the Jaguar Health, Inc. 2013 Equity Incentive Plan (the "2013 Plan"). The 2013 Plan allows the Company's board of directors to grant stock options, restricted stock awards and restricted stock unit awards to employees, officers, directors and consultants of the Company. As of December 31, 2013, the Company had reserved 300,000 shares of its common stock for issuance under the 2013 Plan. In April 2014, the board of directors amended the 2013 Plan to increase the shares reserved for issuance to 847,533 shares. Following the effective date of the IPO and after effectiveness of any grants under the 2013 Plan that were contingent on the IPO, no additional stock awards will be granted under the 2013 Plan. Outstanding grants continue to be exercisable, however any unissued shares under the plan and any forfeitures of outstanding options do not rollover to the 2014 Stock Incentive Plan. There were 565,377 option shares outstanding at September 30, 2017.

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stock Incentive Plans (Continued)

2014 Stock Incentive Plan

Effective May 12, 2015, the Company adopted the Jaguar Health, Inc. 2014 Stock Incentive Plan (“2014 Plan”). The 2014 Plan provides for the grant of options, restricted stock and restricted stock units to eligible employees, directors and consultants to purchase the Company’s common stock. The Company reserved 333,333 shares of common stock for issuance pursuant to the 2014 Plan. On January 1, 2017 and 2016, the Company added 280,142 and 162,498 shares to the option pool in accordance with the 2014 Plan that provides for automatic share increases on the first day of each fiscal year in the amount of 2% of the outstanding number of shares of the Company’s common stock on last day of the preceding calendar year. The 2014 Plan replaces the 2013 Plan except that all outstanding options under the 2013 Plan remain outstanding until exercised, cancelled or until they expire.

In July 2015, the Company amended the 2014 Plan reserving an additional 550,000 shares under the plan contingent upon approval by the Company’s stockholders at the June 2016 annual stockholders meeting. In June 2016, the Company amended the 2014 Plan once again, modifying the increase from 550,000 shares to 1,550,000 shares, which was approved at the 2016 annual stockholders meeting. In July 2017, the Company amended the 2014 Plan reserving an additional 6,500,188 shares under the plan, which was approved at the special stockholders meeting on July 27, 2017.

Stock Options and Restricted Stock Units (“RSUs”)

The following table summarizes incentive plan activity for the nine months ended September 30, 2017:

	Shares Available for Grant	Stock Options Outstanding	RSUs Outstanding	Weighted Average Stock Option Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Combined Incentive Plan						
Balance—December 31, 2016	39,988	2,571,220	20,789	\$2.52	<u>8.77</u>	<u>\$—</u>
Additional shares authorized	6,780,330	—	—			
Options granted	(78,000)	78,000	—	0.70		
Options granted in the Napo						
Merger	(543,301)	543,301	—	2.07		
RSUs granted in the Napo						
Merger	(5,893,849)	—	5,893,849	—		
Options cancelled	208,217	(208,217)	—	1.54		
RSUs vested and released	—	—	(20,789)	—		
Combined Incentive Plan						
Balance—September 30, 2017	<u>513,385</u>	<u>2,984,304</u>	<u>5,893,849</u>	<u>\$2.46</u>	<u>6.76</u>	<u>\$—</u>
Options vested and exercisable—September 30, 2017		<u>1,957,629</u>		<u>\$2.86</u>	<u>5.67</u>	<u>\$—</u>
Options vested and expected to vest—September 30, 2017		<u>2,707,075</u>		<u>\$2.47</u>	<u>6.56</u>	<u>\$—</u>

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stock Incentive Plans (Continued)

There was no option activity related to the 2013 Equity Incentive Plan in the nine months ended September 30, 2017.

The weighted average grant date fair value of stock options granted (excluding the options issued in the Napo Merger) was \$0.44 and \$0.89 during the nine months ended September 30, 2017 and 2016.

The number of option shares that vested in the nine months ended September 30, 2017 and 2016 was 533,348 shares and 480,377 shares. The grant date weighted average fair value of option shares that vested in the nine months ended September 30, 2017 and 2016 was \$549,453 and \$542,999, respectively.

No options were exercised in the nine months ended September 30, 2017 or 2016.

The intrinsic value is computed as the options granted multiplied by the difference between the fair market value of the Company's common stock of \$0.20 on September 30, 2017 and the grant date stock option exercise price.

The Company granted RSUs in 2014 and 2015 under the 2013 Equity Incentive Plan. The units granted vest upon the occurrence of both a liquidity event and satisfaction of the service-based requirement. The time-based vesting provided that 50% of the RSU vested on January 1, 2016 and the remaining 50% vested on July 1, 2017. The Company began recording stock-based compensation expense relating to the RSU grants effective May 18, 2015, the date of the Company's initial public offering, and the date the liquidity condition was met. The stock-based compensation expense is based on the grant date fair value which is the equivalent to the fair market value on the date of grant, and is amortized over the vesting period using the straight-line method, net of estimated forfeitures. On January 1, 2016, the Company issued 17,546 shares of its common stock in exchange for 27,768 vested and released RSUs, net of 10,172 RSU shares used to pay withholding taxes. On July 3, 2017, the Company issued 13,307 shares of its common stock in exchange for 20,789 vested and released RSUs, net of 7,086 RSU shares used to pay withholding taxes. The Company granted 5,893,849 RSUs to replace Napo RSUs upon the consummation of the Napo Merger.

Stock-Based Compensation

The following table summarizes stock-based compensation expense related to stock options and RSUs for the three and nine months ended September 30, 2017 and 2016, and are included in the statements of operations and comprehensive loss as follows:

	<u>Three Months Ended</u> <u>September 30,</u>		<u>Nine Months Ended</u> <u>September 30,</u>	
	<u>2017</u>	<u>2016</u>	<u>2017</u>	<u>2016</u>
Research and development expense	\$ 45,009	\$ 53,935	\$168,981	\$116,552
Sales and marketing expense	7,938	50,052	23,307	58,733
General and administrative expense	133,807	145,391	438,636	303,157
Total	<u>\$186,754</u>	<u>\$249,378</u>	<u>\$630,924</u>	<u>\$478,442</u>

As of September 30, 2017, the Company had \$761,710 of unrecognized stock-based compensation expense for options and restricted stock units outstanding, which is expected to be recognized over a weighted-average period of 1.59 years.

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stock Incentive Plans (Continued)

The estimated grant-date fair value of employee stock options was calculated using the Black-Scholes-Merton option-pricing model using the following assumptions:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Weighted-average volatility	76.92%	69.39 - 71.38%	74.26 - 76.92%	66.25 - 71.38%
Weighted-average expected term (years) . .	5.82	5.00 - 5.82	5.82	5.00 - 5.82
Risk-free interest rate	1.95%	1.10 - 1.29%	1.95 - 1.98%	1.10 - 1.49%
Expected dividend yield	—	—	—	—

The estimated grant-date fair value of non-employee stock options was calculated using the Black-Scholes-Merton option-pricing model was revalued using the following assumptions:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Weighted-average volatility	—	78.30 - 80.02%	—	78.30 - 80.04%
Weighted-average expected term (years)	—	9.17 - 10.00	—	9.17 - 10.00
Risk-free interest rate	—	1.32 - 1.67%	—	1.32 - 1.74%
Expected dividend yield	—	—	—	—

11. Net Income (Loss) Per Share Attributable to Common Stockholders

The following table presents the calculation of basic and diluted net loss per common share for the three and nine months ended September 30, 2017 and 2016:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Net income (loss) attributable to common shareholders—basic	\$ 4,759,844	\$ (3,415,490)	\$ (1,761,156)	\$ (11,057,169)
Interest on convertible debt, net of tax	209,149	—	—	—
Net income attributable to common shareholders—diluted	<u>\$ 4,968,993</u>	<u>\$ (3,415,490)</u>	<u>\$ (1,761,156)</u>	<u>\$ (11,057,169)</u>
Shares used to compute net income (loss) per common share—basic	55,434,898	11,264,886	28,246,721	10,298,987
Dilutive effect of warrants	675,383	—	—	—
Dilutive effect of convertible debt	11,093,249	—	—	—
Shares used to compute net income (loss) per common share—diluted	<u>67,203,530</u>	<u>11,264,886</u>	<u>28,246,721</u>	<u>10,298,987</u>
Net loss per share attributable to common shareholders—basic	<u>\$ 0.09</u>	<u>\$ (0.30)</u>	<u>\$ (0.06)</u>	<u>\$ (1.07)</u>
Net loss per share attributable to common stock—diluted	<u>\$ 0.07</u>	<u>\$ (0.30)</u>	<u>\$ (0.06)</u>	<u>\$ (1.07)</u>

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

11. Net Income (Loss) Per Share Attributable to Common Stockholders (Continued)

The Company's basic net income (loss) per share is calculated by dividing the net loss by the weighted-average number of shares of common stock outstanding for the period, without consideration of potentially dilutive securities. Restricted stock units are considered in the calculation of the Company's basic net income (loss) per share as they are fully vested. Diluted net income (loss) per share is the same as basic net income (loss) per share since the effect of potentially dilutive securities is anti-dilutive. In the three months ended September 30, 2017, certain warrant shares were dilutive. The rights of the holders of voting common stock and non-voting common stock are identical, except with respect to voting and conversion. Shares of Jaguar non-voting common stock have the same rights to dividends and other distributions and are convertible into shares of Jaguar common stock on a one-for-one basis upon transfers to non-affiliates of Nantucket, upon the release from escrow of certain non-voting shares held by a former creditors of Napo to the legacy stockholders of Napo under specified conditions and at any time on or after April 1, 2018 at the option of the respective holders thereof.

The following outstanding common stock equivalents have been excluded from diluted net loss per common share for the nine months ended September 30, 2017 and 2016 because their inclusion would be anti-dilutive:

	September 30, 2017	September 30, 2016
Options issued and outstanding	2,984,304	2,444,375
Warrants to purchase common stock	6,656,333	715,539
Restricted stock units	—	20,789
Total	9,640,637	3,180,703

12. 401(k) Plan

The Company sponsors a 401(k) defined contribution plan covering all employees. There were no employer contributions to the plan from plan inception through September 30, 2017.

13. Income Taxes

The forecasted effective tax rate for the nine months ended September 30, 2017 and 2016 was zero percent, primarily as a result of the estimated tax loss for the year and the change in valuation allowance. However, as a result of the acquisition of Napo in July 2017, the Company recorded a tax benefit of \$12.2 million as a discrete item in the current quarter. This tax benefit is a result of the partial release of its existing valuation allowance since the acquired deferred tax liabilities from Napo will provide a source of income for the Company to realize a portion of its deferred tax assets, for which a valuation allowance is no longer needed.

14. Subsequent Events

The Company completed an evaluation of the impact of subsequent events through November 20, 2017, the date these financial statements were issued.

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. Subsequent Events (Continued)

Follow-On Public Offering

In October 2017, we completed a follow-on registered offering (“offering”) of our Common Stock. In connection with the offering, we issued 21,250,000 shares of our Common Stock at a price to the public of \$0.20 per share. As a result of the follow-on offering, we received \$3.55 million in net proceeds, after deducting underwriting discounts and commissions of \$297,500 and estimated offering expenses of \$400,000.

On November 1, 2017, the underwriters of our previously announced offering exercised their over-allotment option (the “Over-Allotment Option”) to purchase an additional 437,500 shares of our voting common stock, par value \$0.0001 per share at a public offering price of \$0.20 per share. We received additional gross proceeds of approximately \$87,500 from the exercise of the Over-Allotment Option, increasing the aggregate gross proceeds to us from the offering to approximately \$4.3 million, before deducting offering expenses, underwriting discounts and commissions payable by us.

Termination of Elanco Agreement

On November 1, 2017, we received a letter (the “Notice”) from Elanco serving as formal notice of Elanco’s decision to terminate the Elanco Agreement by giving us 90 days written notice. Pursuant to the terms of the Elanco Agreement, termination of the Agreement will become effective on January 30, 2018, which is 90 days after the date of the Notice. On the effective date of termination of the Elanco Agreement, all licenses granted to Elanco by us under the Elanco Agreement will be revoked and the rights granted thereunder revert back to us.

Registered Direct Offering and Equity Line

On November 24, 2017, we entered into a share purchase agreement (the “Share Purchase Agreement”) with L2 Capital, LLC, a Kansas limited liability company (“L2 Capital”), pursuant to which we agreed to sell 2,000,000 shares of our Common Stock to L2 Capital for a purchase price of \$0.25 per share in a registered direct offering (the “Registered Direct Offering”), without an underwriter or placement agent. Net proceeds to us from the Registered Direct Offering were approximately \$0.49 million and transaction expenses were approximately \$9,000. We used the net proceeds from the Registered Direct Offering for the commercialization of Mytesi, our lead prescription drug product, and for working capital and general corporate purposes.

Concurrently with the Registered Direct Offering, we entered into a common stock purchase agreement (the “CSPA”) with L2 Capital relating to an offering (the “Equity Line Offering”) of an aggregate of up to 12,100,000 shares of our common stock, of which 10,000,000 of such shares are being offered in an indirect primary offering consisting of an equity line of credit. We initially issued 2,100,000 shares of Common Stock (the “Commitment Shares”) to L2 Capital as an inducement to enter into the CSPA. Additionally, under the terms of the CSPA, the Company has the right to “put,” or sell, up to 10,000,000 shares of Common Stock (the “Purchase Shares”) to L2 Capital at a fixed price of \$0.52 per share or such other price to be agreed upon between L2 Capital and us.

On December 27, 2017, we delivered a notice to L2 Capital of our decision to exercise the option to increase the number of shares of our Common Stock, available for issuance under the equity line from 10,000,000 shares to 17,808,142 shares of Common Stock at a fixed price of \$0.52 per share (or such other

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. Subsequent Events (Continued)

price agreed upon between L2 Capital and us) (the “Upsize Option”). In consideration for our exercise of the Upsize Option, we issued 1,000,000 shares of Common Stock to L2 Capital as a commitment fee.

CVP Secured Promissory Note

On December 8, 2017, we entered into a securities purchase agreement (the “Securities Purchase Agreement”) with Chicago Venture Partners, L.P. (“CVP”), pursuant to which we issued to CVP a promissory note (the “Note”) in the aggregate principal amount of \$1,587,500 for an aggregate purchase price of \$1,100,000. The Note carries an original issue discount of \$462,500, and the initial principal balance also includes \$25,000 to cover CVP’s transaction expenses. We used proceeds for the note issuance for general corporate purposes. The Note bears interest at the rate of 8% per annum and matures on September 8, 2018.

PIPE Financing

On December 27 2017, we entered into a share purchase agreement with several investors for the purchase of up to \$1.97 million shares of Common Stock at a purchase price equal to the lesser of (i) \$0.10 and (ii) the product equal to (x) eighty percent (80%) multiplied by (y) the average volume-weighted average price of the Common Stock for the five consecutive trading days ending on the date immediately preceding the date of the share purchase agreement.

Riverside/MEF Notes

On December 29, 2017, Napo Pharmaceuticals, Inc. (“Napo”), our wholly-owned subsidiary, entered into an amendment (the “First Amendment”) to the Note Purchase Agreement and Notes (each as defined below) with each of the purchasers (the “Purchasers”) party to the Note Purchase Agreement, dated March 1, 2017, by and among the Napo and the Purchasers (as amended, the “Note Purchase Agreement”). In connection with the First Amendment, Napo amended the original issue discount exchangeable promissory notes previously issued to the Purchasers on March 1, 2017 (the “First Tranche Notes”) and April 27, 2017 (the “Second Tranche Notes” and together with the First Tranche Notes, the “Notes”) pursuant to the Note Purchase Agreement to, among other things, (a) increase the principal amount outstanding under the First Tranche Notes and the Second Tranche Notes by twelve percent (12%), (b) lower the price at which the Notes are exchangeable for shares (the “Exchange Shares”) of our Common Stock (the “Common Stock”) from \$0.56 per share to \$0.20 per share, and (c) extend the maturity date of the First Tranche Notes from December 1, 2017 to February 15, 2018 and the Second Tranche Notes from January 27, 2018 to April 1, 2018.

In connection with the First Amendment, we also issued 2,492,084 shares of Common Stock to the Purchasers as repayment of \$299,050.08 principal amount of the First Tranche Notes. Following such repayment and the 12% increase to the outstanding balance of the Notes described above, \$435,949.92 and \$735,000.00 principal amount remain outstanding under the First Tranche Notes and Second Tranche Notes, respectively.

Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis should be read together with our financial statements and the related notes appearing elsewhere in this report.

For the years ended December 31, 2016 and 2015

Overview

We are an animal health company focused on developing and commercializing first-in-class gastrointestinal products for companion and production animals, foals, and high value horses. Canalevia is our lead prescription drug product candidate, intended for treatment of various forms of diarrhea in dogs. We achieved statistically significant results in a multicenter canine proof-of-concept study completed in February 2015, supporting the conclusion that Canalevia treatment is superior to placebo. As we announced in December 2015, the pivotal clinical field study to evaluate the safety and effectiveness of Canalevia for acute diarrhea in dogs is underway. Two-hundred dogs were enrolled in the Canalevia pivotal study, which completed enrollment in January 2017. Jaguar has received Minor Use in a Minor Species (MUMS) designation for Canalevia for Chemotherapy-Induced Diarrhea (CID) in dogs. Canalevia is a canine-specific formulation of crofelemer, an active pharmaceutical ingredient isolated and purified from the *Croton lechleri* tree, which is sustainably harvested. A human-specific formulation of crofelemer, Mytesi (formerly known as Fulyzaq), was approved by the FDA in 2012 for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy. Members of our management team developed crofelemer while at Napo Pharmaceuticals, Inc. or Napo, which was Jaguar's parent company until May 13, 2015. The reception among users of our lead non-prescription products—Neonorm Calf and Neonorm Foal, an anti-diarrheal product we launched for newborn horses in early 2016—has been quite positive. The clinically-proven performance of Neonorm Foal, in combination with our heightened understanding of market needs within the global equine space, is driving our increased focus on equine product development. Equilevia (formerly referred to as SB-300) is Jaguar's prescription drug product candidate for treatment of gastrointestinal ulcers in horses. Equilevia is a pharmaceutical formulation of a standardized botanical extract. Neonorm is a standardized botanical extract derived from the *Croton lechleri* tree. We launched Neonorm Calf in the United States at the end of 2014 for preweaned dairy calves. Canalevia, Equilevia and Neonorm are distinct products formulated to address specific species and market channels. We have filed nine investigational new animal drug applications, or INADs, with the FDA and intend to develop species-specific formulations of Neonorm in six additional target species, and Canalevia for both cats and dogs. In July 2016 we released data from two China-based studies sponsored by Fresno, California-based Integrated Animal Nutrition and Health Inc. showing remarkable resolution of diarrhea and cure of piglets afflicted with diarrhea following treatment with a *Croton lechleri* botanical extract administered in water.

As we announced in December 2016, Jaguar has signed a distribution agreement with Henry Schein, Inc., the world's largest provider of health care products and services to office-based dental, animal health and medical practitioners, for exclusive distribution of Neonorm Foal product to all segments of the U.S. equine market. Henry Schein's animal health business, Dublin, Ohio-based Henry Schein Animal Health, employs approximately 900 team members and had 2015 net sales of \$2.9 billion. The agreement became effective on December 9, 2016, and, subject to provisions specified in the agreement, shall continue in force for an initial period of one year. Thereafter, unless either party notifies the other of its intent not to renew the term of the agreement at least 30 days prior to the end of the then current term, the term shall be automatically renewed upon expiration for successive renewal terms of one year.

As we announced in September 2016, we have signed an exclusive supply and distribution agreement for this botanical extract with Integrated Animal Nutrition and Health Inc. for dairy cattle and pigs in the Chinese marketplace. According to the Minnesota-based Institute for Agriculture and Trade Policy, swine production was expected to reach 723 million head in 2014 in China, where pork is still the main protein

source for many consumers. In 2015 there were an estimated 15.6 million dairy cattle in China, according to Index Muni. Integrated Animal Nutrition and Health, Inc. has minimum purchase requirements of the botanical extract to maintain their exclusivity.

Since inception, we have been primarily focused on designing and conducting studies of Canalevia to treat diarrhea in dogs and of Neonorm to help retain fluid in calves and to function as an anti-diarrheal in foals. We are also focused on developing a full suite of equine products to support and improve gastrointestinal health in foals and adult horses. Gastrointestinal conditions such as acute diarrhea, ulcers and diarrhea associated with acute colitis can be extremely debilitating for horses, and present a significant economic and emotional burden for veterinarians and owners around the world. A portion of our activities has also been focused on other efforts associated with being a recently formed company, including securing necessary intellectual property, recruiting management and key employees, and financing activities.

On February 8, 2017, we entered into a binding agreement of terms for our acquisition of Napo. Following the merger, Napo will operate as our wholly-owned subsidiary, focused on human health. The binding financial terms of the merger include a 3-to-1 Napo-to-Jaguar value ratio to calculate the relative ownership of the combined entity. As of January 31, 2017, Napo owned approximately 19% of the outstanding shares of our common stock.

The Binding Agreement of Terms sets forth the financial terms of the merger and customary conditions to closing, which include but are not limited to completion of due diligence, receipt of a fairness opinion, and stockholder and other approvals. Additionally, the financial terms of the merger and conditions to closing include provisions that (i) Napo's secured convertible debt shall not exceed \$10.0 million and its unsecured debt shall not exceed \$3.0 million, and (ii) a third party will invest \$3.0 million in us for approximately four million shares of our newly issued common stock with the investment proceeds loaned to Napo immediately prior to the consummation of the merger. The Binding Agreement of Terms also provides that if the merger fails to close for any reason on or prior to July 31, 2017, other than as a result directly or indirectly of (x) lack of stockholder approval by either party or (y) Napo (i) failing to perform in accordance with the terms and conditions of the agreement or (ii) failing to abide by or breaching the provisions or representations, warranties and covenants of the agreement or the merger documents, then, on or before the close of business on August 7, 2017, we will be required to issue 2,000,000 shares of our restricted common stock to Napo.

We expect to incur significant expenses in connection with the merger. While we have assumed that a certain level of expenses will be incurred, there are many factors that could affect the total amount or the timing of the merger expenses, and many of the expenses that will be incurred are, by their nature, difficult to estimate. These expenses could result in the combined company taking significant charges against earnings following the completion of the merger. The ultimate amount and timing of such charges are uncertain at the present time. We incurred approximately \$100,000 in professional and other fees associated with the proposed merger during the year ended December 31, 2016.

On January 27, 2017, we entered into a licensing, development, co-promotion and commercialization agreement with Elanco to license, develop and commercialize Canalevia, our drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals. The Elanco Agreement grants Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco will have exclusive rights globally outside the U.S. and co-exclusive rights with us in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products.

Under the terms of the Elanco Agreement, we received a \$1.5 million upfront payment and will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well

as product development expense reimbursement, and royalty payments on global sales. The Elanco Agreement specifies that we will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. Elanco will also reimburse us for Canalevia-related expenses, including reimbursement for Canalevia-related expenses in Q4 2016, certain development and regulatory expenses related to our planned target animal safety study and the completion of our field study of Canalevia for acute diarrhea in dogs.

Financial Operations Overview

We were incorporated in June 2013 in Delaware. Napo formed our company to develop and commercialize animal health products. Prior to our incorporation, the only activities of Napo related to animal health were limited to the retention of consultants to evaluate potential strategic alternatives. We were previously a majority-owned subsidiary of Napo. However, following the closing of our May 2015 initial public offering, we are no longer majority-owned by Napo.

We have not generated any material revenue to date and expect to continue to incur significant research and development and other expenses. Our net loss attributable to common stockholders was \$14.7 million and \$16.6 million for the years ended December 31, 2016 and 2015. As of December 31, 2016, we had total stockholders' deficit of \$2.5 million and cash and cash equivalents of \$950,979. We expect to continue to incur losses for the foreseeable future as we expand our product development activities, seek necessary approvals for our product candidates, conduct species-specific formulation studies for our non-prescription products, establish API manufacturing capabilities and begin commercialization activities. As a result, we expect to experience increased expenditures for 2017.

Revenue

We sell our primary commercial product Neonorm to distributors under agreements that may provide distributor price adjustments and rights of return under certain circumstances. Until we have sufficient sales history and pipeline visibility, we will defer revenue and costs of distributor sales until products are sold by the distributor to the distributor's customers. Revenue recognition depends on notification either directly from the distributor that product has been sold to the distributor's customer, when we have access to the data. We maintain system controls to verify that the reported distributor and third party data is accurate. Deferred revenue on shipments to distributors will reflect the estimated effects of distributor price adjustments, if any, and the estimated amount of gross margin expected to be realized when the distributor sells through product purchased from the Company. Accounts receivable from distributors will be recognized and included in deferred revenue when we ship product to the distributor. We relieve inventory and recognize revenue typically upon shipment by the distributor to their customer. We recognized \$141,523 and \$258,381 in revenue for the years ended December 31, 2016 and 2015, respectively.

Cost of Revenue

Cost of revenue expenses consist of costs to manufacture, package and distribute Neonorm that distributors have sold through to their customers.

Research and Development Expense

Research and development expenses consist primarily of clinical and contract manufacturing expense, personnel and related benefit expense, stock-based compensation expense, employee travel expense, reforestation expenses. Clinical and contract manufacturing expense consists primarily of costs to conduct stability, safety and efficacy studies, and manufacturing startup expenses at an outsourced API provider in Italy.

We typically use our employee and infrastructure resources across multiple development programs. We track outsourced development costs by prescription drug product candidate and non-prescription product but do not allocate personnel or other internal costs related to development to specific programs or development compounds.

The timing and amount of our research and development expenses will depend largely upon the outcomes of current and future trials for our prescription drug product candidates as well as the related regulatory requirements, the outcomes of current and future species-specific formulation studies for our non-prescription products, manufacturing costs and any costs associated with the advancement of our line extension programs. We cannot determine with certainty the duration and completion costs of the current or future development activities.

The duration, costs and timing of trials, formulation studies and development of our prescription drug and non-prescription products will depend on a variety of factors, including:

- the scope, rate of progress, and expense of our ongoing, as well as any additional clinical trials, formulation studies and other research and development activities;
- future clinical trial and formulation study results;
- potential changes in government regulations; and
- the timing and receipt of any regulatory approvals.

A change in the outcome of any of these variables with respect to the development of a prescription drug product candidate or non-prescription product could mean a significant change in the costs and timing associated with our development activities.

We expect research and development expense to increase significantly as we add personnel, commence additional clinical studies and other activities to develop our prescription drug product candidates and non-prescription products.

Sales and Marketing Expense

Sales and marketing expenses consist of personnel and related benefit expense, stock-based compensation expense, direct sales and marketing expense, employee travel expense, and management consulting expense. We currently incur sales and marketing expenses to promote Neonorm calf and foal sales.

We expect sales and marketing expense to increase significantly as we develop and commercialize new products and grow our existing Neonorm market. We will need to add sales and marketing headcount to promote the sales of existing and new products.

General and Administrative Expense

General and administrative expenses consist of personnel and related benefit expense, stock-based compensation expense, employee travel expense, legal and accounting fees, rent and facilities expense, and management consulting expense.

We expect general and administrative expense to increase in order to enable us to effectively manage the overall growth of the business. This will include adding headcount, enhancing information systems and potentially expanding corporate facilities.

Interest Expense

Interest expense consists primarily of interest on convertible promissory notes, the standby bridge financing commitment and the loan and security agreement (long-term debt arrangement). It also includes

interest expense and the amortization of a beneficial conversion feature related to convertible promissory notes issued in June and December 2014 and in February and March 2015.

Results of Operations

Comparison of the years ended December 31, 2016 and 2015

The following table summarizes the Company's results of operations with respect to the items set forth in such table for the years ended December 31, 2016 and 2015 together with the change in such items in dollars and as a percentage:

	Years Ended December 31,		Variance	
	2016	2015	(\$)	(%)
Revenue	\$ 141,523	\$ 258,381	\$ (116,858)	(45.2)%
Operating Expenses				
Cost of revenue	51,966	123,457	(71,491)	(57.9)%
Research and development expense	7,206,864	6,475,851	731,013	11.3%
Sales and marketing expense	485,440	765,091	(279,651)	(36.6)%
General and administrative expense	5,983,238	5,339,351	643,887	12.1%
Total operating expenses	13,727,508	12,703,750	1,023,758	8.1%
Loss from operations	(13,585,985)	(12,445,369)	(1,140,616)	9.2%
Interest expense, net	(985,549)	(3,317,287)	2,331,738	(70.3)%
Other expense	(11,046)	(27,277)	16,231	(59.5)%
Change in fair value of warrants	(43,200)	(501,617)	458,417	(91.4)%
Loss on extinguishment of debt	(108,000)	—	(108,000)	N/A
Net loss and comprehensive loss	<u>\$(14,733,780)</u>	<u>\$(16,291,550)</u>	<u>\$ 1,557,770</u>	<u>(9.6)%</u>

Revenue and Cost of Revenue

Revenue and related cost of revenue for the years ended December 31, 2016 and 2015 reflects sell-through of our Neonorm Calf and Neonorm Foal products to our distributors. We defer recognizing revenue and cost of revenue until products are sold by the distributor to the distributor's end customers and recognition depends on notification from the distributor that product has been sold to the distributor's end customer. In 2016, we began selling the botanical extract to a distributor for use exclusively in China. The revenue from these sales, which totaled \$24,000 in the year ended December 31, 2016, is recognized upon shipment to the distributor as no return rights are provided to this distributor. We experienced a reduction in Neonorm Calf unit sales in the year ended December 31, 2016 compared to 2015 resulting in the decrease in revenue. The decrease in cost of revenue was consistent with the decrease in revenue. We are increasing our efforts to promote sales growth.

Research and Development Expense

The following table presents the components of research and development expense for the years ended December 31, 2016 and 2015 together with the change in such components in dollars and as a percentage:

	Years Ended December 31,		Variance	Variance %
	2016	2015		
R&D:				
Personnel and related benefits	\$2,546,220	\$1,891,954	\$ 654,266	34.6%
Materials expense and tree planting	113,394	187,876	(74,482)	(39.6)%
Travel, other expenses	400,846	360,362	40,484	11.2%
Clinical and contract manufacturing	2,254,122	3,093,193	(839,071)	(27.1)%
Stock-based compensation	181,489	472,145	(290,656)	(61.6)%
Other	1,710,793	470,321	1,240,472	263.8%
Total	<u>\$7,206,864</u>	<u>\$6,475,851</u>	<u>\$ 731,013</u>	<u>11.3%</u>

We increased research and development expense \$731,000 from \$6.5 million in the year ended December 31, 2015 to \$7.2 million for the same period in 2016. We added headcount to enable us to make significant progress in the development of certain drug candidates that resulted in the increase of \$654,000 in personnel and related benefit expenses, while carefully controlling spend in clinical trials and contract manufacturing. Clinical trial expenses increased due to our dog safety and efficacy study and our horse dose determination study both of which began in fiscal year 2016. These expenses were offset by a reduction of contract manufacturing expenses associated with the setup of manufacturing in Italy, which was completed in March 2016. Stock-based compensation decreased \$291,000 from \$472,000 in the year ended December 31, 2015 to \$181,000 in the same period in 2016 primarily due to the reduction in the fair market value of our common stock. Other expenses, consisting primarily of consulting and formulation expenses, increased \$1.2 million from \$470,000 in the year ended December 31, 2015 to \$1.7 million in the same period in 2016. Consulting expenses increased \$940,000 from \$135,000 in the year ended December 31, 2015 to \$1.1 million in the same period in 2016 due to a substantial increase in contractor utilization to assist in our clinical trials and in chemistry, manufacturing and controls (“CMC”) activities. Formulation expenses increased \$250,000 from \$170,000 in the year ended December 31, 2015 to \$420,000 for the same period in 2016 due to an increase in work needed to supply clinical operations with active and placebo product for use in clinical trials. We plan to increase our research and development expense as we continue developing our drug candidates.

We also continued our reforestation efforts, although our expense decreased \$74,000 from \$188,000 in the year ended December 31, 2015 to \$113,000 for the same period in 2016. We value and take to heart the responsibility to replenish trees consumed in order to extract the raw material to manufacture our primary commercial product and the drug product for use in clinical trials.

Sales and Marketing Expense

The following table presents the components of sales and marketing expense for the years ended December 31, 2016 and 2015 together with the change in such components in dollars and as a percentage:

	Years Ended December 31,		Variance	Variance %
	2016	2015		
S&M:				
Personnel and related benefits	\$198,100	\$347,944	\$(149,844)	(43.1)%
Stock-based compensation	73,679	54,115	19,564	36.2%
Direct Marketing Fees	116,417	196,910	(80,493)	(40.9)%
Other	97,244	166,122	(68,878)	(41.5)%
Total	\$485,440	\$765,091	\$(279,651)	(36.6)%

Sales and marketing expense decreased \$280,000 from \$765,000 in the year ended December 31, 2015 to \$485,000 in the same period in 2016 primarily due to a decrease in average monthly headcount for most of the fiscal year and a decrease in direct marketing expense. Personnel costs decreased \$150,000 from \$348,000 for the year ended December 31, 2015 to \$198,000 for the same period in 2016. Stock based compensation expense increased \$20,000 from \$54,000 in the year ended December 31, 2015 to \$74,000 in the same period in 2016 due primarily to expense associated with options granted to a consultant in 2016. Direct marketing and sales expense decreased \$81,000 from \$197,000 in the year ended December 31, 2015 to \$116,000 for the same period in 2016 due to a reduction in marketing programs to promote our Neonorm products. Other expenses, consisted primarily of travel expense, consulting expense and royalty expense. Travel expenses decreased \$42,000 from \$66,000 in the year ended December 31, 2015 to \$25,000 in the same period in 2016 consistent with the reduction in headcount. Consulting expense increased \$7,000 from \$47,000 in the year ended December 31, 2015 to \$54,000 in the same period in 2016. Royalty expenses decreased \$39,000 from \$40,000 in the year ended December 31, 2015 to \$1,000 in the same period in 2016 due to a reduction in the royalty rate upon going public and also due to the decrease in sales of our Neonorm products. We plan to expand sales and marketing spend to promote our Neonorm products.

General and Administrative Expense

The following table presents the components of general and administrative expense for the years ended December 31, 2016 and 2015 together with the change in such components in dollars and as a percentage:

	Years Ended December 31,		Variance	Variance %
	2016	2015		
G&A:				
Personnel and related benefits	\$2,104,809	\$2,025,339	\$ 79,470	3.9%
Accounting fees	311,693	351,743	(40,050)	(11.4)%
Third-party consulting fees and Napo service fees . . .	374,852	200,758	174,094	86.7%
Legal fees	824,288	611,237	213,051	34.9%
Travel	310,066	442,095	(132,029)	(29.9)%
Stock-based compensation	462,759	465,905	(3,146)	(0.7)%
Rent and lease expense	384,147	280,753	103,394	36.8%
Public company expenses	291,253	234,247	57,006	24.3%
Other	919,371	727,274	192,097	26.4%
Total	\$5,983,238	\$5,339,351	\$ 643,887	12.1%

Our general and administrative expenses increased \$644,000 from \$5.3 million in the year ended December 31, 2015 to \$6.0 million for the same period in 2016. In 2015, we became a public company and added headcount that has resulted in increases of \$79,000 in personnel expense. Stock-based compensation was flat at \$466,000 in the year ended December 31, 2015 compared to \$463,000 in the same period in 2016 due to expense associated with new grants to existing employees offsetting the reduction in our stock price. Our public company expenses increased \$57,000 due primarily to a full year of expense in 2016 versus only seven months of expense in 2015 as we filed our IPO in May 2015. We controlled our professional services expenses, reducing our audit fees by \$40,000. However, our legal fees increased \$213,000 from \$611,000 in the year ended December 31, 2015 compared to \$824,000 in the same period in 2016 due to increased public filings with the SEC, and we increased consulting expenses by \$174,000 from \$201,000 in the year ended December 31, 2015 to \$375,000 in the same period in 2016 primarily due to placement agent fees related to the 2016 private placement financing in 2016. Rent expense increased \$103,000 due to moving into our new San Francisco headquarters facility in July of 2015. Other expenses, including insurance costs also increased as a result of becoming a public company in May 2015. We expect to incur additional general and administrative expense as a result of operating as a public company and as we grow our business, including expenses related to compliance with the rules and regulations of the SEC, additional insurance expenses, investor relations activities and other administrative and professional services.

Liquidity and Capital Resources

Sources of Liquidity

We had an accumulated deficit of \$40.4 million as a result of incurring net losses since our inception as we have not generated significant revenue through the current fiscal year. Our net loss and comprehensive loss was \$801,000 for the period from inception to December 31, 2013, \$8.6 million for the year ended December 31, 2014, \$16.3 million for the year ended December 31, 2015, and \$14.7 million for the year ended December 31, 2016. We expect to continue to incur additional losses through the end of fiscal year 2017 and in future years due to expected significant expenses for toxicology, safety and efficacy clinical trials of our products and product candidates, for establishing contract manufacturing capabilities, and for the commercialization of one or more of our product candidates, if approved.

We had cash and cash equivalents of \$951,000 as of December 31, 2016 compared to \$7.7 million as of December 31, 2015. We do not believe our existing cash and cash equivalents will be sufficient to meet our anticipated cash requirements for the next 12 months. Our independent registered public accounting firm has included an explanatory paragraph in its audit report included in our Form 10-K regarding our assessment of substantial doubt about our ability to continue as a going concern. Our financial statements do not include any adjustments that may result from the outcome of this uncertainty.

To date, we have funded our operations primarily through the issuance of equity securities, short-term convertible promissory notes, and long-term debt, in addition to sales of Neonorm, our commercial product:

- In 2013, we received \$400 from the issuance of 2,666,666 shares of common stock to our parent Napo Pharmaceuticals, Inc. We also received \$519,000 of net cash from the issuance of convertible promissory notes in an aggregate principal amount of \$525,000. These notes were all converted to common stock in 2014.
- In 2014, we received \$6.7 million in proceeds from the issuance of convertible preferred stock. Effective as of the closing of our initial public offering, the 3,015,902 shares of outstanding convertible preferred stock were automatically converted into 2,010,596 shares of common stock. Following our initial public offering, there were no shares of preferred stock outstanding.
- In 2014, we received \$1.1 million from the issuance of convertible promissory notes in an aggregate principal amount of \$1.1 million. These notes were converted to common stock upon the

effectiveness of the initial public offering in May of 2015. In August 2014, we entered into a standby line of credit with an individual, who is an accredited investor, for up to \$1.0 million. To date, we had not made any drawdowns under this facility. Also, in October of 2014, as amended and restated in December 2014, we entered into a \$1.0 million standby bridge loan which was repaid in 2015.

- In 2015, we received \$1.25 million in exchange for \$1.25 million of convertible promissory notes, of which \$1.0 million was converted to common stock in 2015, and \$100,000 was repaid in 2015. The remaining \$150,000 remains outstanding.
- In May 2015, we received net proceeds of \$15.9 million upon the closing of our initial public offering, gross proceeds of \$20.0 million (2,860,000 shares at \$7.00 per share) net of \$1.2 million of underwriting discounts and commissions and \$3.3 million of offering expenses, including \$0.4 million of non-cash expense. These shares began trading on The NASDAQ Capital Market on May 13, 2015.
- In 2015, we received net proceeds of \$5.9 million from the issuance of long-term debt. We entered into a loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. Under the loan agreement we are required to maintain \$4.5 million of the proceeds in cash, which amount may be reduced or eliminated on the achievement of certain milestones. An additional \$2.0 million is available contingent on the achievement of certain further milestones. The agreement has a term of three years, with interest only payments through February 29, 2016. Thereafter, principal and interest payments will be made with an interest rate of 9.9%. Additionally, there will be a balloon interest payment of \$560,000 on August 1, 2018. This amount is being recognized over the term of the loan agreement and the effective interest rate, considering the balloon payment, is 15.0%. Our proceeds are net of a \$134,433 debt discount under the terms of such agreement.
- In 2014 and 2015, we received \$24,000 and \$531,000, respectively, in cash from sales of Neonorm to distributors.
- In 2015, we received approximately \$13,000 in proceeds from the exercise of stock options.
- In 2016, we received net proceeds of \$4.1 million upon the closing of our follow-on public offering, reflecting gross proceeds of \$5.0 million (2.0 million shares at \$2.50 per share) net of \$373,011 of underwriting discounts and commissions and \$496,887 of offering expenses.
- In June 2016, we entered into the CSPA with a private investor. Under the terms of the agreement, we may sell up to \$15.0 million in common stock to the investor during the approximately 30-month term of the agreement. Upon execution of the CSPA, we sold 222,222 shares of our common stock to the investor at \$2.25 per share for net proceeds of \$448,732, reflecting gross proceeds of \$500,000 and offering expenses of \$51,268. In consideration for entering into the CSPA, we issued 456,667 shares of our common stock to the investor. We issued 1,348,601 shares in exchange for net proceeds of \$2,122,570, reflecting gross proceeds of \$2,176,700 net of \$54,130 offering expenses under the CSPA in the year ended December 31, 2016.
- In October 2016, we entered into a Common Stock Purchase Agreement with an existing private investor. Upon execution of the agreement we sold 170,455 shares of our common stock in exchange for \$150,000 in cash proceeds.
- On November 22, 2016, we entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which we sold securities to such investors in a private placement transaction, which we refer to herein as the 2016 Private Placement. In the 2016 Private Placement, we sold an aggregate of 1,666,668 shares of our common stock at a price of \$0.60 per share for gross proceeds of approximately \$1.0 million. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668

shares of our common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, (ii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the Series B Warrants, the 2016 Warrants.

- On January 27, 2017, we entered into a licensing, development, co-promotion and commercialization agreement with Elanco to license, develop and commercialize Canalevia, our drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals. The Elanco Agreement grants Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco will have exclusive rights globally outside the U.S. and co-exclusive rights with us in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products. Under the terms of the Elanco Agreement, we received a \$1.5 million upfront payment and will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well as product development expense reimbursement, and royalty payments on global sales. The Elanco Agreement specifies that we will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. Elanco will also reimburse us for Canalevia-related expenses, including reimbursement for Canalevia-related expenses in Q4 2016, certain development and regulatory expenses related to our planned target animal safety study and the completion of our field study of Canalevia for acute diarrhea in dogs.

We expect our expenditures will continue to increase as we continue our efforts to develop animal health products, expand our commercially available Neonorm product and continue development of Canalevia in the near term. We have agreed to pay Indena S.p.A. fees of approximately €2.1 million under a memorandum of understanding relating to the establishment of our commercial API manufacturing arrangement in Italy. As of June 30, 2016, we remitted €1.95 million of the €2.1 million. We paid the final €150,000 on July 15, 2016.

We do not believe our current capital is sufficient to fund our operating plan through December 2017. We will need to seek additional funds sooner than planned, through public or private equity or debt financings or other sources, such as strategic collaborations. Such financing may result in dilution to stockholders, imposition of debt covenants and repayment obligations or other restrictions that may affect our business. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. We may also not be successful in entering into partnerships that include payment of upfront licensing fees for our products and product candidates for markets outside the United States, where appropriate. If we do not generate upfront fees from any anticipated arrangements, it would have a negative effect on our operating plan. The Company plans to finance its operations and capital funding needs through equity and/or debt financing as well as revenue from future product sales. However, there can be no assurance that additional funding will be available to the Company on acceptable terms on a timely basis, if at all, or that the Company will generate sufficient cash from operations to adequately fund operating needs or ultimately achieve profitability. If the Company is unable to obtain an adequate level of financing needed for the long-term development and commercialization of its products, the Company will need to curtail planned activities and reduce costs. Doing so will likely have an adverse effect on the Company's ability to execute on its business plan.

Cash Flows for Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

The following table shows a summary of cash flows for the years ended December 31, 2016 and 2015:

	Years Ended December 31,	
	2016	2015
Total cash used in operations	\$(14,413,718)	\$(14,315,863)
Total cash provided by/(used in) investing activities . . .	2,384,500	(3,002,700)
Total Cash Provided by Financing Activities	5,282,666	24,170,902
	<u>\$ (6,746,552)</u>	<u>\$ 6,852,339</u>

Cash Used in Operating Activities

During the year ended December 31, 2016, cash used in operating activities of \$14.4 million resulted from our net loss of \$14.7 million, offset by non-cash accretion of end of term payment, debt discounts and debt issuance costs of \$510,000, stock-based compensation of \$718,000, loss on extinguishment of debt of \$108,000, depreciation expense of \$47,000, net of changes in operating assets and liabilities of \$1.1 million.

During the year ended December 31, 2015, cash used in operating activities of \$14.3 million resulted from our net loss of \$16.3 million, offset by non-cash accretion of debt discounts of \$2.5 million, non-cash revaluation of warrant liability of \$502,000 and stock-based compensation of \$992,000, amortization of debt issuance costs of \$130,000, accretion of the balloon payment on the long-term debt of \$116,000, loss on the sale of property and equipment of \$35,000, depreciation expense of \$5,000, net of changes in operating assets and liabilities of \$2.3 million.

Cash Provided By/Used In Investing Activities

During the year ended December 31, 2016, cash provided by investing activities of \$2.4 million primarily consisted of \$2.5 million of a release of restricted cash that resulted from a reduction in our long-term debt, net of \$104,000 in purchases of property and equipment.

During the year ended December 31, 2015, cash used in investing activities of \$3.0 million primarily consisted of \$3.0 million in restricted cash that resulted from our issuance of long-term debt, \$23,000 from the purchase of property and equipment, net of \$21,000 from the sale of property and equipment.

Cash Provided by Financing Activities

During the year ended December 31, 2016, cash provided by financing activities of \$5.3 million primarily consisted of \$4.1 million in net cash received in our secondary public offering, net of commissions and certain offering expenses, \$2.6 million in net proceeds received in the CSPA, \$150,000 in net proceeds from an additional common stock purchase agreement, and \$903,000 in net cash received in the sale of common stock to various investors as part of the 2016 Private Placement offset by \$2.5 million in principal payments on our long-term debt.

During the year ended December 31, 2015, cash provided by financing activities 24.2 million primarily consisted of the gross proceeds from the issuance of \$5.6 million in long-term debt, net of discounts and debt issuance costs, \$1.3 million in convertible promissory notes, offset by \$1.1 million in repayments thereof, and \$18.4 million in net cash was provided related to our initial public offering, net of commissions and certain deferred offering costs, offset by the repayment of the \$1.0 million bridge loans and \$100,000 in convertible notes.

Description of Indebtedness

Convertible Notes and Warrants

2013 Convertible Notes

From July through September 2013, we issued four convertible promissory notes (collectively the “Notes”) for gross aggregate proceeds of \$525,000 to various third-party lenders. The Notes bore interest at 8% per annum. The Notes automatically matured and the entire outstanding principal amount, together with accrued interest, was due and payable in cash at the earlier of July 8, 2015 (the “Maturity Date”) or ten business days after the date of consummation of the initial closing of a first equity round of financing. We consummated a first equity round of financing prior to the Maturity Date with a pre-money valuation of greater than \$3.0 million, and, accordingly, principal and accrued interest was converted into shares of common stock at 75% of the purchase price paid by such equity investors. These notes were all converted to common stock in February 2014 upon the issuance of the convertible preferred stock. In February 2014, in connection with the first equity round of financing and issuance of the Series A convertible preferred stock, the noteholders exercised their option to convert their Notes into 207,664 shares of common stock and accrued interest was paid in cash to the noteholders. The accreted interest expense related to the discount on the Notes was \$1,443 for the period from January 1, 2014 to the conversion date of the Notes. Upon conversion, the entire remaining debt discount of \$4,071 was recorded as interest expense.

In connection with the Notes, we issued warrants to the noteholders, which became exercisable to purchase an aggregate of 207,664 shares of common stock as of the issuance of the first equity round of financing (the “Warrants”). The Warrants have a \$2.53 exercise price, are fully exercisable from the initial date of the first equity round of financing, and have a five-year term subsequent to that date. The warrants were fully expensed prior to 2016.

2014 Convertible Notes

On June 2, 2014, pursuant to a convertible note purchase agreement, we issued convertible promissory notes in the aggregate principal amount of \$300,000 to two accredited investors, including a convertible promissory note for \$200,000 to a board member to which Series A preferred stock was sold. These notes accrued interest at 3% per annum and automatically were to mature on June 1, 2015. Interest expense for the year ended December 31, 2015 was \$3,237 and is included in interest expense in the statement of operations and comprehensive loss. Accrued interest is \$8,507 and is included in accrued liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon the closing of the IPO, the outstanding principal amount automatically converted into 53,571 shares common stock at \$5.60, as amended in March 2015. Upon issuance, we analyzed the beneficial nature of the conversion terms and determined that a beneficial conversion feature, or BCF, existed because the effective conversion price on issuance of the notes was less than the fair value at the time of the issuance. We calculated the value of the BCF using the intrinsic method and recorded a BCF of \$75,000 as a discount to notes payable and to additional paid-in capital. For the year ended December 31, 2015, we amortized \$31,250 of the discount as interest expense in the statements of operations and comprehensive loss.

On July 16, 2014, pursuant to a convertible note purchase agreement, we issued a convertible promissory note in the principal amount of \$150,000 to an accredited investor. This note accrued interest at 3% per annum and automatically was to mature on June 1, 2015. Interest expense for the year ended December 31, 2015 was \$1,627 and is included in interest expense in the statements of operations and comprehensive loss. Accrued interest is \$3,711 and is included in accrued liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon the closing of the IPO, the outstanding principal amount automatically converted into 26,785 shares of common stock at \$5.60, as amended in March 2015. Upon issuance, we analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. We calculated the value of the BCF using the intrinsic method and recorded a BCF of \$37,500 as a discount to

the notes payable and to additional paid-in capital. For the year ended December 31, 2015, we amortized \$17,857 of the discount as interest expense in the statements of operations and comprehensive loss.

In connection with the Transfer Agreement (Note 6) we issued fully vested and immediately exercisable warrants to the Manufacturer to purchase 16,666 shares of common stock at 90% of the IPO price, amended to \$6.30 in March 2015, for a period of five years. The fair value of the warrants, \$37,840, was recorded as research and development expense and additional paid-in capital in June 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$4.83, exercise price of \$4.35, term of five years, volatility of 49%, dividend yield of 0%, and risk-free interest rate of 1.64%.

On December 23, 2014, pursuant to a convertible note purchase agreement, we issued convertible promissory notes in the aggregate principal amount of \$650,000 to three accredited investors, including a convertible promissory note for \$250,000 to the same board member to which the June 2, 2014 \$200,000 convertible promissory note was issued and to which Series A preferred stock was sold. These notes accrued interest at 12% per annum and became payable within thirty days following the IPO. Interest expense for the year ended December 31, 2015 was \$28,210 and is included in interest expense in the statements of operations and comprehensive loss. Accrued interest is \$30,132 and is included in accrued liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon consummation of our IPO, the noteholders converted the notes into 116,070 shares of common stock at a conversion price equal to 80% of the IPO price, amended to \$5.60 in March 2015. In connection with these notes, we also issued the lenders a fully vested warrant to purchase shares of our common stock at an exercise price equal to 80% of the IPO price, amended to \$5.60 in March 2015. These warrants entitle the noteholders to purchase 58,035 shares of common stock. The fair value of the warrants, \$147,943, was recorded as a debt discount and liability at December 23, 2014. We amortized \$141,890 of this discount in the year ended December 31, 2015 which has been recorded as interest expense in the statements of operations and comprehensive loss. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$4.59, exercise price of \$4.15, term of three years expiring December 2017, volatility of 49%, dividend yield of 0%, and risk-free interest rate of 1.10%. Based on the circumstances, the value derived using the Black-Scholes model approximated that which would be obtained using a lattice model. The debt discount was amortized as interest expense over the one hundred ninety days from issuance of the notes through their first maturity date of July 31, 2015, beginning in January 2015. We analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. We calculated the value of the BCF using the intrinsic method. A BCF of \$502,057 was recorded as a discount to the notes payable and to additional paid-in capital. For the years ended December 31, 2016 and 2015, we amortized \$0 and \$484,329 of the BCF as interest expense in the statements of operations and comprehensive loss.

2015 Convertible Notes

In February 2015, we issued convertible promissory notes to two accredited investors in the aggregate principal amount of \$250,000. These notes were issued pursuant to the convertible note purchase agreement dated December 23, 2014. In connection with the issuance of the notes, we issued the lenders warrants to purchase 22,320 shares at \$5.60 per share, which expire December 31, 2017. Principal and interest of \$103,912 was paid in May 2015 for \$100,000 of these notes. The Company analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. We calculated the value of the BCF using the intrinsic method. A BCF for the full face value was recorded as a discount to the notes payable and to additional paid-in capital. For the years ended December 31, 2016 and 2015, we amortized \$0 and \$250,000 of the BCF as interest expense in the Company's statement of operations and comprehensive income.

Extinguishment of debt

The remaining outstanding note of \$150,000 is payable to the investor at an effective simple interest rate of 12% per annum, and was due in full on July 31, 2016. On July 28, 2016, we entered into an amendment to extend the repayment of the principal and related interest under the terms of the remaining note from July 31, 2016 to October 31, 2016. On November 8, 2016, we entered into an amendment to further extend the maturity date of the remaining note from October 31, 2016 to January 1, 2017. In exchange for the extension of the maturity date, on November 8, 2016, our board of directors granted the lender a warrant to purchase 120,000 shares of our common stock for \$0.01 per share. The warrant is exercisable at any time on or before July 28, 2022, the expiration date of the warrant.

The amendment and related warrant issuance resulted in our treating the debt as having been extinguished and replaced with new debt for accounting purposes. We calculated a loss on the extinguishment of debt of \$108,000 which is included in other expense in the statements of operations and comprehensive loss.

The \$150,000 note is included in notes payable in the balance sheet. We accrued interest of \$33,929, which is included in accrued liabilities in the balance sheet, and incurred \$18,049 and \$15,880 in interest expense in the years ended December 31, 2016 and 2015, respectively.

On December 28, 2016, we entered into an amendment to further extend the maturity date of the note from January 1, 2017 to January 31, 2017. On January 31, 2017, the Company entered into an amendment to further extend the due date of the \$150,000 convertible note payable from January 31, 2017 to January 1, 2018.

In March 2015, we entered into a non-binding letter of intent with an investor. In connection therewith, the investor paid the Company \$1.0 million. At March 31, 2015, we had recorded this amount as a loan advance on the balance sheet. In April 2015, the investor purchased \$1.0 million of convertible promissory notes from us, the terms of which provided that such notes were to be converted into shares of our common stock upon the closing of an IPO at a conversion price of \$5.60 per share. In connection with the purchase of the notes, we issued the investor a warrant to purchase 89,285 shares at \$5.60 per share, which expires December 31, 2017. The notes accrued simple interest of 12% per annum and, upon consummation of our IPO in May 2015, converted into 178,571 shares of our common stock. We analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. We calculated the value of the BCF using the intrinsic method. A BCF of for the full face value was recorded as a discount to the notes payable and to additional paid-in capital. For the year ended December 31, 2015, we amortized \$1,000,000 of the BCF as interest expense in the statements of operations and comprehensive income. We accrued interest of \$17,753, which is included in accrued liabilities in the balance sheet, and has incurred \$17,753 and \$15,880 in interest expense in the years ended December 31, 2016 and 2015, respectively.

As of December 31, 2016 and 2015, the convertible notes payable obligations were as follows:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Notes payable	\$150,000	\$150,000
Unamortized note discount	—	—
Net debt obligation	<u>\$150,000</u>	<u>\$150,000</u>

Interest expense on the convertible notes for the years ended December 31, 2016 and 2015 was as follows:

	Years Ended December 31,	
	2016	2015
Nominal Interest	\$18,049	\$ 70,619
Amortization of debt discount	—	1,925,326
	<u>\$18,049</u>	<u>\$1,995,945</u>

Interest payable on the convertible notes at December 31, 2016 and 2015 was as follows:

	December 31, 2016	December 31, 2015
Interest Payable:	<u>\$94,048</u>	<u>\$75,999</u>

Notes Payable—Bridge Loans

On October 30, 2014, we entered into a standby bridge financing agreement with two lenders, which was amended and restated on December 3, 2014, which provided a loan commitment in the aggregate principal amount of \$1.0 million (the “Bridge”). Proceeds to us were net of a \$100,000 debt discount under the terms of the Bridge and net of \$104,000 of debt issuance costs. This debt discount and debt issuance costs were recorded as interest expense using the effective interest method, over the six month term of the Bridge. The Bridge became payable upon the IPO. The Bridge was repaid in May 2015, including interest thereon in an amount of \$1,321,600. In connection with the Bridge, the lenders were granted warrants to purchase 178,569 shares of our common stock determined by dividing \$1.0 million by the exercise price of 80% of the IPO price, amended to \$5.60 in March 2015. The fair value of the warrants, \$505,348, was originally recorded as a debt discount and liability at December 3, 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$5.01, exercise price of \$5.23, term of five years expiring December 2019, volatility of 63%, dividend yield of 0%, and risk-free interest rate of 1.61%. Based on the circumstances, the value derived using the Black-Scholes model approximated that which would be obtained using a lattice model. The debt discount was recorded as interest expense over the six month term of the Bridge. Of the aggregate debt discount of \$605,348 (warrants and original \$100,000 discount), \$521,291 was recorded as interest expense during the year ended December 31, 2015. Additional financing costs of \$104,000 were incurred related to the Bridge and deferred on closing. These were recognized as interest expense over the six-month term of the Bridge using the effective interest method. The Company amortized the remaining \$86,667 of these deferred financing charges by the end of May 2015 was recorded the amortized amounts as interest expense. We fully extinguished the debt and accrued interest in May 2015.

Interest expense on the notes payable-bridge loans for the years ended December 31, 2016 and 2015 was as follows:

	Years Ended December 31,	
	2016	2015
Nominal Interest	\$—	\$100,000
Amortization of debt discount	—	521,291
Repayment premium	—	201,600
Debt issuance costs	—	86,667
	<u>\$—</u>	<u>\$909,558</u>

Standby Line of Credit

In August 2014, we entered into a standby line of credit with an accredited investor for up to \$1.0 million pursuant to a Line of Credit and Loan Agreement dated August 26, 2014. In connection with the entry into the standby line of credit, we issued the lender a fully vested warrant to purchase 33,333 shares of common stock at an exercise price equal to 80% of the IPO price, amended to \$5.60 in March 2015, which expires in August 2016. The fair value of the warrants, \$114,300, was recorded as interest expense and additional paid-in capital in August 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$8.00, exercise price of \$6.40, term of two years, volatility of 52%, dividend yield of 0%, and risk-free interest rate of 0.52%. The line of credit expired on March 31, 2015 and there were no drawdowns under the facility.

Long-term Debt

In August 2015, we entered into a loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. The loan agreement requires us to maintain \$4.5 million of the proceeds in cash, which may be reduced or eliminated on the achievement of certain milestones. An additional \$2.0 million is available contingent on the achievement of certain further milestones. The agreement has a term of three years, with interest only payments through February 29, 2016. Thereafter, principal and interest payments will be made with an interest rate of 9.9%. Additionally, there will be a balloon payment of \$560,000 on August 1, 2018. This amount is being recognized over the term of the loan agreement and the effective interest rate, considering the balloon payment, is 15.0%. Proceeds to us were net of a \$134,433 debt discount under the terms of the loan agreement. This debt discount is being recorded as interest expense, using the interest method, over the term of the loan agreement. Under the agreement, we are entitled to prepay principal and accrued interest upon five days prior notice to the lender. In the event of prepayment, we are obligated to pay a prepayment charge. If such prepayment is made during any of the first twelve months of the loan agreement, the prepayment charge will be (a) during such time as we are required to maintain a minimum cash balance, 2% of the minimum cash balance amount plus 3% of the difference between the amount being prepaid and the minimum cash balance, and (b) after such time as we are no longer required to maintain a minimum cash balance, 3% of the amount being prepaid. If such prepayment is made during any time after the first twelve months of the loan agreement, 1% of the amount being prepaid.

On April 21, 2016, the loan and security was amended upon which we repaid \$1.5 million of the debt out of restricted cash. The amendment modified the repayment amortization schedule providing a four-month period of interest only payments for the period from May through August 2016.

As of December 31, 2016 and 2015, the net long-term debt obligation was as follows:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Debt and unpaid accrued end-of-term payment	\$3,894,320	\$6,115,797
Unamortized note discount	(42,493)	(106,635)
Unamortized debt issuance costs	(114,626)	(206,235)
Net debt obligation	<u>\$3,737,201</u>	<u>\$5,802,927</u>
Current portion of long-term debt	\$1,919,675	\$1,707,899
Long-term debt, net of discount	<u>1,817,526</u>	<u>\$4,095,028</u>
Total	<u>\$3,737,201</u>	<u>\$5,802,927</u>

Future principal payments under the long-term debt are as follows:

<u>Years ending December 31</u>	<u>Amount</u>
2017	\$2,032,048
2018	1,479,246
Total future principal payments	3,511,294
2018 end-of-term payment	560,000
	<u>4,071,294</u>
Less: unaccreted end-of-term payment at December 31, 2016	(176,974)
Debt and unpaid accrued end-of-term payment	<u>\$3,894,320</u>

The obligation at December 31, 2015 includes an end-of-term payment of \$560,000, which accretes over the life of the loan as interest expense. As a result of the debt discount and the end-of-term payment, the effective interest rate for the loan differs from the contractual rate.

Interest expense on the long-term debt for the years ended December 31, 2016 and 2015 was as follows:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Nominal Interest	\$457,448	\$224,400
Amortization of debt discount	64,142	27,798
Accretion of end-of-term payment	267,230	115,797
Debt issuance costs	178,713	43,789
	<u>\$967,533</u>	<u>\$411,784</u>

At the IPO, our outstanding warrants to purchase convertible preferred stock were all converted to warrants to purchase common stock.

Warrants

On November 22, 2016, we entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which we sold securities to such investors in a private placement transaction, which we refer to herein as the 2016 Private Placement. In the 2016 Private Placement, we sold an aggregate of 1,666,668 shares of our common stock at a price of \$0.60 per share for net proceeds of \$677,224 or gross proceeds of approximately \$1.0 million less \$322,777 in issuance costs. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668 shares of our common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, (ii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the Series B Warrants, the 2016 Warrants. The issuance costs were

allocated to common stock, series A warrants, and Series B and C warrants based on the relative fair value of each:

<u>Instruments</u>	<u>Fair Value</u>	<u>% Allocation</u>	<u>Issuance Costs (allocated)</u>
Common Stock	\$ 156,522	16%	\$ 50,522
Warrants (Series A)	700,001	70%	225,944
Warrants (Series B and C)	143,478	14%	46,311
Total	<u>\$1,000,001</u>	<u>100%</u>	<u>\$322,777</u>

Common stock of a net \$106,000 (fair value less issuance costs) was included in equity in the company's balance sheet. Series A warrants of \$756,001, consisting of the series A warrants of \$700,001 and the series A placement agent warrants of \$56,000, are included in current liabilities in the balance sheet and the \$225,944 of issuance cost was expensed and is in general and administrative expense on the statement of operations and comprehensive loss. Series B and C warrants of a net \$97,167 (fair value less issuance costs) are included in equity in the company's balance sheet.

Our warrant share activity is summarized as follows:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Beginning balance at January 1	748,872	494,267
Warrants granted	5,253,337	254,605
Warrants cancelled	(33,333)	—
Ending balance at December 31	<u>5,968,876</u>	<u>748,872</u>

Off-Balance Sheet Arrangements

Since inception, we have not engaged in the use of any off-balance sheet arrangements, such as structured finance entities, special purpose entities or variable interest entities.

Critical Accounting Policies and Significant Judgments and Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles, or U.S. GAAP, requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosures in the financial statements. Critical accounting policies are those accounting policies that may be material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and that have a material impact on financial condition or operating performance. While we base our estimates and judgments on our experience and on various other factors that we believe to be reasonable under the circumstances, actual results may differ from these estimates under different assumptions or conditions. We believe the following critical accounting policies used in the preparation of our financial statements require significant judgments and estimates. For additional information relating to these and other accounting policies, see Note 2 to our audited financial statements, appearing elsewhere in this report.

Accrued Research and Development Expenses

As part of the process of preparing our financial statements, we are required to estimate accrued research and development expenses. Estimated accrued expenses include fees paid to vendors and clinical sites in connection with our clinical trials and studies. We review new and open contracts and communicate with applicable internal and vendor personnel to identify services that have been performed on our behalf

and estimate the level of service performed and the associated costs incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost for accrued expenses. The majority of our service providers invoice us monthly in arrears for services performed or as milestones are achieved in relation to our contract manufacturers. We make estimates of our accrued expenses as of each reporting date.

We base our accrued expenses related to clinical trials and studies on our estimates of the services received and efforts expended pursuant to contracts with vendors, our internal resources, and payments to clinical sites based on enrollment projections. The financial terms of the vendor agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors such as the successful enrollment of animals and the completion of development milestones. We estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the related expense accrual accordingly on a prospective basis. If we do not identify costs that have been incurred or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates. To date, we have not made any material adjustments to our estimates of accrued research and development expenses or the level of services performed in any reporting period presented.

The Company expenses the total cost of a certain long-term manufacturing development contract ratably over the estimated life of the contract, or the total amount paid if greater.

Accounting for Stock-Based Compensation

Beginning in the second quarter of 2014, we awarded options and restricted stock units. We measure stock-based awards granted to employees and directors at fair value on the date of grant and recognize the corresponding compensation expense of the awards, net of estimated forfeitures, over the requisite service periods, which correspond to the vesting periods of the awards. The Company revalues non-employee options each reporting period using the fair market value of the Company's common stock as of the last day of each reporting period.

Key Assumptions. Our Black-Scholes-Merton option-pricing model requires the input of highly subjective assumptions, including the fair value of the underlying common stock, the expected volatility of the price of our common stock, the expected term of the option, risk-free interest rates and the expected dividend yield of our common stock. These estimates involve inherent uncertainties and the application of management's judgment. If factors change and different assumptions are used, our stock-based compensation expense could be materially different in the future. These assumptions are estimated as follows:

- Fair value of our common stock—Our common stock is valued by reference to the publicly-traded price of our common stock.
- Expected volatility—As we do not have any trading history for our common stock, the expected stock price volatility for our common stock was estimated by taking the average historic price volatility for industry peers based on daily price observations for common stock values over a period equivalent to the expected term of our stock option grants. We did not rely on implied volatilities of traded options in our industry peers' common stock because the volume of activity was relatively low. We intend to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of our own common stock share price becomes available.
- Expected term—The expected term represents the period that our stock-based awards are expected to be outstanding. It is based on the "simplified method" for developing the estimate of the expected life of a "plain vanilla" stock option. Under this approach, the expected term is presumed

to be the midpoint between the average vesting date and the end of the contractual term for each vesting tranche. We intend to continue to apply this process until a sufficient amount of historical exercise activity is available to be able to reliably estimate the expected term.

- Risk-free interest rate—The risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the options for each option group.
- Dividend yield—We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we used an expected dividend yield of zero.
- Forfeitures—We estimate forfeitures at the time of grant and revise those estimates periodically in subsequent periods. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest.

Common Stock Valuations. Prior to our IPO, the fair value of the common stock underlying our stock options was determined by our board of directors, which intended all options granted to be exercisable at a price per share not less than the per share fair value of our common stock underlying those options on the date of grant. The valuations of our common stock were determined in accordance with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation. The assumptions we used in the valuation model are highly complex and subjective. We base our assumptions on future expectations combined with management judgment. In the absence of a public trading market, our board of directors, with input from management, exercised significant judgment and considered numerous objective and subjective factors to determine the fair value of our common stock as of the date of each option grant and stock award. These judgments and factors will not be necessary to determine the fair value of new awards once the underlying shares begin trading. For now we included the following factors:

- the prices, rights, preferences and privileges of our Series A preferred stock relative to those of our common stock;
- lack of marketability of our common stock;
- our actual operating and financial performance;
- current business conditions and projections;
- hiring of key personnel and the experience of our management;
- our stage of development;
- illiquidity of share-based awards involving securities in a private company;
- the U.S. capital market conditions; and
- the likelihood of achieving a liquidity event, such as an offering or a merger or acquisition of our company given prevailing market conditions.

The fair market value per share of our common stock for purposes of determining stock-based compensation is now the closing price of our common stock as reported on The NASDAQ Stock Market on the applicable grant date.

Classification of Securities

We apply the principles of ASC 480-10 “Distinguishing Liabilities From Equity” and ASC 815-40 “Derivatives and Hedging—Contracts in Entity’s Own Equity” to determine whether financial instruments such as warrants, contingently issuable shares and shares subject to repurchase should be classified as liabilities or equity and whether beneficial conversion features exist. Financial instruments such as warrants

that are evaluated to be classified as liabilities are fair valued upon issuance and are remeasured at fair value at subsequent reporting periods with the resulting change in fair value recorded in other income/ (expense). The fair value of warrants is estimated using the Black Scholes Merton model and requires the input of subjective assumptions including expected stock price volatility and expected life.

Income Taxes

As of December 31, 2016, we had net operating loss carryforwards for federal and state income tax purposes of \$24.5 million and \$17.1 million, respectively, which will begin to expire in 2033, subject to limitations. Our management has evaluated the factors bearing upon the realizability of our deferred tax assets, which are comprised principally of net operating loss carryforwards. Our management concluded that, due to the uncertainty of realizing any tax benefits as of December 31, 2016, a valuation allowance was necessary to fully offset our deferred tax assets. We have evaluated our uncertain tax positions and determined that we have no liabilities from unrecognized tax benefits and therefore we have not incurred any penalties or interest. The Tax Reform Act of 1986, as amended, limits the use of net operating loss and tax credit carryforward in certain situations where changes occur in the stock ownership of a company. Utilization of the domestic NOL and tax credit forwards may be subject to a substantial annual limitation due to ownership change limitations that may have occurred or that could occur in the future, as required by the Internal Revenue Code Section 382, as well as similar state provisions.

Recent Accounting Pronouncements

In November 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update No. 2016-18, Statement of Cash Flows: Restricted Cash, or ASU 2016-18, that will require entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents and restricted cash and restricted cash equivalents in the statement of cash flows. When cash, cash equivalents, restricted cash and restricted cash equivalents are presented in more than one line item on the balance sheet, the new guidance requires a reconciliation of the totals in the statement of cash flows to the related captions in the balance sheet. This reconciliation can be presented either on the face of the statement of cash flows or in the notes to the financial statements. Entities will also have to disclose the nature of their restricted cash and restricted cash equivalent balances. ASU 2016-18 becomes effective for fiscal years beginning after December 15, 2017, and interim periods within those years, with early adoption permitted. Any adjustments must be reflected as of the beginning of the fiscal year that includes that interim period. The adoption of this standard is not expected to have an impact on our financial position or results of operations.

In August 2016, the FASB issued Accounting Standards Update, or ASU, No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments, which addresses the following cash flow issues: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; (3) contingent consideration payments made after a business combination; (4) proceeds from the settlement of insurance claims; (5) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies; (6) distributions received from equity method investees; (7) beneficial interests in securitization transactions; and (8) separately identifiable cash flows and application of the predominance principle. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years and are effective for all other entities for fiscal years beginning after December 15, 2018 and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. We are currently evaluating the impact of the adoption of ASU No. 2016-15 on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, which simplifies several aspects of the accounting for employee stock-based payment transactions. The areas for simplification in ASU No. 2016-09 include the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The amendments in this ASU will be effective for annual periods beginning after December 15, 2016 and interim periods within those annual periods. Early adoption is permitted. We are currently evaluating the impact of the adoption of ASU No. 2016-09 on our consolidated financial statements.

In March 2016 the FASB issued ASU No. 2016-07, Investments—Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting. This new standard eliminates the requirement that when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence, an adjustment must be made to the investment, results of operations and retained earnings retroactively on a step-by-step basis as if the equity method had been in effect during all previous periods that the investment has been held. T ASU 2016-07 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. We are currently evaluating the potential effects of the adoption of this update on its financial statements.

In February 2016, the FASB issued Accounting Standards Update (“ASU”) No. 2016-02, Leases (Topic 842), which provides guidance for accounting for leases. Under ASU 2016-02, the Company will be required to recognize the assets and liabilities for the rights and obligations created by leased assets. ASU 2016-02 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. We are currently evaluating the impact of the adoption of ASU 2016-02 on our consolidated financial statements.

In November 2015, the FASB issued ASU No. 2015-17, Balance Sheet Classification of Deferred Taxes (Topic 740), which simplifies the presentation of deferred income taxes. Under ASU 2015-17, deferred tax assets and liabilities are required to be classified as noncurrent, eliminating the prior requirement to separate deferred tax assets and liabilities into current and noncurrent. The new guidance is effective beginning on January 1, 2017, with early adoption permitted. The standard may be adopted prospectively or retrospectively to all periods presented. We elected to early adopt the standard on a retrospective basis effective December 31, 2015, and all deferred tax assets and liabilities are classified as non-current on our balance sheet. Adoption had no effect on our balance sheet for 2016 and 2015 as presented.

In April 2015, the FASB issued ASU No. 2015-03, Interest—Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, to simplify the presentation of debt issuance costs by requiring debt issuance costs to be presented as a deduction from the corresponding debt liability. ASU 2015-03 will be effective beginning in its first quarter of 2016, however early adoption is permitted for financial statements that have not been previously issued. The guidance is to be applied retrospectively to all periods presented. We adopted ASU 2015-03 on December 31, 2015. The adoption of this guidance did not have an impact on our financial condition, results of operations or cash flows.

In August 2014, the FASB issued ASU No. 2014-15, “Presentation of Financial Statements—Going Concern (Subtopic 205-40)—Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern”, which provides guidance regarding management’s responsibility to assess whether substantial doubt exists regarding the ability to continue as a going concern and to provide related footnote disclosures. In connection with preparing financial statements for each annual and interim reporting period, management should evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company’s ability to continue as a going concern within one year after the date that the financial statements are issued (or within one year after the date that the financial statements are available to be issued when applicable). This ASU is effective for the annual period ending after December 15, 2016, and for annual periods and interim periods thereafter. We implemented this

guidance for the annual period beginning after December 15, 2016. The adoption of this guidance did not have an impact on our statements of financial condition, results of operations or cash flows.

In June 2014, the FASB issued ASU No. 2014-12, “Compensation—Stock Compensation (Topic 718)”, which requires that a performance target that affects vesting and that could be achieved after the requisite service period be treated as a performance condition. The performance target should not be reflected in estimating the grant-date fair value of the award. Compensation cost should be recognized in the period in which it becomes probable that the performance target will be achieved and should represent the compensation cost attributable to the period(s) for which the requisite service has already been rendered. If the performance target becomes probable of being achieved before the end of the requisite service period, the remaining unrecognized compensation cost should be recognized prospectively over the remaining requisite service period. The total amount of compensation cost recognized during and after the requisite service period should reflect the number of awards that are expected to vest and should be adjusted to reflect those awards that ultimately vest. The requisite service period ends when the employee can cease rendering service and still be eligible to vest in the award if the performance target is achieved. This guidance is effective for annual periods (and interim periods within those annual periods) beginning after December 15, 2015. We implemented this guidance for all interim and annual periods beginning after December 15, 2015. The adoption of this guidance did not have an impact on our statements of financial condition, results of operations or cash flows.

In May 2014, the FASB issued ASU No. 2014-09, “Revenue from Contracts with Customers.” The objective of ASU 2014-19 is to establish a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and will supersede most of the existing revenue recognition guidance, including industry-specific guidance. The core principle of the new standard is that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard is effective for annual reporting periods beginning after December 15, 2018 and allows for prospective or retrospective application. We currently anticipate utilizing the full retrospective method of adoption allowed by the standard, in order to provide for comparative results in all periods presented, and plan to adopt the standard as of January 1, 2018. We are currently evaluating the new guidance, however we do not believe the impact will be significant.

JOBS Act

In April 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period, and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

For the quarter ended September 30, 2017

Overview

Jaguar Health, Inc. is a natural-products pharmaceuticals company focused on the development and commercialization of novel, sustainably derived gastrointestinal products for both human prescription use and animals on a global basis. Our wholly-owned subsidiary, Napo Pharmaceuticals, Inc., focuses on the development and commercialization of proprietary human gastrointestinal pharmaceuticals for the global marketplace from plants used traditionally in rainforest areas. Our lead prescription drug product, Mytesi (crofelemer), is approved by the FDA for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy (ART). In the field of animal health, we are focused on developing and commercializing first-in-class gastrointestinal products for companion and production animals, foals, and high value horses.

Jaguar was founded in San Francisco, California as a Delaware corporation on June 6, 2013. Napo formed Jaguar to develop and commercialize animal health products. Effective December 31, 2013, Jaguar was a wholly-owned subsidiary of Napo, and until May 13, 2015, Jaguar was a majority-owned subsidiary of Napo. On July 31, 2017, the merger of Jaguar Animal Health, Inc. and Napo became effective, at which point Jaguar Animal Health's name changed to Jaguar Health, Inc. and Napo began operating as a wholly-owned subsidiary of Jaguar focused on human health and the ongoing commercialization of, and development of follow-on indications for, Mytesi.

From our formation in June 2013 until the effective date of the merger, our operations were primarily limited to the research and development of our lead animal prescription drug product candidate, Canalevia—intended for the treatment of various forms of diarrhea in dogs; our non-prescription product, Neonorm Calf, to help dairies and calf farms proactively retain fluid in calves; the ongoing commercialization of Neonorm Foal, our antidiarrheal for newborn horses; and Equilevia, our planned product for total gut health in high-performance equine athletes. Since the effective date of the merger, our operations have been primarily focused on research, development and the ongoing commercialization of Mytesi. A portion of our activities has also been focused on other efforts associated with being a recently formed company, including securing necessary intellectual property, recruiting management and key employees, and financing activities.

Our management team has significant experience in gastrointestinal product development. This experience includes the development of crofelemer for human use, from discovery and preclinical and toxicity studies, including the existing animal studies to be used by us for Canalevia regulatory approvals, through human clinical development and commercial manufacturing and supply.

With the merger effective, we believe that our newly combined company is poised to realize a number of synergistic, value adding benefits—and an expanded pipeline of potential blockbuster human follow-on indications, a second-generation anti secretory agent, as well as a pipeline of important animal indications for crofelemer, upon which to build global partnerships.

Jaguar, through Napo, controls commercial rights for Mytesi for all indications, territories and patient populations globally. Napo launched Mytesi in early 2017 with one full-time-equivalent Mytesi sales representative for the first half of 2017 focused on targeting high-decile prescribing HIV doctors. Napo recently significantly expanded its internal national salesforce for Mytesi through the hire in key U.S. markets of six sales representatives experienced in the sale of drugs to HIV physicians and gastroenterologists. Napo's new sales representative team covers New York, Miami, Atlanta, Los Angeles, Houston, San Francisco, Chicago, St. Louis, Dallas, and the surrounding regions. All of these regions are key markets for HIV-related drug sales. Three of our new territory managers have been calling on HIV physicians for 18 to 19 years, and others possess extensive experience in drug sales to both gastroenterologists and HIV healthcare providers.

The goal of Napo's internal sales team is to deliver a frequent and consistent selling message to targeted, high-volume prescribers of antiretroviral therapies and to gastroenterologists who see large numbers of HIV patients. The results of a recent Napo-sponsored survey of 271 U.S. board certified gastroenterologists indicate that the number one GI complaint for people living with HIV/AIDS is diarrhea, and 93 percent of U.S. gastroenterologists see patients with HIV/AIDS in their practice. With seven sales representatives reporting to our newly hired national sales manager, supported by concomitant marketing, promotional activities, and medical education initiatives described below, we expect a proportional response in the number of patients treated with Mytesi. Jaguar estimates the potential U.S. market for Mytesi to be approximately \$100 million in gross annual sales, and anticipates that Mytesi will generate approximately \$7.0 million in revenue by April 2018 (including revenue for January 2017 through March 31, 2018) for its current, FDA-approved specialty indication.

New crofelemer (Mytesi) data from a supplemental analysis of the ADVENT trial was featured in a poster presentation at the 9th International Aids Society (IAS) Conference on HIV Science held from July 23 to 26, 2017 in Paris, France. The presentation was titled Long-Term Crofelemer Use Gives Clinically Relevant Reductions in HIV-Related Diarrhea. IAS features the latest HIV science, including basic, clinical and prevention research, and brings together a broad cross section of HIV professionals from around the world with a focus on implementation—moving scientific advances into practice. The results indicate that over 50% of the patients treated had complete resolution of their diarrhea; and 83% had at least a 50% reduction in diarrhea. Entry criteria required at least 7 watery stools in a week, and the average was 20 (with some patients having as high as 67 stools in a week).

In October 2017, Napo launched a national campaign—called “Keep your pants on... Unless you don't want to”—to highlight the need to recognize and treat diarrhea in people living with HIV/AIDS (PLWHA). The campaign (keep-your-pants-on.com), which launched initially to the 10,000 participants in the AIDS Walk Los Angeles event on October 15, 2017, is designed to raise awareness and to engage PLWHA in a fun and light way to discuss a topic that can be embarrassing. The campaign integrates live third-party events, including the Greater Palm Springs Pride event taking place November 3rd to 5th, 2017, with social media on the web, Twitter, and Facebook. Campaign participants are encouraged to use the hashtag #KeepYourPantsOn when posting photos and videos to social media. Napo is also running “Keep Your Pants On” digital ads on more than 25 HIV and LGBT media outlets around the U.S.

Additionally in Q4 2017, Napo launched a print and digital advertising campaign titled “Enough is Enough” to target PLWHA who are tired of planning their lives around diarrhea as well as HIV physicians and gastroenterologists. The campaign is centered around national HIV magazines, local HIV publications, and publications targeting physicians.

In October 2017, Napo established a scientific advisory board for each potential follow-on indication currently planned for Mytesi. Napo has developed relationships with more than 30 physicians, pharmacists and patient advocates around the world who are recognized specialists and key opinion leaders in the planned Mytesi follow-on indications, and is conducting outreach efforts to discuss the possibility of membership in Napo's new scientific advisory boards with these individuals. As announced on October 19, 2017, Dr. Lee Schwartzberg, MD, FACP, a nationally-recognized medical oncologist and hematologist, has joined Napo's scientific advisory board for cancer therapy-related diarrhea (CTD).

Napo has also established a scientific advisory board for HIV, which Dr. Roscoe Moore Jr., DVM, MPH, Ph.D., DSc, recently joined. Dr. Moore is a former Assistant United States Surgeon General and a Rear Admiral (Retired) in the U.S. Public Health Service. This board will focus primarily on physician education and community awareness regarding the importance and availability of solutions for neglected comorbidities, such as the first-in-class anti-secretory mechanism of action of Mytesi for its currently approved indication.

We are confident that our scientific advisory boards will provide expert, actionable input regarding all aspects of development, including trial design, for Mytesi for our follow-on indications—each of which

addresses a significant, global, unmet medical need. We also expect that our scientific advisory board members will serve as speakers for our medical education programs, authors on Napo abstracts and publications, as a resource for media inquiries.

Napo's HIV Scientific Advisory Board will focus primarily on physician education, and community and global awareness regarding the importance and availability of solutions for neglected comorbidities, such as the first-in-class anti-secretory mechanism of action of Mytesi® for its currently approved indication.

Other key marketing initiatives include the implementation of healthcare provider (HCP) and patient educational programs, including speaker events and the creation of a medical education slide kit for HCPs, as well as a non-branded "My Story with Diarrhea" patient programs delivered by HIV advocates—designed to encourage PLWHA who have HIV-related diarrhea to ask their doctor for Mytesi.

Napo is pursuing AIDS Drug Assistance Program (ADAP) status in the following key states: New York, Florida, California, Georgia. ADAP status, if obtained, can provide copay support for Mytesi. Other Napo government affairs initiatives include efforts to convince The U.S. Department of Health and Human Services (HHS) to address HIV-related diarrhea in its HIV treatment guidelines, and to recommend Mytesi as the first line treatment for chronic diarrhea in HIV, as well as efforts to convince other HIV influencer groups (e.g. HIV Medicine Association, Infectious Diseases Society of America) to write a guideline for treatment of chronic diarrhea in people living with HIV.

Mytesi is currently covered by Medicaid in all 50 states. It is also currently covered on 100% of the top 10 commercial insurance plans, representing more than 245 million U.S. lives. Additionally, Napo operates a co-pay coupon to ensure that no participating patients have a Mytesi co-pay greater than \$25. Information about the NapoCares Patient Assistance Program, which assists patients with benefit verification, prior authorization, and claims appeals, can be found at mytesi.com/mytesi-savings.html.

According to the World Health Organization, there are nearly 1.7 billion cases of diarrheal disease globally every year. Although not all types of diarrhea are secretory in nature, we view the current, initial approval of Mytesi as the opening of the door to an important pipeline—demonstrated by the approval by the FDA of the Chemistry, Manufacturing and Controls ("CMC") for this natural product, as well as acknowledgement by the FDA of the safety of the product for chronic use for the approved indication. Jaguar is pursuing a follow-on indication for Mytesi in cancer therapy-related diarrhea (CTD), an important supportive care indication for patients undergoing primary or adjuvant therapy for cancer treatment. Mytesi is also in development for rare disease indications for infants and children with congenital diarrheal disorders (CDD) and short bowel syndrome (SBS); for irritable bowel syndrome (IBS); as supportive care for post-surgical inflammatory bowel disease patients (IBD); and as a second-generation anti-secretory agent for use in cholera patients. Mytesi has received orphan-drug designation for SBS.

A request for an investigator-initiated trial of Mytesi for CDD and SBS in conjunction with Sheikh Khalifa Medical City in Abu Dhabi has been agreed to with the Company. CDD and SBS—lifelong diseases for which there is currently no available treatment except parenteral nutrition—cause devastating diarrhea and dehydration.

Two investigator-initiated trials of Mytesi are underway in breast cancer patients suffering from CTD, one funded by Genetech—Roche with Herceptin (enrolling patients), and one funded by Puma with neratinib (planning for patient enrollment).

According to data appearing in "Treatment Guidelines for CID" (chemotherapy-induced diarrhea) in the April 2004 issue of *Gastroenterology and Endoscopy News*, diarrhea is the most common adverse event reported in chemotherapy patients. Approved third-party supportive care products for chemotherapy-induced nausea and vomiting (CINV) include Sustol, Aloxi, Akynzeo and Sancuso.

According to Transparency Market Research, sales of therapeutics for the prevention of CINV approximated \$620 million in 2013, and sales of such therapeutics are expected to reach \$1 billion in 2020.

In this era of novel targeted agents, epidermal growth factor receptor tyrosine kinase inhibitors (TKIs), in particular, may block natural chloride secretion regulation pathways in the normal gastrointestinal mucosa, thereby leading to secretory diarrhea. Diarrhea has been reported as the most common side effect of the recently approved CDK 4/6 inhibitor abemaciclib and the pan-HER TKI neratinib, with occurrence ranging from 86% to >95% in published studies. Diarrhea in this patient population has the potential to cause dehydration, potential infections, and non-adherence to treatment. A novel anti-diarrheal like Mytesi may hold promise for treating secretory diarrhea—and therefore also support long-term cancer treatment adherence—in this population.

Jaguar's and Napo's portfolio development strategy involves meeting with Key Opinion Leaders (KOLs) to identify indications that are potentially high-value because they address important medical needs that are significantly or globally unmet, obtain input on protocol practicality and protocol generation, and then strategically sequencing indication development priorities, second-generation product pipeline development, and partnering goals on a global basis, as well as identifying possible opportunities for a Special Protocol Assessment (SPA) from the FDA. When granted, SPA provides that, upon request, FDA will evaluate within 45 days certain protocols to assess whether they are adequate to meet scientific and regulatory requirements identified by the sponsor. In 2007, under the SPA process, Napo obtained agreement with the FDA for the design of the pivotal study protocol for the currently approved indication of crofelemer (Mytesi) for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy. The 2007 SPA agreement was an important milestone for Napo, allowing Napo to address and mitigate regulatory uncertainty prior to the completion of its final Phase 3 trial of crofelemer for its currently approved indication.

Napo Prescription Drug Product Candidates

Product Candidates	Indication	Completed Milestones	Current Phase of Development	Anticipated Near-Term Milestones
Formulation of crofelemer	Cancer therapy-induced diarrhea (CTD)	<ul style="list-style-type: none"> • Two investigator-initiated clinical trials funded by Genentech, Roche & Puma 	Phase 2	<ul style="list-style-type: none"> • Protocol development with KOLs for discussions with FDA • Start pivotal trial in 2018*
Formulation of crofelemer	Supportive care for IBD	<ul style="list-style-type: none"> • Safety • Multiple Phase 2 studies completed in various secretory diarrheas (not IBD) 	Phase 2	<ul style="list-style-type: none"> • Protocol development for discussions with FDA
Formulation of crofelemer	Rare disease indications (SBS & CDD)	<ul style="list-style-type: none"> • Phase I study • Orphan designation for SBS 	Phase 2	<ul style="list-style-type: none"> • Formulation/proof-of-concept 2018, Abu Dhabi • Pivotal Trial 2018* • Pursue orphan-drug status for CDD
Formulation of crofelemer	Irritable Bowel Syndrome—diarrhea predominant (IBS-D)	<ul style="list-style-type: none"> • Phase I study • Two significant Phase 2 studies completed 	Phase 2	<ul style="list-style-type: none"> • Protocol development with KOLs for discussions with FDA • Publication of additional analysis of Phase 2 data
SB-300	Second-generation anti-secretory agent for multiple indications including cholera	<ul style="list-style-type: none"> • Animal and human studies in secretory diarrheas; successful cholera trial design for anti-secretory mechanism of action with crofelemer 	Pre IND	<ul style="list-style-type: none"> • CMC development for SB-300 • Pre-clinical and Phase 1 in 2018*

* Clinical trials are funding-dependent

Estimated Size of Mytesi Target Markets

We believe the medical need for Mytesi is significant, compelling, and unmet, and that doctors are looking for a drug product with a mechanism of action that is distinct from the options currently available to resolve diarrhea. A growing percentage of HIV patients have lived with the virus in their gut for 10+ years, often causing gut enteropathy and chronic or chronic-episodic diarrhea. According to data from the

U.S. Centers for Disease Control and Prevention, by 2020 more than 70% of Americans with HIV are expected to be 50 and older.

Market	Number of Competitors for Mytesi's Approved/Anticipated Labelled Indication	Market Size/Potential
HIV-D	0	We estimate the U.S. market revenue potential for Mytesi to be approximately \$100 million in gross annual sales
CTD	0	An estimated 650,000 U.S. cancer patients receive chemotherapy in an outpatient oncology clinic.(1) Comparable supportive care (i.e. CINV) product sales of ~\$620 million in 2013, which is projected to reach \$1.0 billion by 2020(2)
IBD	0	Estimated 1,171,000 Americans have IBD(3)
IBS-D	3	Most IBS products have estimated revenue potential of greater than \$1.0 billion(4)
CDD/SBS-Orphan	0	Financial benefits of Orphan Designation
Cholera (hydration maintenance) PRV (SB-300)	0	Priority review vouchers have recently sold for \$125 million to \$350 million(5)

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- (1) Centers for Disease Control and Prevention. Preventing Infections in Cancer Patients: Information for Health Care Providers (cdc.gov/cancer/preventinfections/providers.htm)
 - (2) Heron Therapeutics, Inc. Form 10-K for the fiscal year ended December 31, 2016
 - (3) Kappelman, M. et al. Recent Trends in the Prevalence of Crohn's Disease and Ulcerative Colitis in a Commercially Insured US Population. *Dig Dis Sci.* 2013 Feb; 58(2): 519-525
 - (4) Merrill Lynch forecasts peak US sales of roughly \$1.5 bn for Ironwood's Linzess (<http://247wallst.com/healthcare-business/2015/04/27/key-analyst-sees-nearly-30-upside-in-ironwood>); Rodman & Renshaw estimate peak annual sales of Synergy Pharmaceuticals' Trulance at \$2.3 bn in 2021 (Source: <https://www.benzinga.com/analyst-ratings/analyst-color/17/03/9224181/analyst-synergy-pharma-could-achieve-sustainable-profits>)
 - (5) In Aug. 2015, AbbVie Inc. bought a priority review voucher from United Therapeutics Corp for \$350 million (<http://www.reuters.com/article/us-abbvie-priorityreview/abbvie-buys-special-review-voucher-for-350-million-idUSKCN0QO1LQ20150819>). In Feb. 2017 Sarpeta Therapeutics sold a priority review voucher to Gilead Sciences, Inc. for \$125 million (<http://fortune.com/2017/02/21/sarepta-gilead-review-voucher/>).

In the animal health space, we focus on developing and commercializing first-in-class gastrointestinal products for companion and production animals, foals, and high value horses.

Our technology for proprietary gastrointestinal disease products is central to the product pipelines of both veterinary and human indications. Crofelemer, the active pharmaceutical ingredient (API) in Mytesi, is

also the API in Canalevia, and as such the CMC development of Canalevia has benefited from the regulatory approval of Mytesi and the supply chain and quality system that supports the commercial distribution of Mytesi. We achieved statistically significant results in a multicenter canine proof-of-concept study completed in February 2015, supporting the conclusion that Canalevia treatment is superior to placebo. We have received Minor Use in a Minor Species (MUMS) designation for Canalevia for chemotherapy-induced diarrhea (CID) in dogs. The FDA has indicated that the use of Canalevia for the treatment of exercise-induced diarrhea (EID) in dogs qualifies as a “minor use”, which means Canalevia is eligible for conditional approval for the indication of EID in dogs. We expect to conduct the commercial launch of Canalevia for CID and EID in dogs in the first half of 2018. This is expected to be the first prescription product approval for Jaguar’s animal health product development program.

The clinically-proven performance of Neonorm Foal, in combination with our heightened understanding of market needs within the global equine space, is driving our increased focus on equine product development. The demand, particularly in the Middle East, for a total gut health product for high performance equine athletes appears to be quite strong, and we believe this is indicative of an unmet medical need. Based on this demand, and with support from studies we conducted in horses with gastric ulcers—a prevalent problem in competing horses—and also horses with diarrhea, we have transitioned development of Equilevia to a create a non-prescription, personalized, premium proprietary product for total gut health in equine athletes. Equilevia is a formulation of a standardized botanical extract. Gut health is of critical importance in horses, as conditions such as ulcers can meaningfully impair equine athlete performance and colic can lead to the death of an otherwise healthy horse in a matter of hours. Although we are still assessing the size of the opportunity represented by this self-funded program, we expect to launch Equilevia in the fourth quarter of 2017.

The reception among users of our two commercialized non-prescription products—Neonorm Calf and Neonorm Foal, an anti-diarrheal product we launched for newborn horses in early 2016—has been quite positive, and in June 2017 we launched neonorm.com, a commercial website for both Neonorm products. As we announced this past June, the Organic Materials Review Institute (OMRI) has reviewed Neonorm Calf and determined that it is allowed for use in compliance with the U.S. Department of Agriculture (USDA) National Organic Program. OMRI is an international nonprofit organization that determines which input products are allowed for use in organic production and processing. Organic livestock production plays a vital role in support of a sustainable and safe farm and food system, both in the U.S. and internationally. According to a report published by Allied Market Research, the global market for organic dairy food and drinks—organic milk, yogurt, cheese, and others—is expected to grow at a compound annual growth rate of 14.25% from 2016 to reach \$36.7 billion by 2022 from \$14.5 billion in 2015. According to the Organic Trade Association’s (OTA) 2016 Organic Industry Survey, the U.S. organic industry posted new records in 2015, with total organic product sales hitting a new benchmark of \$43.3 billion, up 11% from the previous year’s record level and outpacing the overall food market’s growth rate of 3%.

In July 2016 we released data from two China-based studies sponsored by Fresno, California-based Integrated Animal Nutrition and Health Inc. showing remarkable resolution of diarrhea and cure of piglets afflicted with diarrhea following treatment with a *Croton lechleri* botanical extract administered in water. As we announced in September 2016, we signed an exclusive supply and distribution agreement for this botanical extract with Integrated Animal Nutrition and Health Inc. for dairy cattle and pigs in the Chinese marketplace. According to Index Mundi, swine production is projected to reach 672.5 million head in 2017 in China, where pork is still the main protein source for many consumers. According to New Zealand-based NZX Agri, in 2017 there will be seven million cows “in milk” (lactating cows) in China. With the world’s largest population, China has been experiencing an increase in demand for dairy products as a result of sharply increasing income levels, fast-changing food habits, the desire of parents to feed their babies high-protein formula, and the loosening in 2015 of China’s longstanding one-child policy, among other factors. Integrated Animal Nutrition and Health, Inc. has minimum purchase requirements of the botanical extract to maintain their exclusivity.

Canalevia, Equilevia and Neonorm are distinct products formulated to address specific species and market channels. We have filed nine investigational new animal drug applications, or INADs, with the FDA and intend to develop species-specific formulations of Neonorm in six additional target species, and Canalevia for both cats and dogs.

Merger with Napo Pharmaceuticals, Inc.

On July 31, 2017, we completed a merger with Napo Pharmaceuticals, Inc. (“Napo”) pursuant to the Agreement and Plan of Merger dated March 31, 2017 by and among Jaguar, Napo, Napo Acquisition Corporation (“Merger Sub”), and Napo’s representative (the “Merger Agreement”). In accordance with the terms of the Merger Agreement, upon the completion of the merger, Merger Sub merged with and into Napo, with Napo surviving as our wholly-owned subsidiary. Immediately following the Napo Merger, we changed our name from “Jaguar Animal Health, Inc.” to “Jaguar Health, Inc.” Napo now operates as a wholly-owned subsidiary of Jaguar focused on human health and the ongoing commercialization of Mytesi, a Napo drug product approved by the U.S. FDA for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy.

In connection with the merger, (i) each issued and outstanding share of Napo common stock (other than dissenting shares and shares held by us or Napo) was converted into a contingent right to receive (x) up to a whole number of shares of our common stock comprising in the aggregate up to approximately 20.2% of the fully diluted shares of our common stock immediately following the consummation of the merger, which contingent right will vest only if the resale of certain shares of our common stock (the “Tranche A Shares”) issued by us to Nantucket Investments Limited (“Nantucket”) pursuant to the Napo debt settlement provides Nantucket with specified cash returns over a specified period of time (the “Hurdle Amounts”), and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of our common stock (equal to 50% of the unsold Tranche A Shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units, (ii) existing creditors of Napo (inclusive of Nantucket) were issued in the aggregate approximately 42,903,018 shares of our non-voting common stock and 2,282,445 shares of our voting common stock in full satisfaction of all existing indebtedness then owed by Napo to such creditors, and (iii) an existing Napo stockholder (“Invesco”) was issued an aggregate of approximately 3,243,243 shares of our common stock in return for \$3 million of new funds invested in us by such investor, which were immediately loaned to Napo to partially facilitate the extinguishment of the debt that Napo owed to Nantucket. The minimum Hurdle Amount needed for the vesting of the contingent rights will vary depending on a number of factors (including, among other things, the time period over which Nantucket receives specified cash returns in connection with the resale of the Tranche A Shares), and Napo stockholders may not receive any shares of Jaguar common stock in certain circumstances (including if the minimum Hurdle Amount is not satisfied).

We expect to incur significant expenses in connection with the merger of Jaguar Animal Health and Napo. While we have assumed that a certain level of expenses will be incurred, there are many factors that could affect the total amount or the timing of the merger expenses, and many of the expenses that will be incurred are, by their nature, difficult to estimate. These expenses could result in the combined company taking significant charges against earnings following the completion of the merger. The ultimate amount and timing of such charges are uncertain at the present time. We incurred approximately \$3.6 million in professional and other fees associated with the proposed merger through July 31, 2017.

Financial Operations Overview

We were incorporated in June 2013 in Delaware. Napo formed our company to develop and commercialize animal health products. Prior to our incorporation, the only activities of Napo related to animal health were limited to the retention of consultants to evaluate potential strategic alternatives. We were previously a majority-owned subsidiary of Napo. However, following the closing of our May 2015 initial public offering, we are no longer majority-owned by Napo. On July 31, 2017, Jaguar Animal

Health, Inc., or Jaguar, completed a merger with Napo pursuant to the Agreement and Plan of Merger dated March 31, 2017 by and among Jaguar, Napo, Napo Acquisition Corporation (“Merger Sub”), and Napo’s representative (the “Merger Agreement”). In accordance with the terms of the Merger Agreement, upon the completion of the merger, Merger Sub merged with and into Napo, with Napo surviving as our wholly-owned subsidiary. Immediately following the Napo Merger, Jaguar changed its name from “Jaguar Animal Health, Inc.” to “Jaguar Health, Inc.” Napo now operates as a wholly-owned subsidiary of Jaguar focused on human health and the ongoing commercialization of Mytesi, a Napo drug product approved by the U.S. FDA for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy.

On a consolidated basis, we have not yet generated enough revenue to date to achieve break even or positive cash flow, and we expect to continue to incur significant research and development and other expenses. Our net loss and comprehensive loss was \$1.8 million and \$11.1 million for the nine months ended September 30, 2017 and 2016, respectively. As of September 30, 2017, we had total stockholders’ equity of \$31.8 million and cash and cash equivalents of \$220,590. We expect to continue to incur losses for the foreseeable future as we expand our product development activities, seek necessary approvals for our product candidates, conduct species-specific formulation studies for our non-prescription products, establish API manufacturing capabilities and begin commercialization activities. As a result, we expect to experience increased expenditures for 2017.

Revenue Recognition

We recognize revenue in accordance with ASC 605 “Revenue Recognition”, subtopic ASC 605-25 “*Revenue with Multiple Element Arrangements*” and subtopic ASC 605-28 “*Revenue Recognition-Milestone Method*”, which provides accounting guidance for revenue recognition for arrangements with multiple deliverables and guidance on defining the milestone and determining when the use of the milestone method of revenue recognition for research and development transactions is appropriate, respectively. For multiple-element arrangements, each deliverable within a multiple deliverable revenue arrangement is accounted for as a separate unit of accounting if both of the following criteria are met: (1) the delivered item or items have value to the customer on a standalone basis and (2) for an arrangement that includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially in our control. If a deliverable in a multiple element arrangement is not deemed to have a stand-alone value, consideration received for such a deliverable is recognized ratably over the term of the arrangement or the estimated performance period, and it will be periodically reviewed based on the progress of the related product development plan. The effect of a change made to an estimated performance period and therefore revenue recognized ratably would occur on a prospective basis in the period that the change was made.

We recognize revenue under its licensing, development, co-promotion and commercialization agreement from milestone payments when: (i) the milestone event is substantive and its achievability has substantive uncertainty at the inception of the agreement, and (ii) it does not have ongoing performance obligations related to the achievement of the milestone earned. Milestone payments are considered substantive if all of the following conditions are met: the milestone payment (a) is commensurate with either our performance subsequent to the inception of the arrangement to achieve the milestone or the enhancement of the value of the delivered item or items as a result of a specific outcome resulting from our performance subsequent to the inception of the arrangement to achieve the milestone, (b) relates solely to past performance, and (c) is reasonable relative to all of the deliverables and payment terms (including other potential milestone consideration) within the arrangement.

Our records revenue related to the reimbursement of costs incurred under the collaboration agreement where the company acts as principal, controls the research and development activities and bears credit risk. Under the agreement, we are reimbursed for associated out-of-pocket costs and for certain employee costs. The gross amount of these pass-through costs is reported in revenue in the accompanying

statements of operations and comprehensive loss, while the actual expense for which we are reimbursed are reflected as research and development costs.

Determining whether and when some of these revenue recognition criteria have been satisfied often involves assumptions and judgments that can have a significant impact on the timing and amount of revenue we will report. Changes in assumptions or judgments or changes to the elements in an arrangement could cause a material increase or decrease in the amount of revenue that we report in a particular period.

Product Revenue

Sales of Neonorm Calf and Foal to distributors are made under agreements that may provide distributor price adjustments and rights of return under certain circumstances. Until we develop sufficient sales history and pipeline visibility, revenue and costs of distributor sales will be deferred until products are sold by the distributor to the distributor's customers. Revenue recognition depends on notification either directly from the distributor that product has been sold to the distributor's customer, when we have access to the data. Deferred revenue on shipments to distributors reflect the estimated effects of distributor price adjustments, if any, and the estimated amount of gross margin expected to be realized when the distributor sells through product purchased from us. Our sales to distributors are invoiced and included in accounts receivable and deferred revenue upon shipment. Inventory is relieved and revenue recognized upon shipment by the distributor to their customer. We had Neonorm revenues of \$33,611 and \$26,357 for the three months ended September 30, 2017 and 2016, and \$139,600 and \$88,646 for the nine months ended September 30, 2017 and 2016.

Sales of Botanical Extract are recognized as revenue when delivered to the customer. We had Botanical Extract revenues of \$48,000 and \$24,000 in the three months ended September 30, 2017 and 2016, and \$78,000 and \$24,000 in the nine months ended September 30, 2017 and 2016.

Sales of Mytesi are recognized as revenue when the products are delivered to the wholesalers. We had Mytesi revenues of \$364,054 and \$0 for the three and nine months months ended September 2017 and 2016, respectively. We record a reserve for estimated product returns under terms of agreements with wholesalers based on its historical returns experience. Reserves for returns at September 30, 2017 were immaterial. If actual returns differed from our historical experience, changes to the reserved could be required in future periods.

Collaboration Revenue

On January 27, 2017, we entered into a licensing, development, co-promotion and commercialization agreement with Elanco US Inc. ("Elanco") to license, develop and commercialize Canalevia ("Licensed Product"), our drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals. We granted Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco will have exclusive rights globally outside the U.S. and co-exclusive rights with us in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products.

Under the terms of the Elanco Agreement, we received an initial upfront payment of \$2,548,689, inclusive of reimbursement of past product and development expenses of \$1,048,689, and will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well as product development expense reimbursement for any additional product development expenses incurred, and royalty payments on global sales. The \$61.0 million development and commercial milestones consist of

\$1.0 million for successful completion of a dose ranging study; \$2.0 million for the first commercial sale of license product for acute indications of diarrhea; \$3.0 million for the first commercial sale of a license product for chronic indications of diarrhea; \$25.0 million for aggregate worldwide net sales of licensed products exceeding \$100.0 million in a calendar year during the term of the agreement; and \$30.0 million for aggregate worldwide net sales of licensed products exceeding \$250.0 million in a calendar year during the terms of the agreement. Each of the development and commercial milestones are considered substantive. No revenues associated with the achievement of the milestones has been recognized to date. The Elanco Agreement specifies that we will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. The \$2,548,689 upfront payment, inclusive of reimbursement of past product and development expenses of \$1,048,689 is recognized as revenue ratably over the estimated development period of one year resulting in \$637,200 and \$1,734,100 in collaboration revenue in the three and nine months ended September 30, 2017 which are included in our statements of operations and comprehensive loss. The difference of \$814,589 is included in deferred collaboration revenue in our balance sheet.

In addition to the upfront payments, Elanco reimburses us for certain development and regulatory expenses related to our planned target animal safety study and the completion of the Canalevia field study for acute diarrhea in dogs. These are recognized as revenue in the month in which the related expenses are incurred. We have \$17,349 of unreimbursed expenses as of September 30, 2017, which is included in Other Receivables on our balance sheet. We included the \$17,349 and \$503,391 in collaboration revenue in the three and nine months ended September 30, 2017 which are included in the statements of operations and comprehensive loss. On November 1, 2017, the Company received a letter (the "Notice") from Elanco serving as formal notice of Elanco's decision to terminate the Elanco Agreement by giving the Company 90 days written notice. Pursuant to the terms of the Elanco Agreement, termination of the Agreement will become effective on January 30, 2018, which is 90 days after the date of the Notice. On the effective date of termination of the Elanco Agreement, all licenses granted to Elanco by the Company under the Elanco Agreement will be revoked and the rights granted thereunder revert back to the Company.

Cost of Product Revenue

Cost of product revenue expenses consist of costs to manufacture, package and distribute Neonom that distributors have sold through to their customers.

Research and Development Expense

Research and development expenses consist primarily of clinical and contract manufacturing expense, personnel and related benefit expense, stock-based compensation expense, employee travel expense, reforestation expenses. Clinical and contract manufacturing expense consists primarily of costs to conduct stability, safety and efficacy studies, and manufacturing startup expenses at an outsourced API provider in Italy.

We typically use our employee and infrastructure resources across multiple development programs. We track outsourced development costs by prescription drug product candidate and non-prescription product but do not allocate personnel or other internal costs related to development to specific programs or development compounds.

The timing and amount of our research and development expenses will depend largely upon the outcomes of current and future trials for our prescription drug product candidates as well as the related regulatory requirements, the outcomes of current and future species-specific formulation studies for our non-prescription products, manufacturing costs and any costs associated with the advancement of our line extension programs. We cannot determine with certainty the duration and completion costs of the current or future development activities.

The duration, costs and timing of trials, formulation studies and development of our prescription drug and non-prescription products will depend on a variety of factors, including:

- the scope, rate of progress, and expense of our ongoing, as well as any additional clinical trials, formulation studies and other research and development activities;
- future clinical trial and formulation study results;
- potential changes in government regulations; and
- the timing and receipt of any regulatory approvals.

A change in the outcome of any of these variables with respect to the development of a prescription drug product candidate or non-prescription product could mean a significant change in the costs and timing associated with our development activities.

We expect research and development expense to increase significantly as we add personnel, commence additional clinical studies and other activities to develop our prescription drug product candidates and non-prescription products.

Sales and Marketing Expense

Sales and marketing expenses consist of personnel and related benefit expense, stock-based compensation expense, direct sales and marketing expense, employee travel expense, and management consulting expense. We currently incur sales and marketing expenses to promote Neonorm calf and foal sales.

We expect sales and marketing expense to increase significantly as we develop and commercialize new products and grow our existing Neonorm market. We will need to add sales and marketing headcount to promote the sales of existing and new products.

General and Administrative Expense

General and administrative expenses consist of personnel and related benefit expense, stock-based compensation expense, employee travel expense, legal and accounting fees, rent and facilities expense, and management consulting expense.

We expect general and administrative expense to increase in order to enable us to effectively manage the overall growth of the business. This will include adding headcount, enhancing information systems and potentially expanding corporate facilities.

Interest Expense

Interest expense consists primarily of interest on convertible promissory notes, the standby bridge financing commitment and the loan and security agreement (long-term debt arrangement). We also include accretion of debt issuance costs, debt discount amortization and the accretion of an end-of-term long-term debt payment in interest expense in our statements of operations and comprehensive loss.

Results of Operations

Comparison of the nine months ended September 30, 2017 and 2016

The following table summarizes the Company's results of operations with respect to the items set forth in such table for the nine months ended September 30, 2017 and 2016 together with the change in such items in dollars and as a percentage:

	Nine Months Ended September 30,		Variance	Variance %
	2017	2016		
Product revenue	\$ 581,654	\$ 112,646	\$ 469,008	416.4%
Collaboration revenue	2,237,491	—	2,237,491	N/A
Total revenue	2,819,145	112,646	2,706,499	2402.7%
Operating Expenses				
Cost of revenue	247,135	36,867	210,268	570.3%
Research and development expense	3,033,851	5,672,516	(2,638,665)	(46.5)%
Sales and marketing expense	943,908	355,345	588,563	165.6%
General and administrative expense	8,512,195	4,319,856	4,192,339	97.0%
Impairment of goodwill	3,648,000	—	3,648,000	N/A
Total operating expenses	16,385,089	10,384,584	6,000,505	57.8%
Loss from operations	(13,565,944)	(10,271,938)	(3,294,006)	(32.1)%
Interest expense, net	(800,885)	(774,185)	(26,700)	(3.4)%
Other expense	(13,428)	(11,046)	(2,382)	(21.6)%
Change in fair value of warrants	636,121	—	636,121	N/A
Loss on extinguishment of debt	(207,713)	—	(207,713)	N/A
Net loss before tax	(13,951,849)	(11,057,169)	(2,894,680)	(26.2)%
Income tax benefit	12,190,693	—	12,190,693	N/A
Net loss and comprehensive loss	<u>\$ (1,761,156)</u>	<u>\$(11,057,169)</u>	<u>\$ 9,296,013</u>	<u>84.1%</u>

Revenue and Cost of Revenue

Neonorm Calf and Foal

Our product revenue of \$139,600 and \$88,646 and related cost of revenue of \$56,366 and \$36,867 for the nine months ended September 30, 2017 and 2016 reflects sell-through of our Neonorm Calf and Neonorm Foal products to our distributors. We defer recognizing revenue and cost of revenue until products are sold by the distributor to the distributor's end customers and recognition depends on notification from the distributor that product has been sold to the distributor's end customer. Revenue increased due to an increase in units sold-through from distributors to their customers in the nine months ended September 30, 2017 compared to the same period in 2016. The increase in cost of revenue was consistent with the increase in sales. We continue to increase our efforts to promote sales growth.

Botanical extract

We began selling botanical extract to a distributor for use exclusively in China beginning in September 2016. The revenue from these sales, which totaled \$78,000 and \$24,000 in the nine months ended September 30, 2017 and 2016, is recognized upon shipment to the distributor as no return rights are provided to this distributor. Revenue increased due to an increase in kilograms of botanical extract sold directly to customers in the nine months ended September 30, 2017 compared to the same period in 2016. We had no cost of product revenue associated with the botanical extract as we wrote off the full value of the botanical extract to expense in 2014 due to uncertainty of future use and ability to sell to a customer.

Collaboration revenue

On January 27, 2017, we entered into a licensing, development, co-promotion and commercialization agreement with Elanco to license, develop and commercialize Canalevia (“Licensed Product”), our drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals. We granted to Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco has exclusive rights globally outside the U.S. and co-exclusive rights with us in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products. Under the terms of the Elanco Agreement, we received an initial upfront payment of \$2,548,689 and will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well as product development expense reimbursement, and royalty payments on global sales. The Elanco Agreement specifies that we will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. Elanco will reimburse us for certain development and regulatory expenses related to our planned target animal safety study and the completion of our field study of Canalevia for acute diarrhea in dogs. The \$2,548,689 total of the upfront payment and expense reimbursement is recognized as collaboration revenue ratably over the estimated development period of one year resulting in \$1,734,100 in collaboration revenue in the nine months ended September 30, 2017. The Company included the \$503,391 in collaboration revenue in the nine months ended September 30, 2017 which are included in the Company’s statements of operations and comprehensive loss.

Mytesi revenue

Napo’s product revenue of \$364,054 and related cost of revenue of \$190,768 from the date of acquisition are included in the consolidated results for the nine months ended September 30, 2017 reflecting the delivery of Mytesi product by our distributors to the wholesalers. We record a reserve for estimated product returns under terms of agreements with wholesalers based on its historical returns experience. Reserves for returns at September 30, 2017 were immaterial. If actual returns differed from our historical experience, changes to the reserved could be required in future periods.

Research and Development Expense

The following table presents the components of research and development expense for the nine months ended September 30, 2017 and 2016 together with the change in such components in dollars and as a percentage:

	Nine Months Ended September 30,		Variance	Variance %
	2017	2016		
<i>R&D:</i>				
Personnel and related benefits	\$1,490,293	\$1,993,917	\$ (503,624)	(25.3)%
Materials expense and tree planting	99,409	78,936	20,473	25.9%
Travel, other expenses	168,441	348,135	(179,694)	(51.6)%
Clinical and contract manufacturing	422,449	1,836,816	(1,414,367)	(77.0)%
Stock-based compensation	168,981	116,552	52,429	45.0%
Other	684,278	1,298,160	(613,882)	(47.3)%
Total	<u>\$3,033,851</u>	<u>\$5,672,516</u>	<u>\$(2,638,665)</u>	<u>(46.5)%</u>

Our research and development expense decreased \$2,638,665 from \$5,672,516 in the nine months ended September 30, 2016 to \$3,033,851 for the same period in 2017. Personnel and related benefits decreased \$503,624 from \$1,993,917 in the nine months ended September 30, 2016 to \$1,490,293 in the same period in 2017 due to an increase of \$408,604 employee leasing chargebacks to Napo for services rendered in the seven months ended July 31, 2017 over the nine months ended September 30, 2016 with the remainder of the decrease due to changes in headcount personnel and related salaries and benefits year over year. Travel expenses decreased \$179,694 from \$348,135 in the nine months ended September 30, 2016 to \$168,441 in the same period in 2017 due primarily to a decrease in clinical activity. Significant clinical trial work has decreased and contract manufacturing work was completed in Q1 2016 resulting in a reduction of expense of \$1,414,367 from \$1,836,816 in the nine months ended September 30, 2016 to \$422,449 in the same period in 2017. Clinical expenses decreased \$990,207 from \$1,505,367 in the nine months ended September 30, 2016 to \$515,160 in the same period in 2017, and contract manufacturing expense decreased \$424,161 due to the completion of the manufacturing setup in Italy in the first quarter of 2016 and due to some contract adjustments that arose in the second quarter of 2017. Stock-based compensation increased \$52,429 from \$116,552 in the nine months ended September 30, 2016 to \$168,981 in the same period in 2017 primarily due to an increase in the number of outstanding option grants year over year. Other expenses, consisting primarily of consulting and formulation expenses, decreased \$613,882 from \$1,298,160 in the nine months ended September 30, 2016 to \$684,278 in the same period in 2017. Consulting expenses decreased \$419,182 from \$810,821 in the nine months ended September 30, 2016 to \$391,639 in the same period in 2017 consistent with the decrease in contractor utilization to assist in our clinical trials and in chemistry, manufacturing and controls (“CMC”) activities. Formulation expenses decreased \$184,946 from \$331,153 in the nine months ended September 30, 2016 to \$146,207 for the same period in 2017 due to an decrease in work needed for clinical operations. We plan to increase our research and development expense as we continue developing our drug candidates. Our research and development expenses for the nine months ended September 30, 2017 include Napo’s research and development expenses for the two months from the acquisition of \$96,017.

We increased support for the reforestation of croton lechleri trees in South America, which is reflected in an increase in our spend by \$20,473 from \$78,936 in the nine months ended September 30, 2016 to \$99,409 in the same period in 2017. We value and take to heart the responsibility to replenish trees consumed in order to extract the raw material to manufacture our primary commercial product and the drug product for use in clinical trials.

Sales and Marketing Expense

The following table presents the components of sales and marketing expense for the nine months ended September 30, 2017 and 2016 together with the change in such components in dollars and as a percentage:

	Nine Months Ended September 30,		Variance	Variance %
	2017	2016		
<i>S&M:</i>				
Personnel and related benefits	\$191,238	\$145,619	\$ 45,619	31.3%
Stock-based compensation	23,307	58,733	(35,426)	(60.3)%
Direct Marketing Fees	76,648	70,171	6,477	9.2%
Other	652,715	80,822	571,893	707.6%
Total	<u>\$943,908</u>	<u>\$355,345</u>	<u>\$588,563</u>	<u>165.6%</u>

Our sales and marketing expense increased \$588,563 from \$355,345 in the nine months ended September 30, 2016 to \$943,908 in the same period in 2017. Personnel and related benefits increased \$45,619 from \$145,619 in the nine months ended September 30, 2016 to \$191,238 in the same period in

2017 due to an increase in headcount year over year, net of \$50,039 in employee leasing chargebacks to Napo for services rendered in the seven months ended July 31, 2017 over the nine months ended September 30, 2016. Stock based compensation expense decreased \$35,426 from \$58,733 in the nine months ended September 30, 2016 to \$23,307 in the same period in 2017 due to new options granted at a much lower fair value due to a lower strike price and a lower fair market value. Direct marketing and sales expense increased \$6,477 from \$70,171 in the nine months ended September 30, 2016 to \$76,648 for the same period in 2017 due to an increase in marketing programs to promote our Neonom products. Other expenses, consisted primarily of travel expense, consulting expense and royalty expense, which collectively increased \$571,893 from \$80,822 in the nine months ended September 30, 2016 to \$652,715 in the same period in 2017. We plan to expand sales and marketing spend to promote our Neonom products. Other sales and marketing expenses for the nine months ended September 30, 2017 include sales and marketing expenses of \$513,102 for Napo for the two months from the date of acquisition.

General and Administrative Expense

The following table presents the components of general and administrative expense for the nine months ended September 30, 2017 and 2016 together with the change in such components in dollars and as a percentage:

	Nine Months Ended September 30,		Variance	Variance %
	2017	2016		
<i>G&A:</i>				
Personnel and related benefits	\$1,331,077	\$1,703,951	\$ (372,874)	(21.9)%
Accounting fees	547,977	225,393	322,584	143.1%
Third-party consulting fees and Napo service fees . . .	1,111,473	173,870	937,603	539.3%
Legal fees	2,922,763	456,243	2,466,520	540.6%
Travel	230,736	242,013	(11,277)	(4.7)%
Stock-based compensation	438,636	303,157	135,479	44.7%
Rent and lease expense	226,306	301,677	(75,371)	(25.0)%
Public company expenses	611,746	227,551	384,195	168.8%
Other	1,091,482	686,001	405,481	59.1%
Total	<u>\$8,512,195</u>	<u>\$4,319,856</u>	<u>\$4,192,339</u>	<u>97.0%</u>

Our general and administrative expenses increased \$4,192,339 from \$4,319,856 in the nine months ended September 30, 2016 to \$8,512,195 for the same period in 2017 due primarily to \$3,521,751 in merger related expenses incurred in the nine months ended September 30, 2017, including \$858,103 in consulting services for a fairness opinion, \$101,119 in other consulting services, \$2,202,799 in estimated legal fees and \$136,529 in estimated audit fees, and \$223,201 in estimated printer and filing fees. General and administrative expenses for the nine months ended September 30, 2017 include \$862,250 for Napo's general and administrative expenses for the two months from the date of acquisition. Personnel and related benefits decreased \$372,874 from \$1,703,951 in the nine months ended September 30, 2016 to \$1,331,077 in the same period in 2017 due to an increase of \$92,704 in employee leasing chargebacks for services rendered in the seven months ended July 31, 2017 versus the nine months ended September 30, 2016, a decrease in severance expense of \$105,425 from \$105,425 in the nine months ended September 30, 2016 to \$0 in the same period in 2017, with the remainder of the decrease due to changes in headcount personnel and related salaries year over year, primarily at high paying executive levels. Personnel and related benefits for the nine months ended September 30, 2017 include \$187,505 for Napo's personnel and related benefits for the two months from the date of acquisition. Stock-based compensation increased \$135,479 from \$303,157 in the nine months ended September 30, 2016 to \$438,636 in the same period in 2017 due primarily to expense associated with new grants to existing employees. Our public company

expenses increased \$384,195 from \$227,551 in the nine months ended September 30, 2016 to \$611,746 in the same period in 2017 due primarily to the \$223,201 in merger related printer expenses. In addition to the \$136,529 of audit related merger fees discussed above, our annual, quarterly and other audit fees increased by another \$186,055 resulting in an aggregate \$322,584 increase in accounting fees from \$225,393 in the nine months ended September 30, 2016 to \$547,977 in the same period in 2017. In addition to the \$2,202,799 of legal related merger fees, our general corporate and public securities legal fees increased an additional \$146,973 resulting in an aggregate increase of \$2,466,520 in legal fees from \$456,243 in the nine months ended September 30, 2016 to \$2,922,763 in the same period in 2017. In addition to the \$858,103 fairness opinion consulting and \$101,119 in other consulting merger related fees, our non-merger related consulting expenses actually decreased by \$21,619 resulting in aggregate increase of \$937,603 from \$173,870 in the nine months ended September 30, 2016 to \$1,111,473 in the same period in 2017. Rent and lease expense decreased \$75,371 from \$301,677 in the nine months ended September 30, 2016 to \$226,306 in the same period in 2017 due primarily to an increase of \$82,506 in employee leasing chargebacks to Napo for space used in connection with our employees providing services to Napo during the seven months ended July 31, 2017, offset by additional parking and apartment rent year over year. Other expenses, including warrant expense, insurance costs, office and facilities expenses increased \$405,481 from \$686,001 in the nine months ended September 30, 2016 to \$1,091,482 in the same period in 2017 primarily due to \$23,000 of warrant expense related to warrants issued in connection with warrant exercises, \$26,470 increase in conferences and meetings, \$9,670 increase in bank and credit card fees, net of a reduction of \$96,266 in recruiting fees. Other general and administrative expenses for the nine months ended September 30, 2017 include \$445,946 for Napo's other general and administrative expenses for the two months from the date of acquisition. We expect to incur additional general and administrative expense as a result of operating as a public company and as we grow our business, including expenses related to compliance with the rules and regulations of the SEC, additional insurance expenses, investor relations activities and other administrative and professional services.

Impairment of goodwill

The Company recorded an impairment charge of \$3,648,000 during the three and nine months ended September 30, 2017.

Comparison of the three months ended September 30, 2017 and 2016

The following table summarizes the Company's results of operations with respect to the items set forth in such table for the three months ended September 30, 2017 and 2016 together with the change in such items in dollars and as a percentage:

	Three Months Ended September 30,		Variance	Variance %
	2017	2016		
Product revenue	\$ 445,665	\$ 50,357	\$ 395,308	785.0%
Collaboration revenue	654,549	—	654,549	N/A
Total revenue	<u>1,100,214</u>	<u>50,357</u>	<u>1,049,857</u>	<u>2084.8%</u>
Operating Expenses				
Cost of revenue	206,228	9,858	196,370	1992.0%
Research and development expense	851,608	1,967,128	(1,115,520)	(56.7)%
Sales and marketing expense	663,765	136,882	526,883	384.9%
General and administrative expense	3,070,702	1,115,312	1,955,390	175.3%
Impairment of goodwill	3,648,000	—	3,648,000	N/A
Total operating expenses	<u>8,440,303</u>	<u>3,229,180</u>	<u>5,211,123</u>	<u>161.4%</u>
Loss from operations	(7,340,089)	(3,178,823)	(4,161,266)	(130.9)%
Interest expense, net	(464,684)	(235,191)	(229,493)	(97.6)%
Other expense	(14,876)	(1,476)	(13,400)	(907.9)%
Change in fair value of warrants	388,800	—	388,800	N/A
Net loss before tax	<u>(7,430,849)</u>	<u>(3,415,490)</u>	<u>(4,015,359)</u>	<u>(117.6)%</u>
Income tax benefit	12,190,693	—	12,190,693	N/A
Net income (loss) and comprehensive income (loss)	<u>\$ 4,759,844</u>	<u>\$(3,415,490)</u>	<u>\$ 8,175,334</u>	<u>239.4%</u>

Revenue and Cost of Revenue

Neonorm Calf and Foal

Our product revenue of \$33,611 and \$26,537 and related cost of revenue of \$15,459 and \$9,858 for the three months ended September 30, 2017 and 2016 reflects sell-through of our Neonorm Calf and Neonorm Foal products to our distributors. We defer recognizing revenue and cost of revenue until products are sold by the distributor to the distributor's end customers and recognition depends on notification from the distributor that product has been sold to the distributor's end customer. Revenue increased due to an increase in units sold-through from distributors to their customers in the three months ended September 30, 2017 compared to the same period in 2016. The increase in cost of revenue was consistent with the increase in sales. We continue to increase our efforts to promote sales growth.

Botanical extract

We began selling botanical extract to a distributor for use exclusively in China beginning in September 2016. The revenue from these sales, which totaled \$48,000 and \$24,000 in the three months ended September 30, 2017 and 2016, is recognized upon shipment to the distributor as no return rights are provided to this distributor. Revenue increased due to an increase in kilograms of botanical extract sold directly to customers in the three months ended September 30, 2017 compared to the same period in 2016. We do not have cost of product revenue associated with the botanical extract sales as we wrote off the full value of the botanical extract to expense in 2014 due to uncertainty of future use and ability to sell to a customer.

Collaboration revenue

On January 27, 2017, we entered into a licensing, development, co-promotion and commercialization agreement with Elanco to license, develop and commercialize Canalevia (“Licensed Product”), our drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals. We are granting to Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco will have exclusive rights globally outside the U.S. and co-exclusive rights with us in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products. Under the terms of the Elanco Agreement, we received an initial upfront payment of \$2,548,689 and will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well as product development expense reimbursement, and royalty payments on global sales. The Elanco Agreement specifies that we will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. Elanco will reimburse us for certain development and regulatory expenses related to our planned target animal safety study and the completion of our field study of Canalevia for acute diarrhea in dogs. The \$2,548,689 total of the upfront payment and expense reimbursement is recognized as collaboration revenue ratably over the estimated development period of one year resulting in \$637,200 in collaboration revenue in the three months ended September 30, 2017. We included \$17,349 of the additional expense reimbursements in the three months ended September 30, 2017 as collaboration revenue.

Mytesi revenue

Napo’s product revenue of \$364,054 and related cost of revenue of \$190,768 from the date of acquisition are included in the consolidated results for three months ended September 30, 2017 reflecting the delivery of Mytesi product by our distributors to the wholesalers.

Research and Development Expense

The following table presents the components of research and development expense for the three months ended September 30, 2017 and 2016 together with the change in such components in dollars and as a percentage:

	Three Months Ended September 30,		Variance	Variance %
	2017	2016		
<i>R&D:</i>				
Personnel and related benefits	\$602,216	\$ 567,896	\$ 34,320	6.0%
Materials expense and tree planting	35,878	32,959	2,919	8.9%
Travel, other expenses	45,431	124,807	(79,376)	(63.6)%
Clinical and contract manufacturing	(13,761)	513,478	(527,239)	(102.7)%
Stock-based compensation	45,009	53,935	(8,926)	(16.5)%
Other	136,835	674,053	(537,218)	(79.7)%
Total	<u>\$851,608</u>	<u>\$1,967,128</u>	<u>\$(1,115,520)</u>	<u>(56.7)%</u>

Our research and development expense decreased \$1,115,520 from \$1,967,128 in the three months ended September 30, 2016 to \$851,608 for the same period in 2017. Personnel and related benefits increased \$34,320 from \$567,896 in the three months ended September 30, 2016 to \$602,216 in the same period in 2017 due to a decrease of \$101,016 in employee leasing chargebacks to Napo for services

rendered in the July 2017 over the three month ended September 30, 2016, more than offset with increases in headcount personnel and related salaries and benefits year over year. Travel expenses decreased \$79,376 from \$124,807 in the three months ended September 30, 2016 to \$45,431 in the same period in 2017 consistent with the decrease in clinical activity. Significant clinical trial work has decreased and contract manufacturing work was completed in Q1 2016 resulting in a reduction of expense of \$527,239 from \$513,478 in the three months ended September 30, 2016 to \$(13,761) in the same period in 2017. Clinical expenses decreased \$527,168 from \$511,353 in the three months ended September 30, 2016 to \$(15,815) in the same period in 2017, and contract manufacturing expense was constant at \$2,125 and \$2,055 in the three months ending September 30, 2016 and 2017 due to the completion of the manufacturing setup in Italy in the first quarter of 2016. Stock-based compensation decreased \$8,926 from \$53,935 in the three months ended September 30, 2016 to \$45,009 in the same period in 2017 primarily due to a decrease in the number of outstanding option grants year over year. Other expenses, consisting primarily of consulting and formulation expenses, decreased \$537,218 from \$674,053 in the three months ended September 30, 2016 to \$136,835 in the same period in 2017. Consulting expenses decreased \$365,844 from \$423,636 in the three months ended September 30, 2016 to \$57,792 in the same period in 2017 consistent with the decrease in contractor utilization to assist in our clinical trials and in chemistry, manufacturing and controls (“CMC”) activities. Formulation expenses decreased \$167,576 from \$197,653 in the three months ended September 30, 2016 to \$30,077 for the same period in 2017 due to an decrease in work needed for clinical operations. We plan to increase our research and development expense as we continue developing our drug candidates. Our research and development expenses for the three months ended September 30, 2017 include Napo’s research and development expenses for the two months from the acquisition of \$96,017.

We increased support for the reforestation of croton lechleri trees in South America, which is reflected in an increase in our spend by \$2,919 from \$32,959 in the three months ended September 30, 2016 to \$35,878 in the same period in 2017. We value and take to heart the responsibility to replenish trees consumed in order to extract the raw material to manufacture our primary commercial product and the drug product for use in clinical trials.

Sales and Marketing Expense

The following table presents the components of sales and marketing expense for the three months ended September 30, 2017 and 2016 together with the change in such components in dollars and as a percentage:

	Three Months Ended September 30,		Variance	Variance %
	2017	2016		
<i>S&M:</i>				
Personnel and related benefits	\$ 60,802	\$ 56,040	\$ 4,762	8.5%
Stock-based compensation	7,938	50,052	(42,114)	(84.1)%
Direct Marketing Fees	17,440	13,245	4,195	31.7%
Other	577,585	17,545	560,040	3192.0%
Total	<u>\$663,765</u>	<u>\$136,882</u>	<u>\$526,883</u>	<u>384.9%</u>

Our sales and marketing expense increased \$526,883 from \$136,882 in the three months ended September 30, 2016 to \$663,765 in the same period in 2017. Personnel and related benefits increased \$4,762 from \$56,040 in the three months ended September 30, 2016 to \$60,802 in the same period in 2017 due to an increase in headcount year over year, net of an increase of \$7,684 in employee leasing chargebacks to Napo for services rendered in the seven months ended July 31, 2017 over the nine months ended September 30, 2016. Stock based compensation expense decreased \$42,114 from \$50,052 in the three months ended September 30, 2016 to \$7,938 in the same period in 2017 due to new options granted at a much lower fair value due to a lower strike price and a lower fair market value. Direct marketing and

sales expense increased \$4,195 from \$13,245 in the three months ended September 30, 2016 to \$17,440 for the same period in 2017 due to an increase in marketing programs to promote our Neonorm products. Other expenses, consisted primarily of travel expense, consulting expense and royalty expense, which collectively increased \$560,040 from \$17,545 in the three months ended September 30, 2016 to \$577,585 in the same period in 2017. We plan to expand sales and marketing spend to promote our Neonorm products. Other sales and marketing expenses for the three months ended September 30, 2017 include sales and marketing expenses of \$513,102 for Napo for the two months from the date of acquisition.

General and Administrative Expense

The following table presents the components of general and administrative expense for the three months ended September 30, 2017 and 2016 together with the change in such components in dollars and as a percentage:

	Three Months Ended September 30,		Variance	Variance %
	2017	2016		
<i>G&A:</i>				
Personnel and related benefits	\$ 544,914	\$ 435,271	\$ 109,643	25.2%
Accounting fees	211,326	56,780	154,546	272.2%
Third-party consulting fees and Napo service fees . . .	103,694	20,084	83,610	416.3%
Legal fees	918,271	72,720	845,551	1162.7%
Travel	125,067	61,009	64,058	105.0%
Stock-based compensation	133,807	145,391	(11,584)	(8.0)%
Rent and lease expense	69,307	88,704	(19,397)	(21.9)%
Public company expenses	276,200	41,234	234,966	569.8%
Other	688,116	194,119	493,997	254.5%
Total	<u>\$3,070,702</u>	<u>\$1,115,312</u>	<u>\$1,955,390</u>	<u>175.3%</u>

Our general and administrative expenses increased \$1,955,390 from \$1,115,312 in the three months ended September 30, 2016 to \$3,070,702 for the same period in 2017 due primarily to \$145,000 in warrant expense in connection with warrant exercises, and \$978,332 in merger related expenses incurred in the three months ended September 30, 2017, including \$789,012 in estimated legal fees, \$101,119 in consulting fees, and \$88,201 in printer and filing fees. General and administrative expenses for the three months ended September 30, 2017 include \$862,250 for Napo's general and administrative expenses for the two months from the date of acquisition. Personnel and related benefits increased \$109,643 from \$435,271 in the three months ended September 30, 2016 to \$544,914 primarily due to a decrease of \$13,156 in employee leasing chargebacks for services rendered in the month of July 2017 over the three months ended September 30, 2016, offset by changes in headcount personnel and related salaries quarter over quarter, primarily at high paying executive levels, including \$187,505 for Napo's personnel and related benefits for the two months from the date of acquisition. Stock-based compensation decreased \$11,584 from \$145,391 in the three months ended September 30, 2016 to \$133,807 in the same period in 2017 due primarily to a reduction of expense associated with outstanding options. Our public company expenses increased \$234,966 from \$41,234 in the three months ended September 30, 2016 to \$276,200 in the same period in 2017 due primarily to the \$88,201 merger related expenses in the three months ended September 30, 2017, to another \$62,109 in additional printer expenses associated with other filings with the Securities and Exchange Commission, and to an increase of \$35,708 in investor relations fees and an increase of \$24,191 in investor services expenses. Audit fees increased by \$81,861 from \$56,780 in the three months ended September 30, 2016 to \$138,641 in the same period in 2017. Our general corporate and public securities legal fees increased \$845,551 from \$72,720 in the three months ended September 30, 2016 to \$918,271 in the same period in 2017, due primarily to the \$789,012 in merger related expenses. Our consulting

expenses increased by \$83,610 from \$20,084 in the three months ended September 30, 2016 to \$103,694 in the same period in 2017 due primarily to the \$88,201 in merger related consulting services. Rent and lease expense decreased \$19,397 from \$88,704 in the three months ended September 30, 2016 to \$69,307 in the same period in 2017 due primarily to an increase of \$18,524 in employee leasing chargebacks to Napo for space used in connection with our employees providing services to Napo in the month of July 2017 versus three months ended September 30, 2016. Other expenses, including warrant expense, insurance costs, office and facilities expenses increased \$493,997 from \$194,119 in the three months ended September 30, 2016 to \$688,116 in the same period in 2017 due primarily to \$235,000 warrant expenses, as well as increases of \$7,513 in office and computer equipment and \$8,005 in conferences and meetings expenses, and \$6,653 in bank and credit card fees. Other general and administrative expenses for the three months ended September 30, 2017 include \$445,946 for Napo's other general and administrative expenses for the two months from the date of acquisition. We expect to incur additional general and administrative expense as a result of operating as a public company and as we grow our business, including expenses related to compliance with the rules and regulations of the SEC, additional insurance expenses, investor relations activities and other administrative and professional services.

Impairment of goodwill

The Company recorded an impairment charge of \$3,648,000 during the three and nine months ended September 30, 2017.

Liquidity and Capital Resources

Sources of Liquidity

We had an accumulated deficit of \$42.2 million as a result of incurring net losses since our inception as we have not generated enough revenue to cover costs and expenses through the current fiscal year. Our net loss and comprehensive loss was \$14.7 million for the year ended December 31, 2016, and \$1.8 million for the nine months ended September 30, 2017. We expect to continue to incur additional losses through the end of fiscal year 2017 and into future years due to expected significant expenses for toxicology, safety and efficacy clinical trials of our products and product candidates, for establishing contract manufacturing capabilities, and for the commercialization of one or more of our product candidates, if approved.

We had cash and cash equivalents of \$220,590 as of September 30, 2017. We do not believe our existing cash and cash equivalents will be sufficient to meet our anticipated cash requirements for the next 12 months. Our independent registered public accounting firm has included an explanatory paragraph in its audit report included in our Form 10-K for the years ended December 31, 2016 and 2015 regarding our assessment of substantial doubt about our ability to continue as a going concern. Our financial statements do not include any adjustments that may result from the outcome of this uncertainty.

To date, we have funded our operations primarily through the issuance of equity securities, short-term convertible promissory notes, and long-term debt, in addition to sales of Neonorm, our commercial product:

- In 2013, we received \$400 from the issuance of 2,666,666 shares of common stock to our parent Napo Pharmaceuticals, Inc. We also received \$519,000 of net cash from the issuance of convertible promissory notes in an aggregate principal amount of \$525,000. These notes were all converted to common stock in 2014.
- In 2014, we received \$6.7 million in proceeds from the issuance of convertible preferred stock. Effective as of the closing of our initial public offering, the 3,015,902 shares of outstanding convertible preferred stock were automatically converted into 2,010,596 shares of common stock. Following our initial public offering, there were no shares of preferred stock outstanding.

- In 2014, we received \$1.1 million from the issuance of convertible promissory notes in an aggregate principal amount of \$1.1 million. These notes were converted to common stock upon the effectiveness of the initial public offering in May of 2015. In August 2014, we entered into a standby line of credit with an individual, who is an accredited investor, for up to \$1.0 million. To date, we had not made any drawdowns under this facility. Also, in October of 2014, as amended and restated in December 2014, we entered into a \$1.0 million standby bridge loan which was repaid in 2015.
- In 2015, we received \$1.25 million in exchange for \$1.25 million of convertible promissory notes, of which \$1.0 million was converted to common stock in 2015, and \$100,000 was repaid in 2015. The remaining \$150,000 remains outstanding.
- In May 2015, we received net proceeds of \$15.9 million upon the closing of our initial public offering, gross proceeds of \$20.0 million (2,860,000 shares at \$7.00 per share) net of \$1.2 million of underwriting discounts and commissions and \$3.3 million of offering expenses, including \$0.4 million of non-cash expense. These shares began trading on The NASDAQ Capital Market on May 13, 2015.
- In 2015, we received net proceeds of \$5.9 million from the issuance of long-term debt. We entered into a loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. Under the loan agreement we are required to maintain \$4.5 million of the proceeds in cash, which amount may be reduced or eliminated on the achievement of certain milestones. An additional \$2.0 million is available contingent on the achievement of certain further milestones. The agreement has a term of three years, with interest only payments through February 29, 2016. Thereafter, principal and interest payments will be made with an interest rate of 9.9%. Additionally, there will be a balloon interest payment of \$560,000 on August 1, 2018. This amount is being recognized over the term of the loan agreement and the effective interest rate, considering the balloon payment, is 15.0%. Our proceeds are net of a \$134,433 debt discount under the terms of the agreement.
- In 2014 and 2015, we received \$24,000 and \$531,000, respectively, in cash from sales of Neonorm to distributors.
- In 2015, we received approximately \$13,000 in proceeds from the exercise of stock options.
- In 2016, we received net proceeds of \$4.1 million upon the closing of our follow-on public offering, reflecting gross proceeds of \$5.0 million (2.0 million shares at \$2.50 per share) net of \$373,011 of underwriting discounts and commissions and \$496,887 of offering expenses.
- In June 2016, we entered into the CSPA with a private investor. Under the terms of the agreement, we may sell up to \$15.0 million in common stock to the investor during the approximately 30-month term of the agreement. Upon execution of the CSPA, we sold 222,222 shares of our common stock to the investor at \$2.25 per share for net proceeds of \$448,732, reflecting gross proceeds of \$500,000 and offering expenses of \$51,268. In consideration for entering into the CSPA, we issued 456,667 shares of our common stock to the investor. We issued 1,348,601 shares in exchange for net proceeds of \$2,122,570, reflecting gross proceeds of \$2,176,700 net of \$54,130 offering expenses under the CSPA in the year ended December 31, 2016. And in the nine months ended September 30, 2017, we sold another 3,972,510 shares of the Company's common stock in exchange for \$2,387,085 of gross cash proceeds. Of the \$15.0 million available under the CSPA, we have received \$5,063,785 from the sale of 6,000,000 shares of our common stock as of September 30, 2017.
- In October 2016, we entered into a Common Stock Purchase Agreement with an existing private investor. Upon execution of the agreement we sold 170,455 shares of our common stock in exchange for \$150,000 in cash proceeds.

- On November 22, 2016, we entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which we sold securities to such investors in a private placement transaction, which we refer to herein as the 2016 Private Placement. In the 2016 Private Placement, we sold an aggregate of 1,666,668 shares of our common stock at a price of \$0.60 per share for gross proceeds of approximately \$1.0 million. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668 shares of our common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, (ii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the Series B Warrants, the 2016 Warrants.
- On January 27, 2017, we entered into a licensing, development, co-promotion and commercialization agreement with Elanco to license, develop and commercialize Canalevia, our drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals. The Elanco Agreement grants Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco will have exclusive rights globally outside the U.S. and co-exclusive rights with us in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products.

Under the terms of the Elanco Agreement, we received an initial upfront payment of \$2,548,689 inclusive of reimbursement of past product and development expenses of \$1,048,689 and we will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well as product development expense reimbursement, and royalty payments on global sales. The Elanco Agreement specifies that we will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. Elanco will also reimburse us for Canalevia-related expenses, including reimbursement for Canalevia-related expenses in Q4 2016, certain development and regulatory expenses related to our planned target animal safety study and the completion of our field study of Canalevia for acute diarrhea in dogs. On November 1, 2017, Elanco notified the Company of its intention to terminate the Elanco Agreement, effective January 30, 2018.

- On March 31, 2017, we entered into a merger agreement with Napo, pursuant to which we are required, among other things, to issue approximately 69,299,346 shares of our common stock and non-voting common stock to Napo creditors, noteholders, holders of Napo warrants, options or restricted stock units, and Invesco upon consummation of the merger.
- On June 28, 2017, we closed a private investment in public entities with a member of our board of directors. We received gross proceeds of \$50,000 in exchange for 100,000 shares of our common stock.
- On June 29, 2017, we issued a secured convertible promissory note to a lender in the aggregate principal amount of \$2,155,000 less an original issue discount of \$425,000 and less \$30,000 to cover the lender's legal fees for net cash proceeds of \$1,700,000. Interest on the outstanding balance will be paid 8% per annum from the purchase price date until the balance is paid in full. All interest calculations are computed on the basis of a 360-day year comprised of twelve (12) thirty (30) day months compounded daily and payable in accordance with the terms of the Note. All principal and interest on the debt is due in full on August 2, 2018.

- On July 13, 2017, we closed a private investment in public entities with an investor. We received gross proceeds of \$50,000 in exchange for 100,000 shares of our common stock.
- On July 31, 2017, as part of the merger with Napo, we sold 3,243,243 shares of our common stock to an investor in exchange for \$1,000,000 in cash and \$2,000,000 in a direct payoff of Napo debt.
- On July 31, 2017, the Company entered into Warrant Exercise Agreements, or Exercise Agreements, with certain holders of Series C Warrants, or the Exercising Holders, which Exercising Holders own, in the aggregate, Series C Warrants exercisable for 908,334 shares of the Company's common stock. Pursuant to the Exercise Agreements, the Exercising Holders and the Company agreed that the Exercising Holders would exercise their Series C Warrants with respect to 908,334 shares of common stock underlying such Series C Warrants for a reduced exercise price equal to \$0.40 per share. The Company received aggregate gross proceeds of approximately \$363,334 from the exercise of the Series C Warrants by the Exercising Holders.

We expect our expenditures will continue to increase as we continue our efforts to develop animal health products, expand our commercially available Neonorm product and continue development of our pipeline in the near term. We do not believe our current capital is sufficient to fund our operating plan through June 2018. We will need to seek additional funds through public or private equity or debt financings or other sources, such as strategic collaborations. Such financing may result in dilution to stockholders, imposition of debt covenants and repayment obligations or other restrictions that may affect our business. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. We may also not be successful in entering into partnerships that include payment of upfront licensing fees for our products and product candidates for markets outside the United States, where appropriate. If we do not generate upfront fees from any anticipated arrangements, it would have a negative effect on our operating plan. We plan to finance our operations and capital funding needs through equity and/or debt financing as well as revenue from future product sales. However, there can be no assurance that additional funding will be available to us on acceptable terms on a timely basis, if at all, or that we will generate sufficient cash from operations to adequately fund operating needs or ultimately achieve profitability. If we are unable to obtain an adequate level of financing needed for the long-term development and commercialization of our products, we will need to curtail planned activities and reduce costs. Doing so will likely have an adverse effect on our ability to execute on our business plan. These matters raise substantial doubt about the ability of the Company to continue in existence as a going concern within one year after issuance date of the financial statements.

Cash Flows for the Nine Months Ended September 30, 2017 Compared to the Nine Months Ended September 30, 2016

The following table shows a summary of cash flows for the nine months ended September 30, 2017 and 2016:

	Nine Months Ended September 30, 2017	Nine Months Ended September 30, 2016
Total cash used in operating activities	\$(4,494,788)	\$(11,686,507)
Total cash (used in)/ provided by investing activities	(1,546,047)	1,907,213
Total Cash Provided by Financing Activities	5,310,446	3,895,174
	<u>\$ (730,389)</u>	<u>\$ (5,884,120)</u>

Cash Used in Operating Activities

During the nine months ended September 30, 2017, cash used in operating activities of \$4,494,788 resulted from our net loss of \$1.8 million, adjusted by non-cash accretion of end of term payment, debt discounts and debt issuance costs of \$368,000, stock-based compensation of \$631,000, change in fair value of modified warrants of \$23,000, reduction in the fair value of warrant liability of \$636,000, loss on extinguishment of debt of \$208,000, stock issued in the merger in exchange for services \$151,000, depreciation and amortization expenses of \$326,000, impairment of goodwill of \$3,648,000, deferred income benefit of 12,190,693 and gain on revaluation of derivative liability of \$1,000, net of changes in operating assets and liabilities of \$4.8 million.

During the nine months ended September 30, 2016, cash used in operating activities of \$11,686,507 resulted from our net loss of \$11.1 million, offset by non-cash accretion of end of term payment, debt discounts and debt issuance costs of \$396,000, stock-based compensation of \$478,000, depreciation expense of \$32,000, net of changes in operating assets and liabilities of \$1.5 million.

Cash (Used in) Provided by Investing Activities

During the nine months ended September 30, 2017, cash used in investing activities of \$1,546,047 consisted of cash used in acquisition, net of cash acquired of \$1,557,340 offset by \$11,000 of a release of restricted cash that resulted from principal payments of our long-term debt.

During the nine months ended September 30, 2016, cash provided by investing activities of \$1,907,213 primarily consisted of \$2.0 million of a release of restricted cash that resulted from principal payments on our long-term debt, net of \$104,000 in purchases of property and equipment.

Cash Provided by Financing Activities

During the nine months ended September 30, 2017, cash provided by financing activities of \$5,310,446 primarily consisted of \$2.3 million in net proceeds received in the CSPA, \$94,000 in net proceeds received in a PIPE financing, \$1.7 million received in the issuance of convertible debt, \$3.0 million received from the sale of common stock in the merger, and \$363,000 received in the exercise of certain warrants, offset by \$2.2 million in principal payments of our long-term debt.

During the nine months ended September 30, 2016, cash provided by financing activities of \$3,895,174 primarily consisted of \$4.1 million in net cash received in our secondary public offering, net of commissions and certain offering expenses, and \$395,000 in net cash received in the initial sale under the CSPA, net of fees and certain offering expenses, and \$1.4 million received from the issuance of common stock under the aforementioned CSPA, offset by \$2.0 million in principal payments on our long-term debt.

Standby Lines of Credit, Convertible Notes and Warrant Issuances

Convertible Notes and Warrants

Convertible notes at September 30, 2017 and December 31, 2016 consist of the following:

	Notes Payable	
	September 30, 2017	December 31, 2016
February 2015 convertible notes payable	150,000	150,000
June 2017 convertible note payable	2,135,000	—
Napo convertible notes	12,473,501	—
	\$14,758,501	\$150,000
Less: unamortized debt discount and debt issuance costs	(384,292)	—
Net convertible notes payable obligation	\$14,374,209	\$150,000
Convertible notes payable—non-current	11,161,000	—
Convertible notes payable—current	\$ 3,213,209	\$150,000

Interest expense on the convertible notes for the three and nine months ended September 30, 2017 and 2016 follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
February 2015 convertible note nominal interest	\$ 4,537	\$4,537	\$ 13,463	\$13,512
June 2017 convertible note nominal interest	43,900	—	44,372	—
June 2017 convertible note accretion of debt discount	123,362	—	124,708	—
Napo convertible note nominal interest	175,798	—	175,798	—
Total interest expense on convertible debt	\$347,597	\$4,537	\$358,341	\$13,512

Interest expense is classified as such in the statements of operations and comprehensive income.

February 2015 Convertible Note

In February 2015, we issued convertible promissory notes to two accredited investors in the aggregate principal amount of \$250,000. These notes were issued pursuant to the convertible note purchase agreement dated December 23, 2014. In connection with the issuance of the notes, we issued the lenders warrants to purchase 22,320 shares at \$5.60 per share, which expire December 31, 2017. Principal and interest of \$103,912 was paid in May 2015 for \$100,000 of these notes. We analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. We calculated the value of the BCF using the intrinsic method. A BCF for the full face value was recorded as a discount to the notes payable and to additional paid-in capital. The full amount of the BCF was amortized to interest expense by the end of June 2015.

The remaining outstanding note of \$150,000 is payable to an investor at an effective simple interest rate of 12% per annum, and was due in full on July 31, 2016. On July 28, 2016, we entered into an amendment to delay the repayment of the principal and related interest under the terms of the remaining note from July 31, 2016 to October 31, 2016.

On November 8, 2016, we entered into an amendment to extend the maturity date of the remaining note from October 31, 2016 to January 1, 2017. In exchange for the extension of the maturity date, on November 8, 2016, our board of directors granted the lender a warrant to purchase 120,000 shares of the

Company's common stock for \$0.01 per share. The warrant is exercisable at any time on or before July 28, 2022, the expiration date of the warrant. The amendment and related warrant issuance resulted in our treating the debt as having been extinguished and replaced with new debt for accounting purposes due to meeting the 10% cash flow test.

Extinguishment of debt

On January 31, 2017, we entered into another amendment to extend the maturity date of the remaining note from January 1, 2017 to January 1, 2018. In exchange for the extension of the maturity date, on January 31, 2017, our board of directors granted the lender a warrant to purchase 370,916 shares of our common stock for \$0.51 per share. The warrant is exercisable at any time on or before January 31, 2019, the expiration date of the warrant. The amendment and related warrant issuance resulted in our treating the debt as having been extinguished and replaced with new debt for accounting purposes due to meeting the 10% cash flow test. We calculated a loss on the extinguishment of debt of \$207,713, or the equivalent to the fair value of the warrants granted, which is included in loss on extinguishment of debt in our statements of operations and comprehensive loss in the nine months ended September 30, 2017.

The \$150,000 note is included in notes payable in current liabilities on our balance sheet. We have unpaid accrued interest of \$47,392 and \$33,929, which is included in accrued expenses on our balance sheet as of September 30, 2017 and December 31, 2016, respectively, and incurred interest expense of \$4,537 in the three months ended September 30, 2017 and 2016, respectively, and \$13,463 and \$13,512 in the nine months ended September 30, 2017 and 2016 which are included in interest expense in the statement of operations and comprehensive loss.

June 2017 Convertible Note

On June 29, 2017, we issued a secured convertible promissory note, or Note, to a lender in the aggregate principal amount of \$2,155,000 less an original issue discount of \$425,000 and less \$30,000 to cover the lender's legal fees for net cash proceeds of \$1,700,000. Interest on the outstanding balance will be paid 8% per annum from the purchase price date until the balance is paid in full. All interest calculations are computed on the basis of a 360-day year comprised of twelve (12) thirty (30) day months compounded daily and payable in accordance with the terms of the Note. All principal and interest on the debt is due in full on August 2, 2018. We accrued interest of \$44,372 at September 30, 2017 which is included in accrued expenses on our balance sheet, and incurred interest expense of \$43,900 and \$44,372 in interest expense in the three and nine months ended September 30, 2017 which are included in interest expense in our statement of operations and comprehensive loss. We also recorded \$123,362 and \$124,708 in interest expense in the three and nine months ended September 30, 2017 which are included in our statement of operations and comprehensive loss for the accretion of the debt discount. The lender has the right to convert all or any portion of the outstanding balance into our common stock at \$1.00 per share.

The Note provides the lender with an optional monthly redemption that allows for the monthly payment of up to \$350,000 at the creditor's option commencing on the earlier of six months after the purchase price date, June 29, 2017, or the effective date of the registration statement which is expected to be before December 2017. ASC 470-10-45-9 and 45-10 provide that debt that is due on demand or will be due on demand within one year from the balance sheet date should be classified as a current liability, even though the liability may not be expected to be paid within that period or the liability has scheduled repayment dates that extend beyond one year but nevertheless is callable by the creditor within one year. As such, despite the fact that the Note is due in full on August 2, 2018, the full amount of the Note balance has been classified as a current liability in the balance sheet.

The Note provides for two separate features that result in a derivative liability:

1. Repayment of mandatory default amount upon an event of default—upon the occurrence of any event of default, the lender may accelerate the Note resulting in the outstanding balance becoming immediately due and payable in cash; and
2. Automatic increase in the interest rate on and during an event of default—during an event of default, the interest rate will increase to the lesser of 17% per annum or the maximum rate permitted under applicable law.

The Company computed fair values at June 30, 2017 of \$15,000 and \$5,000 for the repayment and the interest rate increase feature, respectively, using the Binomial Lattice Model, which was based on the generalized binomial option pricing formula. The \$20,000 combined fair value was carved out and is included as a derivative liability on the balance sheet. The derivatives were revalued at September 30, 2017 using the same Model resulting in a combined fair value of \$19,000. The \$1,000 gain is included in other income and expense in the statement of income and comprehensive income.

The balance of the note payable of \$1,750,708, consisting of the \$2,155,000 face value of the note less note discounts and debt issuance costs of \$509,000, less the \$20,000 derivative liability, plus the accretion of the debt discount and debt issuance costs of \$124,708 in the nine months ended September 30, 2017, is included in notes payable in current liabilities on the balance sheet.

Napo convertible notes

In December 2016, Napo entered into a note purchase agreement which provides for the sale of up to \$12,500,000 face amount of notes and issued convertible promissory notes (the Napo December Notes) in the aggregate face amount of \$2,500,000 to three lenders and received proceeds of \$2,000,000 which resulted in \$500,000 of original issue discount. In July 2017, Napo issued convertible promissory notes (the Napo July Notes) in the aggregate face amount of \$7,500,000 to four lenders and received proceeds of \$6,000,000 which resulted in \$1,500,000 of original issue discount. The Napo December Notes and the Napo July Notes mature on December 30, 2019 and bear interest at 10% with interest due each six-month period after December 30, 2016. On June 30, 2017, the accrued interest of \$125,338 was added to principal of the Napo December Notes, and the new principal balance became \$2,625,338. Interest may be paid in cash or in the stock of Jaguar per terms of the note purchase agreement. In each one year period beginning December 30, 2016, up to one-third of the principal and accrued interest on the notes may be converted into the common stock of the merged entity at a conversion price of \$0.925 per share. The Company assumed these convertible notes at fair value of \$11,161,000 as part of the Napo Merger. At September 30, 2017, the balance of the note payable is \$11,161,000 and the accrued interest on these notes is \$193,565.

In March 2017, Napo entered into an exchangeable note purchase agreement with two lenders for the funding of face amount of \$1,312,500 in two \$525,000 tranches of face amount \$656,250. The notes bear interest at 3% and mature on December 1, 2017. Interest may be paid at maturity in either cash or shares of Jaguar per terms of the exchangeable note purchase agreement. The notes may be exchanged for up to 2,343,752 shares of Jaguar common stock, prior to maturity date. The Company assumed the notes at fair value of \$1,312,500 as part of the Napo Merger. At September 30, 2017, the accrued interest on these notes is \$19,957.

Long term Debt

In August 2015, we entered into a loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. The loan agreement requires us to maintain \$4.5 million of the proceeds in cash, which may be reduced or eliminated on the achievement of certain milestones. An additional \$2.0 million is available contingent on the achievement of certain further

milestones. The agreement has a term of three years, with interest only payments through February 29, 2016. Thereafter, principal and interest payments will be made with an interest rate of 9.9%. Additionally, there will be a balloon payment of \$560,000 on August 1, 2018. This amount is being recognized over the term of the loan agreement and the effective interest rate, considering the balloon payment, is 15.0%. Proceeds were net of a \$134,433 debt discount under the terms of the loan agreement. This debt discount is being recorded as interest expense, using the interest method, over the term of the loan agreement. Under the agreement, we are entitled to prepay principal and accrued interest upon five days prior notice to the lender. In the event of prepayment, we are obligated to pay a prepayment charge. If such prepayment is made during any of the first twelve months of the loan agreement, the prepayment charge will be (a) during such time as we are required to maintain a minimum cash balance, 2% of the minimum cash balance amount plus 3% of the difference between the amount being prepaid and the minimum cash balance, and (b) after such time as we are no longer required to maintain a minimum cash balance, 3% of the amount being prepaid. If such prepayment is made during any time after the first twelve months of the loan agreement, 1% of the amount being prepaid.

On April 21, 2016, the loan and security was amended upon which we repaid \$1.5 million of the debt out of restricted cash. The amendment modified the repayment amortization schedule providing a four-month period of interest only payments for the period from May through August 2016.

On July 7, 2017, we entered into the third amendment to the Loan Agreement upon which we paid \$1.0 million of the outstanding loan balance, and the Lender waived the Prepayment Charge associated with such prepayment. The Third Amendment modified the repayment schedule providing a three-month period of interest only payments for the period from August 2017 through October 2017, and reduced the required cash amount that we must keep on hand to \$500,000, which will be reduced following the Lender's receipt of each principal repayment subsequent to the \$1.0 million.

As of September 30, 2017 and December 31, 2016, the net long-term debt obligation was as follows:

	<u>September 30,</u> <u>2017</u>	<u>December 31,</u> <u>2016</u>
Debt and unpaid accrued end-of-term payment	\$1,855,328	\$3,894,320
Unamortized note discount	(13,141)	(42,493)
Unamortized debt issuance costs	(40,960)	(114,626)
Net debt obligation	<u>\$1,801,227</u>	<u>\$3,737,201</u>
Current portion of long-term debt	\$1,801,227	\$1,919,675
Long-term debt, net of discount	—	1,817,526
Total	<u>\$1,801,227</u>	<u>\$3,737,201</u>

Future principal payments under the long-term debt are as follows:

<u>Years ending December 31</u>	<u>Amount</u>
2017—September through December	\$ 260,832
2018	<u>1,089,199</u>
Total future principal payments	1,350,031
2018 end-of-term payment	<u>560,000</u>
	1,910,031
Less: unaccreted end-of-term payment at September 30, 2017	<u>(54,703)</u>
Debt and unpaid accrued end-of-term payment	<u>\$1,855,328</u>

The debt obligation includes an end-of-term payment of \$560,000, which accretes over the life of the loan as interest expense. As a result of the debt discount and the end-of-term payment, the effective interest rate for the loan differs from the contractual rate.

Interest expense on the long-term debt for the three and nine months ended September 30, 2017 and 2016 was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Nominal interest	\$ 36,906	\$103,566	\$183,040	\$364,566
Accretion of debt discount	7,712	15,337	29,351	50,388
Accretion of end-of-term payment	32,109	63,897	122,269	209,924
Accretion of debt issuance costs	24,038	47,855	91,562	135,795
	<u>\$100,765</u>	<u>\$230,655</u>	<u>\$426,222</u>	<u>\$760,673</u>

Warrants

On November 22, 2016, we entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which we sold securities to such investors in a private placement transaction, which we refer to herein as the 2016 Private Placement. In the 2016 Private Placement, we sold an aggregate of 1,666,668 shares of our common stock at a price of \$0.60 per share for gross proceeds of approximately \$1.0 million. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668 shares of our common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, and the Placement Agent received warrants to purchase 133,333 shares of our common stock in lieu of cash for service fees with the same terms as the investors; (ii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the Series B Warrants, the 2016 Warrants. The warrants were granted in three series with different terms. The warrants were valued using the Black-Scholes-Merton warrant pricing model as follows:

- Series A Warrants and Placement Agent Warrants: 1,666,668 warrant shares with a strike price of \$0.75 per share and an expiration date of May 29, 2022; and 133,333 warrant shares to the placement agent with a strike price of \$0.75 and an expiration date of May 29, 2022; the expected life is 5.5 years, the volatility is 71.92% and the risk free rate is 1.87% in valuing these warrants.
- Series B Warrants: 1,666,668 warrant shares with a strike price of \$0.90 per share and an expiration date of November 29, 2017; the expected life is one year, the volatility is 116.65% and the risk free rate is 0.78% in valuing these warrants.
- Series C Warrants: 1,666,668 warrant shares with a strike price of \$1.00 per share and an expiration date of May 29, 2018; the expected life is 1.5 years, the volatility is 116.92% and the risk free rate is 0.94%.

The warrant valuation date was November 29, 2016 and the closing price of \$0.69 per share was used in determining the fair value of the warrants. The series A warrants and placement agent warrants were valued at \$756,001 and were classified as a warrant liability in the balance sheet. The series A warrants and placement agent warrants were revalued on December 31, 2016 at \$799,201 which is included in the balance sheet, and the \$43,200 increase is included in the statements of operations and comprehensive loss. The stock price was \$0.716, the strike price was \$0.75 per share, the expected life was 5.41 years, the volatility was 73.62% and the risk free rate was 2.0%. The series B and C warrants were classified as equity, and as such were not subject to revaluation at year end. Costs incurred in connection with the issuance

were allocated based on the relative fair values of the Series A and the Series B and C warrants. The series A warrants and placement agent warrants were revalued on September 30, 2017 at \$163,080 and is included in the balance sheet. The valuation reflects a reduction of \$388,800 from the June 30, 2017 valuation of \$551,880, and a decrease of \$636,121 decrease from the \$799,201 December 31, 2016 valuation. The changes are included in the statements of operations and comprehensive loss. The \$163,080 valuation at September 30, 2017 was computed using the Black-Scholes-Merton pricing model using a stock price of \$0.20, the strike price was \$0.75 per share, the expected life was 4.67 years, the volatility was 90.77% and the risk free rate was 1.87%.

On July 31, 2017, the Company entered into Warrant Exercise Agreements, or the Exercise Agreements, with certain holders of Series C Warrants, the Exercising Holders, which Exercising Holders own, in the aggregate, Series C Warrants exercisable for 908,334 shares of our common stock. Pursuant to the Exercise Agreements, the Exercising Holders and us agreed that the Exercising Holders would exercise their Series C Warrants with respect to 908,334 shares of common stock underlying such Series C Warrants for a reduced exercise price equal to \$0.40 per share. We received aggregate gross proceeds of approximately \$363,334 from the exercise of the Series C Warrants by the Exercising Holders. The difference between the pre-modification and post-modification fair value of \$23,000 was expensed in general and administrative expense in the statements of operations and comprehensive income. The pre-modification fair value was computed using the Black-Scholes-Merton model using a stock price of \$0.56 (fair market value on modification date), original strike price of \$1.00, expected life of 0.83 years, volatility of 115.28%, risk-free rate of 1.20% to arrive at a fair value of \$0.1347 per share. The post-modification fair value was computed using the intrinsic value on the date of modification or \$0.16 per share.

We granted 1,224,875 warrants at a strike price of \$0.08 per share to replace Napo warrants upon the consummation of the merger.

Our warrant activity is summarized as follows:

	Nine Months Ended September 30, 2017	Year Ended December 31, 2016
Beginning balance	5,968,876	748,872
Warrants granted	1,595,791	5,253,337
Warrants exercised	(908,334)	—
Warrants cancelled	—	(33,333)
Ending balance	<u>6,656,333</u>	<u>5,968,876</u>

Off-Balance Sheet Arrangements

Since inception, we have not engaged in the use of any off-balance sheet arrangements, such as structured finance entities, special purpose entities or variable interest entities.

Critical Accounting Policies and Significant Judgments and Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles, or U.S. GAAP, requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosures in the financial statements. Critical accounting policies are those accounting policies that may be material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and that have a material impact on financial condition or operating performance. While we base our estimates and judgments on our experience and on various other factors that we believe to be reasonable under the circumstances, actual results may differ from these estimates under different assumptions or

conditions. We believe the following critical accounting policies used in the preparation of our financial statements require significant judgments and estimates. For additional information relating to these and other accounting policies, see Note 2 to our financial statements, appearing elsewhere in this report.

Revenue Recognition

We recognize revenue in accordance with ASC 605 “Revenue Recognition”, subtopic ASC 605-25 “*Revenue with Multiple Element Arrangements*” and subtopic ASC 605-28 “*Revenue Recognition-Milestone Method*”, which provides accounting guidance for revenue recognition for arrangements with multiple deliverables and guidance on defining the milestone and determining when the use of the milestone method of revenue recognition for research and development transactions is appropriate, respectively. For multiple-element arrangements, each deliverable within a multiple deliverable revenue arrangement is accounted for as a separate unit of accounting if both of the following criteria are met: (1) the delivered item or items have value to the customer on a standalone basis and (2) for an arrangement that includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially in our control. If a deliverable in a multiple element arrangement is not deemed to have a stand-alone value, consideration received for such a deliverable is recognized ratably over the term of the arrangement or the estimated performance period, and it will be periodically reviewed based on the progress of the related product development plan. The effect of a change made to an estimated performance period and therefore revenue recognized ratably would occur on a prospective basis in the period that the change was made.

We recognize revenue under its licensing, development, co-promotion and commercialization agreement from milestone payments when: (i) the milestone event is substantive and its achievability has substantive uncertainty at the inception of the agreement, and (ii) it does not have ongoing performance obligations related to the achievement of the milestone earned. Milestone payments are considered substantive if all of the following conditions are met: the milestone payment (a) is commensurate with either our performance subsequent to the inception of the arrangement to achieve the milestone or the enhancement of the value of the delivered item or items as a result of a specific outcome resulting from our performance subsequent to the inception of the arrangement to achieve the milestone, (b) relates solely to past performance, and (c) is reasonable relative to all of the deliverables and payment terms (including other potential milestone consideration) within the arrangement.

Our revenue related to the reimbursement of costs incurred under the collaboration agreement where the company acts as principal, controls the research and development activities and bears credit risk. Under the agreement, the Company is reimbursed for associated out-of-pocket costs and for certain employee costs. The gross amount of these pass-through costs is reported in revenue in the accompanying statements of operations and comprehensive loss, while the actual expense for which the Company is reimbursed are reflected as research and development costs.

Determining whether and when some of these revenue recognition criteria have been satisfied often involves assumptions and judgments that can have a significant impact on the timing and amount of revenue the Company will report. Changes in assumptions or judgments or changes to the elements in an arrangement could cause a material increase or decrease in the amount of revenue that the Company reports in a particular period.

Product Revenue

Sales of Neonorm Calf and Foal to distributors are made under agreements that may provide distributor price adjustments and rights of return under certain circumstances. Until we develop sufficient sales history and pipeline visibility, revenue and costs of distributor sales will be deferred until products are sold by the distributor to the distributor’s customers. Revenue recognition depends on notification either directly from the distributor that product has been sold to the distributor’s customer, when we have access

to the data. Deferred revenue on shipments to distributors reflect the estimated effects of distributor price adjustments, if any, and the estimated amount of gross margin expected to be realized when the distributor sells through product purchased from us. Our sales to distributors are invoiced and included in accounts receivable and deferred revenue upon shipment. Inventory is relieved and revenue recognized upon shipment by the distributor to their customer. We had Neonorm revenues of \$33,611 and \$26,357 for the three months ended September 30, 2017 and 2016, and \$139,600 and \$88,646 for the nine months ended September 30, 2017 and 2016.

Sales of Botanical Extract are recognized as revenue when delivered to the customer. We had Botanical Extract revenues of \$48,000 and \$24,000 in the three months ended September 30, 2017 and 2016, and \$78,000 and \$24,000 in the nine months ended September 30, 2017 and 2016.

The Company's subsidiary—Napo sells its drug product, Mytesi through one distributor that in turn sells to various wholesalers in the United States. Sales to the wholesalers are made under agreements that may provide price adjustments and rights of return prior to sell through sales are recognized as revenue when delivered to the wholesalers. Mytesi revenue included in the Company's revenue for the nine months ended September 2017 and 2016 is \$363,868 and \$0, respectively. Mytesi revenue included in the Company's revenue for the three months ended September 2017 and 2016 is \$364,054 and \$0, respectively.

Collaboration Revenue

On January 27, 2017, we entered into a licensing, development, co-promotion and commercialization agreement with Elanco US Inc. ("Elanco") to license, develop and commercialize Canalevia ("Licensed Product"), our drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals. We granted Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco will have exclusive rights globally outside the U.S. and co-exclusive rights with us in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products.

Under the terms of the Elanco Agreement, we received an initial upfront payment of \$2,548,689, inclusive of reimbursement of past product and development expenses of \$1,048,689, and will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well as product development expense reimbursement for any additional product development expenses incurred, and royalty payments on global sales. The \$61.0 million development and commercial milestones consist of \$1.0 million for successful completion of a dose ranging study; \$2.0 million for the first commercial sale of license product for acute indications of diarrhea; \$3.0 million for the first commercial sale of a license product for chronic indications of diarrhea; \$25.0 million for aggregate worldwide net sales of licensed products exceeding \$100.0 million in a calendar year during the term of the agreement; and \$30.0 million for aggregate worldwide net sales of licensed products exceeding \$250.0 million in a calendar year during the terms of the agreement. Each of the development and commercial milestones are considered substantive. No revenues associated with the achievement of the milestones has been recognized to date. The Elanco Agreement specifies that we will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. The \$2,548,689 upfront payment, inclusive of reimbursement of past product and development expenses of \$1,048,689 is recognized as revenue ratably over the estimated development period of one year resulting in \$637,200 and \$1,734,100 in collaboration revenue in the three and nine months ended September 30, 2017 which are included in our statements of operations and comprehensive loss. The difference of \$814,589 is included in deferred collaboration revenue in our balance sheet.

In addition to the upfront payments, Elanco reimburses us for certain development and regulatory expenses related to our planned target animal safety study and the completion of the Canalevia field study for acute diarrhea in dogs. These are recognized as revenue in the month in which the related expenses are incurred. We have \$17,349 of unreimbursed expenses as of September 30, 2017, which is included in Other Receivables on our balance sheet. We included the \$17,349 and \$503,391 in collaboration revenue in the three and nine months ended September 30, 2017 which are included in the statements of operations and comprehensive loss. On November 1, 2017, Elanco notified us of its intention to terminate the Elanco Agreement, effective January 30, 2018. On the effective date of termination of the Elanco Agreement, all licenses that we granted to Elanco under the Elanco Agreement will be revoked and the rights granted thereunder revert back to us.

Goodwill and Indefinite-lived Intangible Assets

Goodwill is tested for impairment on an annual basis and in between annual tests if events or circumstances indicate that an impairment loss may have occurred. The test is based on a comparison of the reporting unit's book value to its estimated fair market value. We perform annual impairment test during the fourth quarter of each fiscal year using the opening consolidated balance sheet as of the first day of the fourth quarter, with any resulting impairment recorded in the fourth quarter of the fiscal year.

If the carrying value of a reporting unit's net assets exceeds its fair value, the goodwill would be considered impaired and would be reduced to its fair value. The goodwill was entirely allocated to the human health reporting unit as the goodwill relates to the Napo Merger. The decline in market capitalization during the three months ended September 30, 2017 was determined to be a triggering event for potential goodwill impairment. Accordingly, we performed the goodwill impairment analysis. We utilized the market capitalization plus a reasonable control premium in the performance of its impairment test. The market capitalization was based on the outstanding shares and the average market share price for the 30 days prior to September 30, 2017. Based on the results of our impairment test, we recorded an impairment charge of \$3,648,000 during the three and nine months ended September 30, 2017. If the market capitalization decreases in the future, a reasonable possibility exists that goodwill could be further impaired in the near term and that such impairment may be material to the financial statements.

Fair value determinations require considerable judgment and are sensitive to changes in underlying assumptions, estimates and market factors. Estimating the fair value of individual reporting units and indefinite-lived intangible assets requires us to make assumptions and estimates regarding our future plans, as well as industry and economic conditions. These assumptions and estimates include projected revenues and income growth rates, terminal growth rates, competitive and consumer trends, market-based discount rates, and other market factors. If current expectations of future growth rates are not met or market factors outside of our control, such as discount rates, change significantly, this may lead to a further goodwill impairment in the future.

Additionally, as goodwill and intangible assets associated with recently acquired businesses are recorded on the balance sheet at their estimated acquisition date fair values, those amounts are more susceptible to an impairment risk if business operating results or macroeconomic conditions deteriorate. Acquired in-process research and development (IPR&D) are intangible assets initially recognized at fair value and classified as indefinite-lived assets until the successful completion or abandonment of the associated research and development efforts. During the development period, these assets will not be amortized as charges to earnings; instead these assets will be tested for impairment on an annual basis or more frequently if impairment indicators are identified.

Accrued Research and Development Expenses

As part of the process of preparing our financial statements, we are required to estimate accrued research and development expenses. Estimated accrued expenses include fees paid to vendors and clinical

sites in connection with our clinical trials and studies. We review new and open contracts and communicate with applicable internal and vendor personnel to identify services that have been performed on our behalf and estimate the level of service performed and the associated costs incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost for accrued expenses. The majority of our service providers invoice us monthly in arrears for services performed or as milestones are achieved in relation to our contract manufacturers. We make estimates of our accrued expenses as of each reporting date.

We base our accrued expenses related to clinical trials and studies on our estimates of the services received and efforts expended pursuant to contracts with vendors, our internal resources, and payments to clinical sites based on enrollment projections. The financial terms of the vendor agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors such as the successful enrollment of animals and the completion of development milestones. We estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the related expense accrual accordingly on a prospective basis. If we do not identify costs that have been incurred or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates. To date, we have not made any material adjustments to our estimates of accrued research and development expenses or the level of services performed in any reporting period presented.

We expense the total cost of a certain long-term manufacturing development contract ratably over the estimated life of the contract, or the total amount paid if greater.

Accounting for Stock-Based Compensation

Beginning in the second quarter of 2014, we awarded options and restricted stock units. We measure stock-based awards granted to employees and directors at fair value on the date of grant and recognize the corresponding compensation expense of the awards, net of estimated forfeitures, over the requisite service periods, which correspond to the vesting periods of the awards. The Company revalues non-employee options each reporting period using the fair market value of the Company's common stock as of the last day of each reporting period.

Key Assumptions. Our Black-Scholes-Merton option-pricing model requires the input of highly subjective assumptions, including the fair value of the underlying common stock, the expected volatility of the price of our common stock, the expected term of the option, risk-free interest rates and the expected dividend yield of our common stock. These estimates involve inherent uncertainties and the application of management's judgment. If factors change and different assumptions are used, our stock-based compensation expense could be materially different in the future. These assumptions are estimated as follows:

- Fair value of our common stock—Our common stock is valued by reference to the publicly-traded price of our common stock.
- Expected volatility—As we do not have any trading history for our common stock, the expected stock price volatility for our common stock was estimated by taking the average historic price volatility for industry peers based on daily price observations for common stock values over a period equivalent to the expected term of our stock option grants. We did not rely on implied volatilities of traded options in our industry peers' common stock because the volume of activity was relatively low. We intend to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of our own common stock share price becomes available.

- **Expected term**—The expected term represents the period that our stock-based awards are expected to be outstanding. It is based on the “simplified method” for developing the estimate of the expected life of a “plain vanilla” stock option. Under this approach, the expected term is presumed to be the midpoint between the average vesting date and the end of the contractual term for each vesting tranche. We intend to continue to apply this process until a sufficient amount of historical exercise activity is available to be able to reliably estimate the expected term.
- **Risk-free interest rate**—The risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the options for each option group.
- **Dividend yield**—We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we used an expected dividend yield of zero.
- **Forfeitures**—We estimate forfeitures at the time of grant and revise those estimates periodically in subsequent periods. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest.

Common Stock Valuations. Prior to our IPO, the fair value of the common stock underlying our stock options was determined by our board of directors, which intended all options granted to be exercisable at a price per share not less than the per share fair value of our common stock underlying those options on the date of grant. The valuations of our common stock were determined in accordance with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation. The assumptions we used in the valuation model are highly complex and subjective. We base our assumptions on future expectations combined with management judgment. In the absence of a public trading market, our board of directors, with input from management, exercised significant judgment and considered numerous objective and subjective factors to determine the fair value of our common stock as of the date of each option grant and stock award. These judgments and factors will not be necessary to determine the fair value of new awards once the underlying shares begin trading. For now we included the following factors:

- the prices, rights, preferences and privileges of our Series A preferred stock relative to those of our common stock;
- lack of marketability of our common stock;
- our actual operating and financial performance;
- current business conditions and projections;
- hiring of key personnel and the experience of our management;
- our stage of development;
- illiquidity of share-based awards involving securities in a private company;
- the U.S. capital market conditions; and
- the likelihood of achieving a liquidity event, such as an offering or a merger or acquisition of our company given prevailing market conditions.

The fair market value per share of our common stock for purposes of determining stock-based compensation is now the closing price of our common stock as reported on The NASDAQ Stock Market on the applicable grant date.

Classification of Securities

We apply the principles of ASC 480-10 “Distinguishing Liabilities From Equity” and ASC 815-40 “Derivatives and Hedging—Contracts in Entity’s Own Equity” to determine whether financial instruments such as warrants, contingently issuable shares and shares subject to repurchase should be classified as liabilities or equity and whether beneficial conversion features exist. Financial instruments such as warrants that are evaluated to be classified as liabilities are fair valued upon issuance and are remeasured at fair value at subsequent reporting periods with the resulting change in fair value recorded in other income/ (expense). The fair value of warrants is estimated using the Black-Scholes-Merton model and requires the input of subjective assumptions including expected stock price volatility and expected life.

Income Taxes

As of December 31, 2016, we had net operating loss carryforwards for federal and state income tax purposes of \$24.5 million and \$17.1 million, respectively, which will begin to expire in 2033, subject to limitations. Our management has evaluated the factors bearing upon the realizability of our deferred tax assets, which are comprised principally of net operating loss carryforwards. Our management concluded that, due to the uncertainty of realizing any tax benefits as of December 31, 2016, a valuation allowance was necessary to fully offset our deferred tax assets. We have evaluated our uncertain tax positions and determined that we have no liabilities from unrecognized tax benefits and therefore we have not incurred any penalties or interest. The Tax Reform Act of 1986, as amended, limits the use of net operating loss and tax credit carryforward in certain situations where changes occur in the stock ownership of a company. Utilization of the domestic NOL and tax credit forwards may be subject to a substantial annual limitation due to ownership change limitations that may have occurred or that could occur in the future, as required by the Internal Revenue Code Section 382, as well as similar state provisions.

Recent Accounting Pronouncements

In July 2017, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2017-11, “Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Non-controlling Interests with a Scope Exception” (“ASU 2017-11”), which addresses the complexity of accounting for certain financial instruments with down round features. Down round features are features of certain equity-linked instruments (or embedded features) that result in the strike price being reduced on the basis of the pricing of future equity offerings. Current accounting guidance creates cost and complexity for entities that issue financial instruments (such as warrants and convertible instruments) with down round features that require fair value measurement of the entire instrument or conversion option. The amendments in Part I of this ASU are effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. We are currently evaluating the impact of the adoption of ASU 2017-11 on its consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, “Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting” (“ASU 2017-09”), which provides guidance on determining which changes to the terms and conditions of share-based payment awards require an entity to apply modification accounting under Topic 718. The amendments in this ASU are effective for all entities for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim period, for (1) public business entities for reporting periods for which financial statements have not yet been issued and (2) all other entities for reporting periods for which financial statements have not yet been made available for issuance. The amendments in this ASU should be applied prospectively to an award modified on or after the adoption date. We do not expect the adoption of ASU 2017-09 to have a material impact on our consolidated financial statements.

In February 2017, the FASB issued ASU No. 2017-05, “Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets” (“ASU 2017-05”), which clarifies the scope of the nonfinancial asset guidance in Subtopic 610-20. This ASU also clarifies that the derecognition of all businesses and nonprofit activities (except those related to conveyances of oil and gas mineral rights or contracts with customers) should be accounted for in accordance with the derecognition and deconsolidation guidance in Subtopic 810-10. The amendments in this ASU also provide guidance on the accounting for what often are referred to as partial sales of nonfinancial assets within the scope of Subtopic 610-20 and contributions of nonfinancial assets to a joint venture or other noncontrolled investee. The amendments in this ASU are effective for annual reporting reports beginning after December 15, 2017, including interim reporting periods within that reporting period. Public entities may apply the guidance earlier but only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. We do not expect the adoption of ASU 2017-05 to have a material impact on our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04 related to goodwill impairment testing. This ASU eliminates Step 2 from the goodwill impairment test. Under the new guidance, if a reporting unit’s carrying amount exceeds its fair value, the entity will record an impairment charge based on that difference. The impairment charge will be limited to the amount of goodwill allocated to that reporting unit. Previously, if the fair value of a reporting unit was lower than its carrying amount (Step 1), an entity was required to calculate any impairment charge by comparing the implied fair value of goodwill with its carrying amount (Step 2). Additionally, under the new standard, entities that have reporting units with zero or negative carrying amounts will no longer be required to perform the qualitative assessment to determine whether to perform Step 2 of the goodwill impairment test. As a result, reporting units with zero or negative carrying amounts will generally be expected to pass the simplified impairment test; however, additional disclosure will be required of those entities. This ASU will be effective beginning in the first quarter of our fiscal year 2020. Early adoption is permitted for annual and interim goodwill impairment testing dates after January 1, 2017. The new guidance must be adopted on a prospective basis. We early adopted this ASU in 2017. For impact of the adoption of this standard, refer to Note 6 “Goodwill” to the Condensed Consolidated Financial Statements.

In November 2016, the FASB issued ASU No. 2016-18, Statement of Cash Flows: Restricted Cash, or ASU 2016-18, that will require entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents and restricted cash and restricted cash equivalents in the statement of cash flows. When cash, cash equivalents, restricted cash and restricted cash equivalents are presented in more than one line item on the balance sheet, the new guidance requires a reconciliation of the totals in the statement of cash flows to the related captions in the balance sheet. This reconciliation can be presented either on the face of the statement of cash flows or in the notes to the financial statements. Entities will also have to disclose the nature of their restricted cash and restricted cash equivalent balances. ASU 2016-18 becomes effective for fiscal years beginning after December 15, 2017, and interim periods within those years, with early adoption permitted. Any adjustments must be reflected as of the beginning of the fiscal year that includes that interim period. The adoption of this standard is not expected to have an impact on our financial position or results of operations.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments, which addresses the following cash flow issues: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; (3) contingent consideration payments made after a business combination; (4) proceeds from the settlement of insurance claims; (5) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies; (6) distributions received from equity

method investees; (7) beneficial interests in securitization transactions; and (8) separately identifiable cash flows and application of the predominance principle. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years and are effective for all other entities for fiscal years beginning after December 15, 2018 and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. We are currently evaluating the impact of the adoption of ASU No. 2016-15 on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, which simplifies several aspects of the accounting for employee stock-based payment transactions. The areas for simplification in ASU No. 2016-09 include the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Effective January 1, 2017, we adopted ASU No. 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. Among other requirements, the new guidance requires all tax effects related to share-based payments at settlement (or expiration) to be recorded through the income statement. Previously, tax benefits in excess of compensation cost (“windfalls”) were recorded in equity, and tax deficiencies (“shortfalls”) were recorded in equity to the extent of previous windfalls, and then to the income statement. Under the new guidance, the windfall tax benefit is to be recorded when it arises, subject to normal valuation allowance considerations. The adoption of this standard did not have any impact to the Statement of Operations or the Statement of Cash Flows. As of December 31, 2016, we had no unrecognized deferred tax assets related to excess tax benefits, and as such, there was no cumulative-effect adjustment to the beginning accumulated deficit. Additionally, the treatment of forfeitures has not changed as we elected to continue our current process of estimating the number of forfeitures. As such, this has no cumulative effect on accumulated deficit.

In March 2016, the FASB issued ASU No. 2016-06, Derivatives and Hedging (Topic 815): Contingent Put and Call Options in Debt Instruments. ASU 2016-06 clarifies that an entity will only need to consider the four-step decision sequence, as provided by the amended ASC 815-15-25-42, to assess whether the economic characteristics and risks of embedded put or call options are clearly related to those of their hosts. ASU 2016-06 is effective for public business entities for financial statements issued for fiscal years beginning after December 15, 2016; accordingly, we adopted this guidance during 2017.

In February 2016, the FASB issued Accounting Standards Update (“ASU”) No. 2016-02, Leases (Topic 842), which provides guidance for accounting for leases. Under ASU 2016-02, the Company will be required to recognize the assets and liabilities for the rights and obligations created by leased assets. ASU 2016-02 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. We are currently evaluating the impact of the adoption of ASU 2016-02 on our consolidated financial statements.

In May 2014, the FASB issued ASU No. 2014-09, “Revenue from Contracts with Customers.” The objective of ASU 2014-09 is to establish a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and will supersede most of the existing revenue recognition guidance, including industry-specific guidance. The core principle of the new standard is that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard is effective for annual reporting periods beginning after December 15, 2017 and allows for prospective or retrospective application. We currently anticipate utilizing the full retrospective method of adoption allowed by the standard, in order to provide for comparative results in all periods presented, and plan to adopt the standard as of January 1, 2018. The Company is in the process of evaluating the impact of the new standard and related guidance on our consolidated financial statements and related disclosures including the impact of the new standard on its accounting policies, processes, and system requirements. While we continue to assess all potential impacts under the new standard, there is the potential for

significant impacts to our revenue recognition policy relating to royalty revenues and certain other revenues that are currently recognized on a cash basis or sell through method. Upon adoption of these standards, these revenues will be recognized in the periods in which the sales occur, subject to the constraint on variable consideration. We currently do not expect that adopting these standards will have a material impact on our Condensed Consolidated Financial Statements.

JOBS Act

In April 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period, and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Principal Accountants

Representatives of the principal accountants for the current year and most recently completed fiscal year are not expected to be present at the Special Meeting, but will have the opportunity to make a statement if they desire to do so and will be available to respond to questions.

STOCKHOLDER PROPOSALS FOR 2018 ANNUAL MEETING

In accordance with SEC Rule 14a-8, in order for stockholder proposals intended to be presented at the 2018 Annual Meeting of Stockholders to be eligible for inclusion in our proxy statement and the form of proxy for such meeting, they must have been received by us at our executive offices in San Francisco, California, before December 15, 2017. The Board of Directors has not determined the date of the 2018 Annual Meeting of the Company's Stockholders, but does not currently anticipate that the date will be changed by more than 30 calendar days from the date of this year's annual meeting.

AVAILABILITY OF ANNUAL REPORT TO STOCKHOLDERS AND REPORT ON FORM 10-K

Copies of our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 as filed with the Securities and Exchange Commission (exclusive of exhibits and documents incorporated by reference), may be obtained for free by directing written requests to: Jaguar Health, Inc., Attention: Karen S. Wright, 201 Mission Street, Suite 2375, San Francisco, CA 94105 (415.371.8300 phone). Copies of exhibits and basic documents filed with the Annual Report on Form 10-K or referenced therein will be furnished to stockholders upon written request and payment of a nominal fee in connection with the furnishing of such documents. You may also obtain the Annual Report on Form 10-K over the Internet at the SEC's website, www.sec.gov, or on our corporate website at <https://jaguar.health/>.

LIST OF THE COMPANY'S STOCKHOLDERS

A list of our stockholders as of January 17, 2018, the record date for the Special Meeting, will be available for inspection at our corporate headquarters during normal business hours during the 10-day period prior to the Special Meeting. The list of stockholders will also be available for such examination at the Special Meeting.

DELIVERY OF PROXY MATERIALS TO HOUSEHOLDS

Unless contrary instructions are received, we may send a single copy of the Proxy Statement and Notice of Special Meeting to any household at which two or more stockholders reside if we believe the stockholders are members of the same family. Each stockholder in the household will continue to receive a separate proxy card. This process is known as "householding" and helps reduce the volume of duplicate information received at a single household, which reduces costs and expenses borne by us.

If you would like to receive a separate set of our annual disclosure documents this year or in future years, follow the instructions described below and we will deliver promptly a separate set. Similarly, if you share an address with another stockholder and the two of you would like to receive only a single set of our annual disclosure documents, follow the instructions below:

1. If your shares are registered in your own name, please contact our transfer agent by writing to them at Computershare Investor Services, PO Box 30170, College Station, Texas 77842-3170 (Attn: Jaguar Health, Inc. Representative) or calling 1-800-962-4284.
2. If a bank, broker or other nominee holds your shares, please contact your bank, broker or other nominee directly.

OTHER MATTERS THAT MAY COME BEFORE THE SPECIAL MEETING

Our Board of Directors knows of no matters other than those referred to in the accompanying Notice of Special Meeting of Stockholders which may properly come before the Special Meeting. However, if any other matter should be properly presented for consideration and voting at the Special Meeting or any adjournments or postponements thereof, it is the intention of the persons named as proxies on the enclosed form of proxy card to vote the shares represented by all valid proxy cards in accordance with their judgment of what is in the best interest of the Company.

By Order of the Board of Directors.

A handwritten signature in black ink that reads "Lisa A. Conte". The signature is written in a cursive style with a large initial "L".

Lisa A. Conte
Chief Executive Officer & President

**CERTIFICATE OF AMENDMENT TO THE
THIRD AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF
JAGUAR HEALTH, INC.**

Jaguar Health, Inc., a corporation organized and existing under the laws of the State of Delaware (the “Corporation”), hereby certifies that:

1. The name of the Corporation is Jaguar Health, Inc.. The date of filing of the Corporation’s original Certificate of Incorporation with the Secretary of State of the State of Delaware was June 6, 2013, under the name Jaguar Animal Health, Inc.

2. This Certificate of Amendment to the Third Amended and Restated Certificate of Incorporation was duly authorized and adopted by the Corporation’s Board of Directors and stockholders in accordance with Section 242 of the General Corporation Law of the State of Delaware and amends the provisions of the Company’s Third Amended and Restated Certificate of Incorporation.

3. The amendments to the existing Third Amended and Restated Certificate of Incorporation being effected hereby are as follows:

[a. Delete the first paragraph of Article IV in its entirety and to substitute in its place the following:

“The total number of shares of stock that the Corporation shall have authority to issue is Five Hundred Sixty Million (560,000,000) shares, consisting of (i) Five Hundred Million (500,000,000) shares of common stock, \$0.0001 par value per share (“*Common Stock*”), (ii) Fifty Million (50,000,000) shares of convertible non-voting common stock, \$0.0001 par value per share (“*Non-Voting Common Stock*”), and (iii) Ten Million (10,000,000) shares of Preferred Stock, \$0.0001 par value per share (“*Preferred Stock*”).”](1)

[b. Add the following paragraph at the end of Section IV.A. as a new Section IV.A.6:

“6. *Reverse Stock Split*. Upon the effectiveness (the “Effective Time”) pursuant to the DGCL of this amendment to the Third Restated Certificate, each * shares of Common Stock issued and outstanding immediately prior to the Effective Time shall be combined into one (1) validly issued, fully paid and non-assessable share of Common Stock without any further action by the Corporation or the holder thereof; *provided* that no fractional shares shall be issued to any holder and that instead of issuing such fractional shares, the Corporation shall round shares up to the nearest whole number. Each certificate that immediately prior to the Effective Time represented shares of Common Stock (“Old Certificates”), shall thereafter represent that number of shares of Common Stock into which the shares of Common Stock represented by the Old Certificate shall have been combined, subject to the treatment of fractional shares as described above.”

* Number between one and two-tenths (1.2) and ten (10) as determined by the Board of Directors in its sole discretion.](2)

(1) To be included if the stockholders approve Proposal 1.

(2) To be included if the stockholders approve Proposal 2 and the Board elects, in its sole discretion, to proceed with the reverse stock split.

4. This Certificate of Amendment to the Third Amended and Restated Certificate of Incorporation was approved by written consent of the board of directors and by the stockholders of this Corporation at a meeting thereof duly called and held on March 12, 2018.

5. This Certificate of Amendment to the Third Amended and Restated Certificate of Incorporation shall be effective immediately upon filing by the Delaware Secretary of State.

IN WITNESS WHEREOF, Jaguar Health, Inc. has caused this Certificate of Amendment to the Third Amended and Restated Certificate of Incorporation to be signed by [_____], its [_____], this [•] day of [•], 2018.

JAGUAR HEALTH, INC.

A Delaware corporation

By: _____

Name: _____

Title: _____