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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended March 31, 2020
OR
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to
Commission file number 001-36714

JAGUAR HEALTH, INC.
(Exact name of registrant as specified in its charter)

Delaware	**46-2956775**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

201 Mission Street, Suite 2375
San Francisco, California 94105
(Address of principal executive offices, zip code)

(415) 371-8300
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ Smaller reporting company ☒
Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Securities registered pursuant to Section 12(b) of the Act:

Title of each class:	**Trading Symbol(s)**	**Name of each exchange on which registered:**
Common Stock, Par Value $0.0001 Per Share	JAGX	The NASDAQ Capital Market

As of May 8, 2020 there were 18,513,196 shares of voting common stock, par value $0.0001 per share, outstanding, 40,301,237 shares of non-voting common stock, par value $0.0001 per share, outstanding (convertible into 38,382 shares of voting common stock), 5,524,926 shares of Series A redeemable convertible preferred stock, par value $0.0001 per share, outstanding (convertible into 473,565 shares of voting common stock, subject to certain voting restrictions as provided in the Certificate of Designation for the convertible preferred stock), 1,971 shares of Series B convertible preferred stock, par value $0.0001 per share, outstanding (convertible into 4,423,250 shares of voting common stock, subject to certain voting restrictions as provided in the Certificate of Designation for the convertible preferred stock), and 7,534 shares of Series B-2 convertible preferred stock, par value $0.0001 per share, outstanding (convertible into 1,431,460 shares of voting common stock, subject to certain restrictions as provided in the Certificate of Designation for the convertible preferred stock).

PART I. — FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements

JAGUAR HEALTH, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

(In thousands, except share and per share data)	March 31, 2020	December 31, 2019
Assets		
Current assets:		
Cash	$ 1,215	$ 3,495
Restricted cash	388	388
Accounts receivable	1,083	1,692
Other receivable	4	2
Inventory	2,704	2,129
Operating lease - right-of-use asset	372	553
Prepaid expenses and other current assets	1,074	1,263
Total current assets	6,840	9,522
Property and equipment, net	707	710
Intangible assets, net	25,602	26,024
Other assets	127	154
Total assets	$ 33,276	$ 36,410
Liabilities, convertible preferred stock and stockholders' equity		
Current liabilities:		
Accounts payable	$ 5,597	$ 5,352
Accrued liabilities	3,309	2,922
Warrant liability	2	3
Operating lease liability	228	337
Notes payable, net of discount	7,132	6,778
Total current liabilities	16,268	15,392
Notes payable long term	400	450
Total liabilities	16,668	15,842
Commitments and contingencies (See Note 6)		
Series A redeemable convertible preferred stock: $0.0001 par value, 5,524,926 shares authorized at March 31, 2020 and December 31, 2019; 5,524,926 shares issued and outstanding at March 31, 2020 and December 31, 2019; (redemption amount of $12,738,822 at March 31, 2020 and December 31, 2019; liquidation preference of $9,199,002 at March 31, 2020 and December 31, 2019)	10,375	9,895
Stockholders' equity		
Series B convertible preferred stock: $0.0001 par value, 11,000 shares authorized at March 31, 2020 and December 31, 2019; 1,971 shares issued and outstanding at March 31, 2020 and December 31, 2019	476	476
Series B-1 convertible preferred stock: $0.0001 par value; 63 shares authorized at March 31, 2020 and December 31, 2019; zero shares issued and outstanding at March 31, 2020 and December 31, 2019	—	—
Series B-2 convertible preferred stock: $0.0001 par value, 10,165 shares authorized at March 31, 2020 and December 31, 2019; 7,534 and 10,165 shares issued and outstanding at March 31, 2020 and December 31, 2019, respectively	916	1,236
Common stock - voting: $0.0001 par value, 150,000,000 shares authorized at March 31, 2020 and December 31, 2019; 18,286,196 and 14,273,061 shares issued and outstanding at March 31, 2020 and December 31, 2019, respectively	2	1
Common stock - non-voting: $0.0001 par value, 50,000,000 shares authorized at March 31, 2020 and December 31, 2019; 40,301,237 shares issued and outstanding at March 31, 2020 and December 31, 2019	4	4
Additional paid-in capital	145,861	142,046
Accumulated deficit	(141,026)	(133,090)
Total stockholders' equity	6,233	10,673
Total liabilities, convertible preferred stock and stockholders' equity	$ 33,276	$ 36,410

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

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

(In thousands, except share and per share data)	Three Months Ended March 31, 2020	2019
Product revenue	$ 869	$ 1,590
Total revenue	869	1,590
Operating expenses		
Cost of product revenue	676	865
Research and development	1,582	1,421
Sales and marketing	1,469	1,565
General and administrative	3,149	3,514
Series B convertible preferred stock inducement expense	1,647	—
Total operating expenses	8,523	7,365
Loss from operations	(7,654)	(5,775)
Interest expense	(199)	(547)
Other income (expense)	(82)	6
Change in fair value of financial instruments	(1)	(46)
Loss on extinguishment of debt	—	(1,942)
Loss before income tax expense	(7,936)	(8,304)
Income tax expense	—	—
Net loss	(7,936)	(8,304)
Deemed dividend attributable to accretion of Series A convertible preferred stock	(480)	—
Net loss attributable to common shareholders	$ (8,416)	$ (8,304)
Net loss per share, basic and diluted	$ (0.56)	$ (16.84)
Weighted-average common shares outstanding, basic and diluted	15,141,906	493,202

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

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

(In thousands, except share data)	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Series B-1 Convertible Preferred Stock		Series B-2 Convertible Preferred Stock		Common stock - voting		Common stock - non-voting		Additional paid-in capital	Accumulated deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balances as of January 1, 2019	5,524,926	$ 9,000	—	$ —	—	$ —	—	$ —	351,472	$ —	40,301,237	$ 4	$ 99,930	$ (94,551)	$ 5,383
Issuance of common stock, net of offering costs	—	—	—	—	—	—	—	—	190,476	—	—	—	2,502	—	2,502
Issuance of common stock in exchange of notes payable and accrued interest	—	—	—	—	—	—	—	—	268,066	1	—	—	6,072	—	6,073
Issuance of common stock in exchange of accrued interest, January 2019	—	—	—	—	—	—	—	—	19,752	—	—	—	447	—	447
Issuance of common stock, net of offering costs, March 2019	—	—	—	—	—	—	—	—	19,019	—	—	—	266	—	266
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	427	—	427
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	(8,304)	(8,304)
Balances as of March 31, 2019	5,524,926	$ 9,000	—	$ —	—	$ —	—	$ —	848,785	$ 1	40,301,237	$ 4	$ 109,644	$ (102,855)	$ 6,794

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Series B-1 Convertible Preferred Stock		Series B-2 Convertible Preferred Stock		Common stock - voting		Common stock - non-voting		Additional paid-in capital	Accumulated deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balances as of January 1, 2020	5,524,926	$ 9,895	1,971	$ 476	—	$ —	10,165	$ 1,236	14,273,061	$ 1	40,301,237	$ 4	$ 142,046	$ (133,090)	$ 10,673
Shares issued on exercise of Series 1, Series 2, and 2019 Bridge Note warrants	—	—	—	—	—	—	—	—	548,962	—	—	—	392	—	392
Shares issued on exercise of Series 2 warrants and inducement offer conversion of Series B-1 convertible preferred stock	—	—	—	—	—	—	—	—	1,250,000	1	—	—	2,340	—	2,341
Issuance of common stock in PIPE financing, net of issuance costs of $51	—	—	—	—	—	—	—	—	1,714,283	—	—	—	668	—	668
Underwriter settlement offering cost	—	—	—	—	—	—	—	—	—	—	—	—	(185)	—	(185)
Conversion of Series B-2 convertible preferred stock into common stock	—	—	—	—	—	—	(2,631)	(320)	499,890	—	—	—	320	—	—
Accretion to redemption value of redeemable preferred stock	—	480	—	—	—	—	—	—	—	—	—	—	(480)	—	(480)
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	760	—	760
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	(7,936)	(7,936)
Balances as of March 31, 2020	5,524,926	$10,375	1,971	$ 476	—	$ —	7,534	$ 916	18,286,196	$ 2	40,301,237	$ 4	$ 145,861	$ (141,026)	$ 6,233

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

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

(in thousands)	Three Months Ended March 31, 2020	Three Months Ended March 31, 2019
Cash flows from operating activities		
Net loss	$ (7,936)	$ (8,304)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization expense	432	437
Loss on extinguishment of debt	—	1,942
Amortization of operating lease right-of-use-assets	191	56
Expense on modification of warrants	85	—
Series B convertible preferred stock inducement expense	1,647	—
Stock-based compensation	760	427
Amortization of debt issuance costs and debt discount	14	178
Change in fair value of warrants, conversion option and derivative liability	(1)	46
Changes in assets and liabilities		
Accounts receivable	609	81
Other receivable	(1)	4
Inventory	(575)	382
Prepaid expenses and other current assets	189	150
Other non-current assets	27	27
Operating lease liabilities	(119)	(93)
Accounts payable	191	1,150
Accrued expenses	191	52
Total cash used in operating activities	(4,296)	(3,465)
Cash flows from investing activities		
Purchase of equipment	(7)	—
Total cash used in investing activities	(7)	—
Cash flows from financing activities		
Proceeds from issuance of notes payable, net of issuance costs and debt discount	350	800
Repayment of notes payable	(50)	(100)
Proceeds from issuance of common stock	—	2,769
Proceeds from issuance of common stock in PIPE financing, net of issuance costs	698	—
Proceeds from shares issued on exercise of 2019 Bridge warrants	173	—
Proceeds from shares issued on exercise of Series 1 warrants	144	—
Proceeds from shares issued on exercise of Series 2 warrants	708	—
Total cash provided by financing activities	2,023	3,469
Net increase in cash and restricted cash	(2,280)	4
Cash and restricted cash at beginning of period	3,883	2,568
Cash and restricted cash at end of period	$ 1,603	$ 2,572

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

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

Supplemental schedule of cash flow information		
Cash paid for interest	$ 6	$ —
Supplemental schedule of non-cash financing and investing activities		
Common stock issued as redemption of notes payable and related interest	$ —	$ 4,821
Issuance of March 2019 letter of credit warrant	$ —	$ 116
Issuance of warrants with Notes Payable	$ —	$ 893
Accretion to redemption value of Series A redeemable convertible preferred stock	$ 480	$ —
Conversion of Series B-2 convertible preferred stock into common stock	$ 320	$ —
Offering costs included in accounts payable and accrued expenses	$ 240	$ —
Cash and Restricted Cash:		
Cash	$ 1,215	$ 2,572
Restricted cash	388	—
Total cash and restricted cash	$ 1,603	$ 2,572

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

JAGUAR HEALTH, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Business

Jaguar Health, Inc. (“Jaguar”, “we” 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. The Company's activities are subject to significant risks and uncertainties, including failing to secure additional funding in order to timely complete the development and commercialization of products.

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. Food and Drug Administration (“FDA”) for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy.

The Company manages its operations through two segments—human health and animal health and is headquartered in San Francisco, California.

Nasdaq Communication and Compliance

On December 30, 2019, the Company received written notice from the Staff of the Listing Qualifications Department (the “Staff”) of The Nasdaq Stock Market LLC (“Nasdaq”) indicating that the bid price for the Company’s common stock for the last 30 consecutive business days had closed below the minimum $1.00 per share required for continued listing under Nasdaq Listing Rule 5550(a)(2).

Under Nasdaq Listing Rule 5810(c)(3)(A), the Company has been granted a 180 calendar day grace period, or until June 29, 2020, to regain compliance with the minimum bid price requirement. The continued listing standard will be met if the Company evidences a 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. In order for Nasdaq to consider granting the Company additional time beyond June 29, 2020, the Company would be required, among other things, to meet the continued listing requirement for market value of publicly held shares as well as all other standards for initial listing on Nasdaq, with the exception of the minimum bid price requirement. If measured today, the Company would qualify for Nasdaq’s consideration of an extension because the Company currently has stockholders’ equity of at least $5 million. In the event the Company does not regain compliance with the $1.00 bid price requirement by June 29, 2020, eligibility for Nasdaq’s consideration of a second 180 day grace period would be determined on the Company’s compliance with the above referenced criteria on June 29, 2020.

On April 17, 2020, the Company received a letter from Nasdaq indicating that given the extraordinary market conditions from COVID19, Nasdaq has determined to toll the compliance periods for bid price and market value of publicly held shares through June 30, 2020. As a result, companies presently in compliance period for any Price-based Requirements will remain at that stage of the process and will not be subject to being delisted for these concerns. Starting on July 1, 2020, companies will receive the balance of any pending compliance period in effect at the start of the tolling period to regain compliance. Accordingly, since the Company had 72 calendar days remaining in its Bid compliance period as of April 16, 2020, it will, upon reinstatement of the Price-based Requirements, still have 72 calendar days from July 1, 2020, or until September 10, 2020, to regain compliance.

The Company is diligently working to evidence compliance with the minimum bid price requirement for continued listing on Nasdaq; however, there can be no assurance that the Company will be able to regain compliance or that Nasdaq will grant the Company a further extension of time to regain compliance, if necessary. If the Company fails to regain compliance with the Nasdaq continued listing standards, its common stock will be subject to delisting from Nasdaq.

Liquidity and Going Concern

The accompanying condensed consolidated financial statements have been prepared assuming the Company will continue as a going concern. The Company, since its inception, has incurred recurring operating losses and negative cash flows from operations and has an accumulated deficit of $141.0 million as of March 31, 2020. The Company expects to incur substantial losses and negative cash flows 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 and generating positive cash flows from operations. There is no assurance that the Company will have adequate cash balances to maintain its operations. In addition, as a result of the recent outbreak of novel COVID-19, the Company may experience disruptions in fiscal year 2020 and beyond that could severely impact its supply chain, ongoing and future clinical trials and commercialization of Mytesi.

Although the Company plans to finance its operations and cash flow needs through equity and/or debt financing, collaboration arrangements with other entities, license royalty agreements, as well as revenue from future product sales, the Company does not believe its current cash balances are sufficient to fund its operating plan through one year from the issuance of these condensed consolidated financial statements. The Company has an immediate need to raise cash. There can be no assurance that additional funding will be available to the Company on acceptable terms, or on a timely basis, if at all, or that the Company will generate sufficient cash from operations to adequately fund operating needs. If the Company is unable to obtain an adequate level of financing needed for short-term operations and 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; accordingly, there is substantial doubt about the ability of the Company to continue in existence as a going concern. The accompanying condensed consolidated financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Potential Impact of the COVID-19

As a result of the recent outbreak of novel COVID-19, the Company may experience disruptions that could severely impact our supply chain, ongoing and future clinical trials and commercialization of Mytesi. It is currently not possible to predict how long the pandemic will last or the time that it will take for economic activity to return to prior levels. The Company does not yet know the full extent of any impact on its business or operations. The Company will continue to monitor the COVID-19 situation closely, and intend to follow health and safety guidelines as they evolve.

2. Summary of Significant Accounting Policies

Basis of Presentation

The condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information and on a basis consistent with the annual consolidated financial statements, and in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for a fair presentation of the periods presented. These interim financial results are not necessarily indicative of the results to be expected for the year ending December 31, 2020, or for any other future annual or interim period. These unaudited condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in our Annual Report on Form 10-K for the year ended December 31, 2019.

There has been no material change to the Company's significant accounting policies during the three months March 31, 2020, as compared to the significant accounting policies described in Note 2 of the “Notes to Consolidated Financial Statements” in the Company's Annual Report on Form 10-K for the year ended December 31, 2019.

Principles of Consolidation

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

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, acquired in-process research and development (“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, including estimates for product returns. Those estimates could change, and as a result, actual results could differ materially from those estimates.

Cash and Restricted Cash

Our cash on deposit may exceed United States federally insured limits at certain times during the year. We maintain cash accounts with certain major financial institutions in the United States. Restricted cash represents cash not available to us for immediate and general use.

Concentrations

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 insurance limits.

For the three months ended March 31, 2020 and 2019, substantially all of the Company’s revenue has been derived from the sale of Mytesi. For the three months ended March 31, 2020, the Company earned Mytesi revenue primarily from one pharmaceutical distributor in the United States. For the three months ended March 31, 2019, the Company earned Mytesi revenue primarily from three pharmaceutical distributors in the United States, each of whom amounted to a percentage of total net revenue of at least 10%. Revenue earned from each as a percentage of total net revenue is as follows:

	Three Months Ended March 31,	
	2020	2019
	(unaudited)	
Customer 1	96 %	68 %
Customer 2	— %	30 %
	96 %	98 %

The Company is subject to credit risk from its accounts receivable related to its sales. The Company generally does not perform evaluations of customers' financial condition and generally does not require collateral. The Company's

significant pharmaceutical distributors and their related accounts receivable balance as a percentage of total accounts receivable were as follows:

	March 31, 2020 (unaudited)	December 31, 2019
Customer 1	99 %	99 %
	99 %	99 %

No other customer represented more than 10% of the Company's accounts receivable balances as of those dates.

The Company is subject to supplier concentration risk from its suppliers. The Company sources raw material used to produce the active pharmaceutical ingredient in Mytesi from two suppliers and is dependent on single third-party contract manufacturers, both for the supply of the active pharmaceutical ingredient in Mytesi, as well as for the supply of finished products for commercialization.

Fair Value

The Company’s financial instruments include accounts receivable, accounts payable, accrued expenses, warrant liabilities, derivative assets and liabilities, equity-linked financial instruments and debt. 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 3 for the fair value measurements.

Inventories

Inventories are stated at the lower of cost or net realizable value. The Company calculates inventory valuation adjustments when conditions indicate that 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 net realizable value.

Land, Property and Equipment

Land is stated at cost, reflecting fair value of the property at July 31, 2017, the date of the Napo merger. Equipment is stated at cost, net of accumulated depreciation. Equipment begins to be depreciated when it is placed into service. Depreciation is calculated using the straight-line method over estimated useful lives ranging between 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 consolidated statements of 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.

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

Indefinite-lived Intangible Assets

Acquired in-process research and development ("IPR&D") are intangible assets acquired in the July 2017 Napo merger. Under ASC 805, IPR&D are 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. An impairment loss is measured based on the excess of the carrying amount over the asset's fair value. Definite-lived intangible assets are amortized on a straight-line basis over the estimated periods benefited and are reviewed when appropriate for possible impairment. The Company recorded no impairment in the three months ended March 31, 2020 and 2019.

Leases

ASC 842, Leases, requires lessees to recognize right-of-use assets and lease liabilities for all leases with a term of greater than 12 months regardless of their classification on the balance sheet and to provide expanded disclosures about leasing arrangements. The Company adopted ASC 842 on January 1, 2019 using the optional transition method with no restatements of comparative periods. There was no effect on accumulated deficit at adoption.

The Company elected to adopt the package of practical expedients to (i) not reassess whether expired or existing contracts are or contain leases, (ii) not reassess the lease classification for any expired or existing leases and (iii) not reassess the accounting for initial direct costs.

The adoption of the new leases standard resulted in the following adjustments to the consolidated balance sheet as of January 1, 2019:

(in thousands)	December 31, 2018	Adoption Impact	January 1, 2019
Operating lease right-of-use assets	$ —	$ 1,111	$ 1,111
Operating leases liabilities, current portion	—	337	337
Operating leases liabilities, long term	—	395	395
Deferred rent	380	(380)	—

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present. Operating lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected lease term. Because the interest rate implicit in lease contracts is typically not readily determinable, the Company utilizes its incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term, an amount equal to the lease payments in a similar economic environment. Certain adjustments to the right-of-use asset may be required for items such as initial direct costs paid or incentives received.

Operating Lease

The Company has a non-cancelable operating lease with CA-Mission Street Limited Partnership for its offices in San Francisco, California through September 30, 2020. The lease agreement calls for monthly base rents between $38,000 and $41,000 over the term of the lease. The Company has engaged a realtor to assist us in relocating to new office space starting on or near the termination of the current lease with CA-Mission Street Limited Partnership.

Research and Development Expense

Research and development expense consist of expenses incurred in performing research and development activities including related salaries, clinical trials 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 Topic 606, *Revenue from Contracts with Customers* ("ASC 606").

Practical Expedients, Elections, and Exemptions

The Company recognizes revenue in accordance with the core principle of ASC 606 or when there is a transfer of control of promised goods or services to customers in an amount that reflects the consideration that the Company expects to be entitled to in exchange for those goods or services.

The Company also elected a practical expedient available under ASC 606-10-32-18 that permits it to not adjust the amount of consideration for the effects of a significant financing component if, at contract inception, the expected period between the transfer of promised goods or services and customer payment is one year or less.

The Company has elected to treat shipping and handling activities as fulfillment costs.

Additionally, the Company elected to record revenue net of sales and other similar taxes.

Contracts

Effective January 16, 2019, Napo Pharmaceuticals, Inc. engaged Cardinal Health as its exclusive third party logistics distribution agent for commercial sales for the Company's Mytesi product and to perform certain other services which include, without limitation, storage, distribution, returns, customer support, financial support, Electronic Data Interchange ("EDI") and system access support (the "Exclusive Distribution Agreement") .

In addition to the terms and conditions of the Exclusive Distribution Agreement, Cardinal Health's purchase of products, and assumption of title therein, is set forth in the Title Model Addendum. The Title Model Addendum states that upon receipt of product at the 3PL Facility (Cardinal Health in La Vergne, Tennessee) from the Company, title and risk of loss for the Mytesi product purchased by Cardinal Health (excluding consigned inventory) shall pass to Cardinal Health, and title and risk of loss for consigned inventory shall remain with the Company until purchased by Cardinal Health in accordance with the Title Model Addendum. Napo Pharmaceuticals, Inc. considers Cardinal Health the Company's exclusive customer for Mytesi products per the Exclusive Distribution Agreement.

Jaguar's Neonorm and botanical extract products are primarily sold to distributors, who then sell the products to the end customers. Since 2014, the Company has entered into several distribution agreements with established distributors such as Animart, Vedco, VPI, RJ Matthews, Henry Schein, and Stockmen Supply to distribute the Company's products in the United States, Japan, and China. The distribution agreements and the related purchase order together meet the contract existence criteria under ASC 606-10-25-1. Jaguar sells directly to its customers without the use of an agent.

Performance obligations

For animal products sold by Jaguar Health, the single performance obligation identified above is the Company's promise to transfer the Company's animal products to distributors based on specified payment and shipping terms in the arrangement. Product warranties are assurance type warranties that do not represent a performance obligation. For the Company's human product, Mytesi, which is sold by Napo Pharmaceuticals Inc., the single performance obligation identified above is the Company's promise to transfer Mytesi to Cardinal Health, the Company's exclusive distributor for the product, based on specified payment and shipping terms as outlined in the Exclusive Distribution Agreement. The product warranties are assurance type warranties that do not represent a performance obligation.

Transaction price

For both Jaguar and Napo, the transaction price is the amount of consideration to which the Company expects to collect in exchange for transferring promised goods or services to a customer. The transaction price of Mytesi and Neonorm is the Wholesaler Acquisition Cost (“WAC”), net of discounts, returns, and price adjustments.

Allocate transaction price

For both Napo and Jaguar, the entire transaction price is allocated to the single performance obligation contained in each contract.

Point in time recognition

For both Napo and Jaguar, a single performance obligation is satisfied at a point in time, upon the free on board (“FOB”) terms of each contract when control, including title and all risks, has transferred to the customer.

Disaggregation of Product Revenue

Human

Sales of Mytesi are recognized as revenue when the products are delivered to the wholesaler. Revenues from the sale of Mytesi were $835,000 and $1,543,000 for the three months ended March 31, 2020 and 2019, respectively.

Animal

The Company recognized Neonorm revenues of $34,000 and $47,000 for the three months ended March 31, 2020 and 2019, respectively. Revenues are recognized upon shipment which is when title and control is transferred to the buyer. 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.

Collaboration Revenue

On September 24, 2018, the Company entered into a Distribution, License and Supply Agreement (“License Agreement”) with Knight Therapeutics ("Knight"). The License Agreement has a term of 15 years (with automatic renewals) and provides Knight with an exclusive right to commercialize current and future Jaguar human health products (including Crofelemer, Lechlemer, and any product containing a proanthocyanidin or with an anti-secretory mechanism) in Canada and Israel. In addition, Knight was granted a right of first negotiation for expansion to Latin America. Under the License Agreement, Knight is responsible for applying for and obtaining necessary regulatory approvals in the territory of Canada and Israel, as well as marketing, sales and distribution of the licensed products. Knight will pay a transfer price for all licensed products, and upon achievement of certain regulatory and sales milestones, Jaguar may receive payments from Knight in an aggregate amount of up to approximately $18 million payable throughout the initial 15-year term of the agreement. The Company did not have any license revenues for the three months ended March 31, 2020 and 2019.

Modifications to equity-classified instruments

In the three months ending March 31, 2020, the Company modified certain equity-classified warrants (see Note 8). It is the Company’s policy to determine the impact of modifications to equity-classified warrants by analogy to the share-based compensation guidance of ASC 718, *Compensation - Stock Compensation* (“ASC 718”). The model for a modified share-based payment award that is classified as equity and remains classified in equity after the modification is addressed in ASC 718-20-35-3. Pursuant to that guidance, the incremental fair value from the modification is recognized as an expense in the statement of operations to the extent the modified instrument has a higher fair value; however, in

certain circumstances, such as when an entire class of warrants are modified, the measured increase in fair value may be more appropriately recorded as a deemed dividend, depending upon the nature of the warrant modification.

In the three months ending March 31, 2020, the Company modified the terms of its Series B convertible preferred stock (see Note 9). For amendments to preferred stock, it is the Company's policy to measure the impact by analogy to ASC 470-50 in determining if such an amendment is an extinguishment or a modification. If the amendment results in an extinguishment, the Company follows the SEC staff guidance in ASC 260-10-S99-2 and ASC 470-20. If the amendment results in a modification, the Company follows the model in either ASC 718 or ASC 470-50, depending on the nature of the amendment.

Stock-Based Compensation

The Company's 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, non-employees and directors at fair value on the date of grant and recognizes the corresponding compensation expense of the awards, net of estimated forfeiture 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 determine the grant date fair value of options granted to employees, non-employees and directors.

Income Taxes

The Company uses the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial reporting and the tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized.

Comprehensive Loss

For all periods presented, the comprehensive loss was equal to the net loss; therefore, a separate statement of comprehensive loss is not included in the accompanying condensed consolidated financial statements.

Recent Accounting Pronouncements

There have been no other new accounting pronouncements adopted by the Company during the three months ended March 31, 2020, that the Company believes are of significance or potential significance to the Company.

In December 2019, the FASB issued ASU 2019-12, Income Taxes (Topic 740): *Simplifying the Accounting for Income Taxes*, which is intended to simplify various aspects related to accounting for income taxes. The standard also removes certain exceptions to the general principles in Topic 740 and clarifies and amends existing guidance to improve consistent application. The pronouncement is effective for the Company beginning January 1, 2021 with early adoption permitted. The Company is still evaluating the impact of the adoption of this standard.

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— Observable inputs such as quoted prices (unadjusted) for identical instruments in active markets.
- Level 2— Observable inputs such as quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, or model derived valuations whose significant inputs are observable.
- Level 3— Unobservable inputs that reflect the reporting entity's own assumptions.

The following tables set forth the fair value of the Company's financial instruments that were measured at fair value on a recurring basis as of March 31, 2020 and December 31, 2019.

	March 31, 2020 (unaudited)			
(in thousands)	Level 1	Level 2	Level 3	Total
Warrant liability	$ —	$ —	$ 2	$ 2
Total fair value	$ —	$ —	$ 2	$ 2

	December 31, 2019			
(in thousands)	Level 1	Level 2	Level 3	Total
Warrant liability	$ —	$ —	$ 3	$ 3
Total fair value	$ —	$ —	$ 3	$ 3

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

	Three Months Ended March 31, 2020
(in thousands)	Warrant Liability (unaudited)
Beginning fair value of Level 3 liability	$ 3
Change in fair value	(1)
Ending fair value of Level 3 liability	$ 2

Warrant Liability

The warrants associated with the Level 3 warrant liability activity for the three months ended March 31, 2020 were the November 2016 Series A warrants and the October 2018 Underwriter warrants, which at March 31, 2020 were valued at $3 and $2,096, respectively, in the Company's condensed consolidated balance sheet. The warrants associated with the Level 3 warrant liability activity for the year ended December 31, 2019 were the November 2016 Series A warrants, the October 2018 Underwriter warrants, the March 2019 LOC warrants and the Bridge warrants, which at December 31, 2019 were valued at $10, $3,482, zero and zero, respectively in the Company's consolidated balance sheet.

The Series A Warrants

The Series A warrant valuation of $3 at March 31, 2020 was computed using the Black-Scholes-Merton pricing model using a stock price of $0.53, a strike price of $787.50 per share, an expected term of 2.20 years, volatility of 141.60% and a risk-free discount rate of 0.29%. The Series A warrant valuation of $10 at December 31, 2019 was computed using the Black-Scholes-Merton pricing model using a stock price of $0.65, a strike price of $787.50 per

share, an expected term of 2.41 years, volatility of 143.41% and a risk-free discount rate of 1.62%. The net change in the fair value of the warrants of $7 for the three months ended March 31, 2020 was recorded as a gain in the change in fair value of financial instruments in the condensed statements of operations.

The October 2018 Underwriter Warrants

The October 2018 Underwriter Warrants valuation of $2,096 at March 31, 2020 was computed using the Black-Scholes-Merton pricing model using a stock price of $0.53, a strike price of $52.50 per share, an expected term of 3.50 years, volatility of 141.60% and a risk-free discount rate of 0.29%. The October 2018 Underwriter Warrants valuation of $3,482 at December 31, 2019 was computed using the Black-Scholes-Merton pricing model using a stock price of $0.65, a strike price of $52.50 per share, an expected term of 3.76 years, volatility of 143.41% and a risk-free discount rate of 1.69%. The net change in the fair value of the warrants of $1,386 for the three months ended March 31, 2020 was recorded as a gain in the change in fair value of financial instruments in the condensed statements of operations.

4. Balance Sheet Components

Inventory

Inventory at March 31, 2020 and December 31, 2019 consisted of the following:

(in thousands)	March 31, 2020 (unaudited)	December 31, 2019
Raw Material	$ 551	$ 457
Work in Process	1,234	1,211
Finished Goods	919	461
Inventory	$ 2,704	$ 2,129

Property and Equipment

Property and equipment at March 31, 2020 and December 31, 2019 consisted of the following:

(in thousands)	March 31, 2020 (unaudited)	December 31, 2019
Land	$ 396	$ 396
Lab equipment	418	411
Clinical equipment	65	65
Software	63	63
Total property and equipment at cost	942	935
Accumulated depreciation	(235)	(225)
Property and equipment, net	$ 707	$ 710

Depreciation and amortization expense was $10,000 and $15,000 in the three months ended March 31, 2020 and 2019, respectively.

Intangible Assets

Intangible assets at March 31, 2020 and December 31, 2019 consisted of the following:

(in thousands)	March 31, 2020 (unaudited)	December 31, 2019
Developed technology	$ 25,000	$ 25,000
Accumulated developed technology amortization	(4,444)	(4,028)
Developed technology, net	20,556	20,972
In-process research and development	4,800	8,800
Impairment	—	(4,000)
In process research and development, net	4,800	4,800
Trademarks	300	300
Accumulated trademark amortization	(54)	(48)
Trademarks, net	246	252
Total intangible assets, net	$ 25,602	$ 26,024

Amortization expense was $422,000 for the three months ended March 31, 2020 and 2019.

5. Related Party Transactions

Management Services Agreement

In March 2018, concurrent with the issuance of the Company's Series A convertible participating preferred stock to Sagard Capital Partners, the Company entered into a Management Services Agreement with Sagard Capital Partners. Under the agreement, Sagard Partners will provide consulting and management advisory service to the Company from March 2018 through March 2021. These services include assistance with strategic planning regarding the Company's commercial strategy, research and due diligence regarding human resource activities, and strategic advice in financial matters. In consideration for such services, the Company will pay Sagard Capital Partners an annual fee of $450,000, with total fees over the term of the agreement not to exceed $1,350,000. For the three months ended March 31, 2020, total fees incurred were $112,500. As of March 31, 2020, the Company had a balance due of $900,000.

Letter of Credit

In August 2018, to satisfy a letter of credit requirement in the Company's office lease agreement (see Note 6), Pacific Capital Management, LLC, one of the Company's existing shareholders, caused its financial institution to issue a letter of credit in the amount of $475,000 on behalf of the Company. In consideration of the letter of credit, in August 2018, the Company issued to Pacific Capital Management, LLC a warrant (see Note 8) to purchase 9,580 shares of the Company's voting common stock. As additional consideration, a payment of $45,000 was made to Pacific Capital Management, LLC in November 2019.

On March 24, 2020, the Company entered into a letter of credit agreement with Dr. Conte, the brother of Lisa Conte, the Company's President, CEO and member of the Company's board of directors, pursuant to which the Company will, subject to Pacific Capital Management, LLC's consent, replace the existing letter of credit in the amount of $475,000 entered into on August 28, 2018 by the Company with Pacific Capital Management, LLC to satisfy the letter of credit requirement in the Company's office lease agreement with a new letter of credit in the amount of $475,000. In consideration of the new letter of credit, the Company will pay Charles Conte an amount equal to $10,000 per month and reimburse up to $7,500 for reasonable out-of-pocket expenses incurred. The letter of credit will expire no earlier than December 31, 2020, provided, however that the Company, at no additional cost, may replace it on an earlier date.

2019 Bridge Notes

Between March 18, 2019 and June 26, 2019, three members of the Board of Directors of the Company entered into short-term Promissory Note Purchase Agreements (see Note 7, the "2019 Bridge Notes") with the Company: (i) Lisa Conte, the Company's CEO & President, purchased a short-term Promissory Note of $100,000 which the Company settled in July 2019. In consideration for the short-term financing, the Company issued Ms. Conte a warrant that became exercisable into 37,500 shares of the Company's common stock; (ii) James Bochnowski, purchased a short-term Promissory Note of $350,000 which the Company settled in July 2019. In consideration for the short-term financing, the Company issued Mr. Bochnowski a warrant that became exercisable into 218,750 shares of the Company's common stock; and (iii) Jonathan Siegel DBA JBS Healthcare Ventures, purchased a short-term Promissory Note of $75,000 which the Company settled in July 2019. In consideration for the short-term financing, the Company issued Mr. Siegel a warrant that became exercisable into 34,375 shares of the Company's common stock.

In addition, Sagard Capital Partners purchased a short-term Promissory Note of $500,000, which the Company settled in July 2019. In consideration for the short-term financing, the Company issued Sagard Capital Partners a warrant that became exercisable into 187,500 shares of the Company's common stock; and Jonathan Glaser, an existing shareholder, purchased short-term Promissory Notes of $500,000 which the Company settled in July 2019. In consideration for the short-term financing, the Company issued Mr. Glaser warrants that became exercisable into 250,000 shares of the Company's common stock.

6. Commitments and Contingencies

Commitments

Leases

On August 28, 2018, the Company entered into an office lease extension agreement for approximately 6,311 square feet of office space in San Francisco, CA. The term of the Lease began on September 1, 2018 and will expire on September 30, 2020, unless earlier terminated in accordance therewith. The monthly base rent under the Lease is as follows: $38,000 for the first twelve months, $39,544 for the subsequent twelve months, and $41,000 for the final month. The Company will also pay an additional monthly amount for the Company's proportionate share of the building's operating charges. An existing shareholder provided a standby letter of credit in the amount of $475,000 to the Lessor as collateral for the full performance by the Company of all of its obligations under the Lease. In consideration of the Letter of Credit, the Company issued the shareholder a five-year warrant (see Note 8) to purchase 9,580 shares of the Company's voting common stock. The $494,000 fair value of the Warrant was classified in stockholders' equity with an offset to deferred rent. With the Company's adoption of ASC 842 on January 1, 2019, the offset to deferred balance was classified as a right-of-use asset. Each month, $20,000 of this rent will be recognized as non-cash lease expense.

In December 2018, the Company did not meet a covenant per the terms of the $475,000 Letter of Credit, the result of which required the Company to issue a Letter of Credit of $122,000 to the shareholder who issued the original $475,000 letter of credit. In March 2019, the Company canceled the $122,000 letter of credit in lieu of issuing the shareholder a promissory note for that amount in April 2019, as well as issuing the shareholder a warrant (see Note 8).

The Company recognizes rent expense on a straight-line basis over the non-cancelable lease period. Rent expense was $191,000 and $172,000 for the three months ended March 31, 2020 and 2019, respectively. Rent expense is included in general and administrative expenses in the consolidated statements of operations. Future minimum lease payments under the non-cancelable operating leases as of March 31, 2020, and through to the end of the lease in September 2020 are $230,000.

Angel Pond Agreement

In October 2019, the Company engaged Angel Pond Capital LLC to explore potential licensing agreements and collaborations for Mytesi in China. In consideration of these services, the Company compensated Angel Pond Capital LLC with $140,000, paid via the issuance of 166,667 shares of the Company's common stock, for the initial four-month term of the agreement. The Company has the option to extend the agreement term for two months for $30,000 payable in shares of the Company's common stock. The Company is currently in discussions with Angel Pond Capital LLC on the terms to extend the agreement.

If a definitive commercial agreement is executed by the Company with an entity that does all or substantially all of its business in China and one with whom Angel Pond Capital LLC has had substantial contact on the Company's behalf prior to the expiration or termination of this Agreement, Angel Pond Capital LLC will be paid compensation equal to 6% (6.5% for certain engaged entities) of the amounts received by the Company from such engaged entity in the form of upfront licensing fees and regulatory milestone payments pursuant to such Definitive Commercial Agreement.

The Company will pay to Angel Pond Capital LLC sales milestone payments equal to $300,000 after the first $50,000,000 of "Net Sales" (as defined in a Definitive Commercial Agreement) has been achieved in China by an engaged entity, and $300,000 after each and every additional $50,000,000 in cumulative net sales in China by such engaged entity; provided, however, such milestone payments will be capped at 6% of the cumulative sales royalty payments received by the Company from such engaged entity.

If Angel Pond Capital LLC is able to raise equity capital for the Company from an engaged entity prior to the expiration or termination of the Agreement, Angel Pond Capital LLC will receive compensation equal to 6% of the total dollar amount raised.

If Angel Pond Capital LLC is instrumental in arranging for the sale of the Company to an engaged entity prior to the expiration or termination of the Agreement, then Angel Pond Capital LLC will be compensated determinant upon any such sale price. As of March 31, 2020, no qualifying amounts have been raised in China and no amounts are owed to Angel Pond as compensation.

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 $7.0 million. No payments have been made to date.

Revenue sharing commitment

On December 14, 2017, the Company announced its entry into a collaboration agreement with Seed Mena Businessmen Services LLC (“SEED”) for Equilevia™, the Company's non-prescription, personalized, premium product for total gut health in equine athletes. According to the terms of the Agreement, the Company will pay SEED 15% of total revenue generated from any clients or partners introduced to the Company by SEED in the form of fees, commissions, payments or revenue received by the Company or its business associates or partners, and the agreed-upon revenue percentage increases to 20% after the first million dollars of revenue. In return, SEED will provide the Company access to its existing United Arab Emirates (“UAE”) network and contacts and assist the Company with any legal or financial requirements. The agreement became effective on December 13, 2017 and will continue indefinitely until terminated by either party pursuant to the terms of the Agreement. No payments have been made to date.

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 (the “Plaintiff”) on behalf of shareholders of the Company who held shares on April 12, 2017 and were entitled to vote at the 2017 Special Shareholders Meeting, against the Company and certain individuals who were directors as of the date of the vote (collectively, the “Defendants”), in a matter captioned Tony Plant v. Jaguar Animal Health, Inc., et al., making 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 claims alleged false and misleading information provided to investors in the Joint Proxy Statement/Prospectus on Form S-4 (File No. 333 217364) declared effective by the Commission on July 6, 2017 related to the solicitation of votes from shareholders to approve the merger and certain transactions related thereto. The Company accepted service of the complaint and summons on behalf of itself and the United States-based director Defendants on November 1, 2017. The Company has not accepted service on behalf of, and Plaintiff has not yet served, the non-U.S.-based director Defendants.

On October 3, 2017, Plaintiff filed a motion seeking appointment as lead plaintiff and appointment of Monteverde & Associates PC as lead counsel. That motion was granted. Plaintiff filed an amended complaint against the Company and the United States based director Defendants on January 10, 2018. The Defendants filed a motion to dismiss on March 12, 2018, for which oral arguments were held on June 14, 2018. The court dismissed the amended complaint on September 20, 2018. Plaintiff was entitled to amend that complaint within 20 days from the date of dismissal. On October 10, 2018, Plaintiff filed a second amended complaint to focus on the Company’s commercial strategy in support of Equilevia and the related disclosure statements in the Form S-4 described above. On November 6, 2018, the Defendants moved to dismiss the second amended complaint. The Defendants argue in their motion that the second amended complaint fails to state a claim upon which relief can be granted because the omissions and misrepresentations alleged in the complaint are immaterial as a matter of law. The court denied the Defendants’ motion to dismiss on June 28, 2019. The Company answered the second amended complaint on August 2, 2019; the answer denied the material allegations of the second amended complaint. The parties are now engaged in discovery. If the

Plaintiff were able to prove his allegations in this matter and to establish the damages he asserts, then an adverse ruling could have a material adverse impact on the Company. The Company believes that it is not probable that an asset has been impaired or a liability has been incurred as of the date of the financial statements and the amount of any potential loss is not reasonably estimable.

Settlement of Underwriter Fee

In August 2018, the Company entered into an agreement with an underwriter pursuant to which the underwriter would aid the Company in identifying certain financing transactions, in exchange for a percentage fee of any such financing and warrants. In the first quarter of 2020, the Company and the underwriter agreed on a final settlement for the underwriter services comprised of a cash payment, warrants and common stock. The cash payment amount totals $386,560, of which $201,650 had been paid in September 2019, and $184,910 was accrued in March 2020 and was paid in April 2020. The Company classified these payments as issuance costs in the condensed consolidated statements of stockholders' equity. The Company issued 1,096 warrants to the underwriter in August 2018, which were equity-classified, and in April 2020, the Company issued additional warrants to the underwriter to purchase 100,780 shares of common stock at an exercise price of $2.50 per share. Also, in April 2020, the Company issued to the underwriter 100,000 shares of the Company's common stock.

Contingencies

From time to time, the Company may be involved in legal proceedings (other than those noted above) 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

Notes Payable

Notes payable at March 31, 2020 and December 31, 2019 consist of the following:

(in thousands)	March 31, 2020 (unaudited)	December 31, 2019
2019 Exchange Note 1	4,381	4,381
2019 Exchange Note 2	2,297	2,297
Tempesta Note Payable	500	550
Royalty Interest	500	—
	7,678	7,228
Less: unamortized discount and debt issuance costs	(146)	—
Note payable, net of discount	$ 7,532	$ 7,228
Notes payable - non-current, net	$ 400	$ 450
Notes payable - current, net	$ 7,132	$ 6,778

December 2017 Note

On December 8, 2017, the Company entered into a securities purchase agreement (the "Securities Purchase Agreement") with CVP pursuant to which the Company issued a promissory note (the "Note") in the aggregate principal amount of $1,588,000 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. The Company will

use the proceeds for general corporate purposes. The Note bears interest at the rate of 8% per annum and matures on August 26, 2019.

On August 2, 2018, the Company and CVP amended the December 2017 Note agreement, extending the maturity date from September 8, 2018 to August 26, 2019, and limiting the aggregate amount that CVP is permitted to redeem on a monthly basis to $500,000, which amount is the maximum aggregate amount for the Notes collectively. This amendment resulted in the Company accounting for the transaction as a troubled debt restructuring, under which the carrying amount of the note payable remained unchanged but interest expense is computed using a new effective rate that equates the present value of the future cash payments specified by the new terms with the carrying amount of the note. The principal balance of the note is included in notes payable in the current liabilities section of the condensed consolidated balance sheet.

Between October 2018 and December 2018, the Company and CVP renegotiated the terms of the December 2017 Note agreement such that CVP agreed not to make any redemptions of the Note until March 2019. In consideration of this standstill arrangement, the Company paid CVP a total standstill fee of $499,000 for all four CVP Notes. The standstill fee allocated to the December 2017 Note was $142,000, of which $86,000 increased the principal balance and $56,000 was paid in cash. These modifications in whole represented four separate restructurings of the December 2017 Note agreement, resulting in two troubled debt restructurings accounted for under ASC 470-60 and two modifications accounted for under ASC 470-50. For the two restructurings resulting in troubled debt restructurings, the changes were accounted for prospectively and a new effective interest rate was determined that equated the present value of the future cash payments specified by the new terms with the carrying amount of the Note. For the two modifications that resulted in modification accounting, a new effective rate was determined at the date of modification that equated the revised cash flows to the carrying amount of the Note.

In March 2019, the Company and CVP amended the December 2017 Note agreement such that the Company prepaid principal and accrued interest of $811,000 and $179,000, respectively, in shares of the Company’s common stock. The exchange of debt for common stock was considered a substantial change to the Note and therefore the exchange resulted in extinguishment accounting and a corresponding extinguishment loss of $243,000. At March 31, 2019, the net carrying value of the December 2017 Note was $862,000. At December 31, 2018, the net carrying value of the December 2017 Note was $1,549,000.

February 2018 Note

On February 26, 2018, the Company entered into a securities purchase agreement with CVP, pursuant to which the Company issued to CVP a promissory note in the aggregate principal amount of $2,241,000 for an aggregate purchase price of $1,560,000. The Note carries an original issue discount of $656,000, and the initial principal balance also includes $25,000 to cover CVP's transaction expenses. The Company will use the proceeds for general corporate purposes and working capital. The Note bears interest at the rate of 8% per annum and matures on August 26, 2019.

Between October 2018 and December 2018, the Company and CVP renegotiated the terms of the February 2018 Note agreement such that CVP agreed not to make any redemptions of the Note until March 2019. In consideration of this standstill arrangement, the Company paid CVP a total standstill fee of $499,000 for all four CVP Notes. The standstill fee allocated to the February 2018 Note was $199,000, of which $119,000 increased the principal balance and $80,000 was paid in cash. These modifications in whole represented four separate restructurings of the February 2018 Note agreement, resulting in a debt extinguishment accounted for under ASC 470-50, two troubled debt restructurings accounted for under ASC 470-60 and a debt modification accounted for under ASC 470-50. For the debt extinguishment, the Company recorded an extinguishment loss of $102,000. For the two troubled debt restructurings, the changes were accounted for prospectively and a new effective interest rate was determined that equated the present value of the future cash payments specified by the new terms with the carrying amount of the Note. For the modification that resulted in modification accounting, a new effective rate was determined at the date of modification that equated the revised cash flows to the carrying amount of the Note.

In March 2019, the Company and CVP amended the February 2018 Note agreement such that the Company prepaid principal and accrued interest of $2,045,000 and $204,000, respectively, in shares of the Company’s common

stock. The exchange of debt for common stock was considered a substantial change to the Note and therefore the exchange resulted in extinguishment accounting and a corresponding extinguishment loss of $488,000. At March 31, 2019, the net carrying value of the February 2018 Note was $315,000. At December 31, 2018, the net carrying value of the February 2018 Note was $2,291,000.

March 2018 Note

On March 21, 2018, the Company entered into a securities purchase agreement with CVP, pursuant to which the Company issued to CVP a promissory note in the aggregate principal amount of $1,090,000 for an aggregate purchase price of $750,000. The Note carries an original issue discount of $315,000, and the initial principal balance also includes $25,000 to cover CVP's transaction expenses. The Company will use the proceeds to fully repay certain prior secured and unsecured indebtedness. The Note bears interest at the rate of 8% per annum and matures on September 21, 2019.

Between October 2018 and December 2018, the Company and CVP renegotiated the terms of the March 2018 Note agreement such that CVP agreed not to make any redemptions of the Note until March 2019. In consideration of this standstill arrangement, the Company paid CVP a total standstill fee of $499,000 for all four CVP Notes. The standstill fee allocated to the March 2018 Note was $96,000, of which $58,000 increased the principal balance and $38,000 was paid in cash. These modifications in whole represented four separate restructurings of the March 2018 Note agreement, resulting in a debt extinguishment accounted for under ASC 470-50, two troubled debt restructurings accounted for under ASC 470-60, and a debt modification accounted for under ASC 470-50. For the debt extinguishment, the Company recorded an extinguishment loss of $224,000. For the two troubled debt restructurings, the changes were accounted for prospectively and a new effective interest rate was determined that equated the present value of the future cash payments specified by the new terms with the carrying amount of the Note. For the modification that resulted in modification accounting, a new effective rate was determined at the date of modification that equated the revised cash flows to the carrying amount of the Note

Between January 2019 and March 2019, the Company and CVP amended the March 2018 Note agreement such that the Company prepaid principal and accrued interest of $1,050,000 and $86,000, respectively, in shares of the Company’s common stock. These exchanges in whole represented four separate prepayments of principal and accrued interest, resulting in a three debt extinguishments and one debt modification. For the debt extinguishments, the Company recorded an aggregate extinguishment loss of $1,211,000. For the modification, a new effective rate was determined at the date of modification that equated the revised cash flows to the carrying amount of the Note. At March 31, 2019, the March 2018 Note had been fully extinguished. At December 31, 2018, the net carrying value of the March 2018 Note was $1,006,000.

2019 Exchange Notes

In May 2019, the Company and CVP entered into an Exchange Agreement whereby CVP purchased the two outstanding Napo convertible notes and all rights thereof from the current debt holders. Subject to the terms of the Exchange Agreement, CVP and the Company agreed to exchange the two Napo convertible notes for a single CVP Note (“CVP Exchange Note 1”). At the Exchange date, the principal balance of the two Napo convertible notes was $10,125,000, or $10,536,000 inclusive of accrued but unpaid interest of $411,000. The beginning principal balance of CVP Exchange Note 1 was $10,536,000, or equal to the principal balance of the two Napo convertible notes and accrued interest thereon. The maturity date of CVP Exchange Note 1 was December 31, 2020, with an interest rate of 10%. Per the terms of the Exchange Agreement, CVP agreed to extend the maturity date of CVP Exchange Note 1 from December 31, 2019 (the same maturity date carried over from the two Napo convertible notes) to December 31, 2020; in consideration of this extension, the Company issued CVP Exchange Note 2 with a principal balance of $2,297,000. The maturity date of CVP Exchange Note 2 is December 31, 2020, with an interest rate of 10%.

Between May 2019 and July 2019, the Company and CVP entered into note exchange agreements pursuant to which the Company made prepayments of principal and related accrued interest of $6,154,000 and $90,000, respectively, in lieu of making cash payments to CVP on Exchange Note 1, by issuing 1,119,440 shares of the Company’s common stock to CVP. At March 31, 2020 and December 31, 2019, the net carrying value of Exchange Note 1 and Exchange Note 2 was $4,381,000 and $2,297,000, respectively, or an aggregate principal balance of $6,678,461.

2019 Tempesta Note

In October 2019, the Company entered into a License Termination and Settlement Agreement with Dr. Michael Tempesta, pursuant to which certain royalty payment disputes between Napo and Tempesta were settled. Per the terms of the Agreement, Tempesta received $50,000 in cash, an unsecured promissory note issued by the Company in the aggregate principal amount of $550,000 and 40,000 shares of the Company's common stock in exchange for the cessation of all royalty payments by Napo to Dr. Tempesta under the License Agreements. The $550,000 promissory note bears interest at the rate of 2.5% per annum and matures on March 1, 2025. The promissory note provides for the Company to make semi-annual payments equal to $50,000 plus accrued interest beginning on March 1, 2020 until the Note is paid in full. At March 31, 2020, the net carrying value of the Tempesta note was $500,000.

Sale of Future Royalty Interest

In March 2020, the "Company entered into a royalty interest purchase agreement (the "Purchase Agreement") with Iliad Research and Trading, L.P., pursuant to which the Company sold to Iliad a royalty interest entitling Iliad to receive $500,000 of future royalties on sales of Mytesi and certain up-front license fees and milestone payments from licensees and/or distributors (the "Royalty Repayment Amount") for an aggregate purchase price of $350,000.

Until such time as the Royalty Repayment Amount has been paid in full, the Company will pay Iliad ten percent (10%) of the Company's Net Sales on Included Products and ten percent (10%) of worldwide revenues related to upfront licensing fees and milestone payments from licensees and/or distributors, but specifically excluding licensing fees and/or milestone payments that are reimbursements of clinical trial expenses (the "Royalty Payments"). Beginning on the six-month anniversary of the Purchase Price Date and continuing until the 12-month anniversary of the Purchase Price Date, the monthly Royalty Payment shall be the greater of (a) $25,000, and (b) the actual Royalty Payment amount Investor is entitled to for such month. Beginning on the 12-month anniversary of the Purchase Price Date and continuing until the Revenue Repayment Amount has been paid in full, the monthly Royalty Payment shall be the greater of (a) $43,750, and (b) the actual Royalty Payment amount Investor is entitled to for such month.

The Royalty Interest amount of $500,000 (or $350,000 in cash received) is classified as debt, net of a $150,000 discount. Under ASC 470-10-35-3, royalty payments to Iliad will be amortized under the interest method per ASC 835-30. Because there is no set interest rate, and because the royalty payments are variable, the discount rate is variable. After each royalty payment, the Company will use a prospective method to determine a new discount rate based on the revised estimate of remaining cash flows. The new rate is the discount rate that equates the present value of the revised estimate of remaining cash flows with the carrying amount of the debt, and it will be used to recognize interest expense for the remaining periods. At issuance, based on projected cash outflows from future revenue streams, the discount rate was 105%.

8. Warrants

The following table summarizes information about warrants outstanding and exercisable into shares of the Company's common stock as of March 31, 2020 and for the year ended December 31, 2019:

	Three Months Ended March 31, 2020 (unaudited)	Year Ended December 31, 2019
Warrants outstanding, beginning balance	19,421,892	34,682
Issuances	—	20,637,761
Exercises	(1,798,962)	(1,250,000)
Expirations and cancelations	—	(551)
Warrants outstanding, ending balance	17,622,930	19,421,892

March 2019 Ladenburg Warrants

In March 2019, in consideration of services provided in the Company's March 2019 public offering of 19,019 common shares, the Company issued to Ladenburg Thalmann & Co. warrants to purchase an aggregate of 761 shares of common stock at an exercise price of $17.50 per common share. The warrants were valued at $13,000 using the Black-Scholes option pricing model as follows: exercise price of $17.50 per share, stock price of $18.90 per share, expected life of five years, volatility of 146%, and a risk-free rate of 2.21%. The warrants were classified in stockholders' equity.

March 2019 LOC Warrant

In March 2019, in consideration of a letter of credit cancelation related to the Company's office lease, the Company issued a warrant to purchase warrant shares equal to a fixed principal amount divided by a variable exercise price. The warrants were initially classified as liabilities pursuant to ASC 480-10 due to their debt-like nature. On July 23, 2019, upon the exercise price of the warrants becoming fixed, the warrants became exercisable into 45,750 shares of the Company's common stock and were reclassified to additional paid-in-capital with a fair value of $71,000.

2019 Bridge Note Warrants

Between March 18, 2019 and June 26, 2019, concurrent to the Company entering into Promissory Notes of $5,050,000, the Company issued twenty-one warrants to purchase warrant shares equal to a fixed principal amount divided by a variable exercise price. The warrants for all twenty-one Bridge Notes were initially liability classified pursuant to ASC 480-10 due to their debt-like nature. On July 23, 2019, upon the exercise price of the warrants becoming fixed, the warrants became exercisable into 2,781,250 shares of the Company's common stock and were reclassified to additional paid-in-capital with a fair value of $4,259,000.

February 2020 Modification of Certain 2019 Bridge Note Warrants

In February 2020, the Company entered into a warrant exercise agreement with a holder of its Bridge warrants, pursuant to which the holder agreed to exercise 250,000 Bridge warrants in consideration of the Company lowering the exercise price of the 250,000 warrants from $2.00 to $0.692. Upon exercise of the warrants, the Company received cash proceeds of $173,000 and in turn issued 250,000 common shares. It is the Company's policy to determine the impact of modifications to equity-classified warrants by analogy to the share-based compensation guidance per ASC 718, *Compensation – Stock Compensation*. Pursuant to that guidance, and due to the modification being applicable only to a single holder of the Bridge warrants, the incremental increase of $7,000 in fair value of the modified warrants was recorded as an expense in the condensed consolidated statement of operations for the three months ended March 31, 2020.

July 2019 Series 1 Warrants

In July 2019, the Company entered into an underwriting agreement, relating to a public offering, which was comprised of (1) 2,886,500 Class A Units, priced at $2.00 per unit, with each unit consisting of (i) one share of the Company's voting common stock, (ii) one Series 1 warrant to purchase one share of Common Stock, and (iii) one Series 2 warrant to purchase one share of Common Stock, and (2) 10,787 Class B Units, priced at a price of $1,000 per unit, with each unit consisting of (i) one share of Series B convertible preferred stock, convertible into 500 shares of Common Stock, (ii) 500 Series 1 Warrants and (iii) 500 Series 2 Warrants.

The Series 1 Warrants had an exercise price of $2.00 and expire on the earlier of (a) 5 years from the date of issuance and (b) 30 calendar days following the public announcement of Positive Interim Results related to the diarrhea results from the HALT-D investigator initiated trial, if and only if certain trading benchmarks are achieved during such 30 calendar day period.

In the offering, the Company sold (i) 2,886,500 Class A Units, which included Series 1 warrants to purchase 2,886,500 shares of the Company's common stock and (ii) 10,787 Class B Units, which included Series 1 warrants to purchase 5,393,500 shares of the Company's common stock. In total, 8,280,000 Series 1 warrants were issued, with an

initial valuation of $5,025,000 computed using the Black-Scholes-Merton pricing model using a stock price of $1.73, a strike price of $2.00, an expected term of 5.0 years, volatility of 109.25% and a risk-free discount rate of 1.83%. Upon issuance, the Series 1 warrants were classified in additional paid-in-capital.

September 2019 Modification of the July 2019 Series 1 Warrants

In September 2019, the Company reduced the exercise price all 8,280,000 Series 1 Warrants from $2.00 to $1.40. The Company determined the impact of this modification to be an increase in the fair value of the warrants of $522,000. Because the modification applied to the entire class of Series 1 Warrant holders, the increase in fair value represented a deemed dividend to the entire class of Series 1 Warrant holders. The modification did not result in the reclassification of the equity-classified Series 1 warrants from additional paid-in-capital to liability classification.

February 2020 Modification of the July 2019 Series 1 Warrants

In February 2020, the Company entered into a warrant exercise agreement with a holder of its Series 1 Warrants, pursuant to which the holder agreed to exercise 208,022 Series 1 Warrants in consideration of the Company lowering the exercise price of the 208,022 warrants from $2.00 to $0.692. Upon exercise of the warrants, the Company received cash proceeds of $144,000 and in turn issued 208,022 common shares. It is the Company's policy to determine the impact of modifications to equity-classified warrants by analogy to share-based compensation guidance per ASC 718, *Compensation – Stock Compensation*. Pursuant to that guidance, and due to the modification being applicable only to a single holder of the Series 1 Warrants, the incremental increase of $6,413 in fair value of the modified warrants was recorded as an expense in the condensed consolidated statement of operations for the three months ended March 31, 2020.

July 2019 Series 2 Warrants

The Series 2 Warrants have an exercise price of $2.00 and expire on the first date on the earlier of (a) 5 years from the date of issuance and (b) 30 calendar days following the public announcement by the Company that a pivotal phase 3 clinical trial using crofelemer (Mytesi, or the same or similar product with a different name) for the treatment of cancer therapy-related diarrhea in humans has met its primary endpoint in accordance with the protocol, if and only if certain trading benchmarks are achieved during such 30 calendar day period. In addition, each Series 2 Warrant has an embedded call option that allows the Company to redeem any unexercised warrants if certain contingencies are met.

In the July 2019 offering, the Company sold (i) 2,886,500 Class A Units, which included Series 2 warrants to purchase 2,886,500 shares of the Company's common stock and (ii) 10,787 Class B Units, which included Series 2 warrants to purchase 5,393,500 shares (10,787 Class B Units multiplied by 500 warrants per Class B Unit equals 5,393,500) of the Company's common stock. In total, 8,280,000 Series 2 warrants were issued, with an initial valuation of $5,026,000 computed using the Black-Scholes-Merton pricing model using a stock price of $1.73, a strike price of $2.00, an expected term of 5.0 years, volatility of 109.25% and a risk-free discount rate of 1.83%. Upon issuance, the Series 2 Warrants were classified in additional paid-in-capital.

March 5, 2020 Modification of the July 2019 Series 2 Warrants

On March 5, 2020, the Company entered into a warrant exercise agreement with a holder of its Series 2 Warrants, pursuant to which the holder agreed to exercise 90,940 Series 2 Warrants in consideration of the Company lowering the exercise price of the 90,940 warrants from $2.00 to $0.6050. Upon exercise of the warrants, the Company received cash proceeds of $55,000 and in turn issued 90,940 common shares. It is the Company's policy to determine the impact of modifications to equity-classified warrants by analogy to share-based compensation guidance per ASC 718, *Compensation – Stock Compensation*. Pursuant to that guidance, and due to the modification being applicable only to a single holder of the Series 2 Warrants, the incremental increase of $6,000 in fair value of the modified warrants was recorded as an expense in the condensed consolidated statement of operations for the three months ended March 31, 2020.

March 23, 2020 Modification of the July 2019 Series 2 Warrants

On March 23, 2020, the Company entered into a Warrant Exercise and Preferred Stock Amendment Agreement (see Note 9) with a holder of its Series 2 Warrants, pursuant to which the holder agreed to exercise in cash its Series 2 Warrants to purchase an aggregate of 1,250,000 shares of Common Stock, in consideration of the Company reducing the Series 2 Warrant exercise price from $2.00 to $0.5227 per share, for gross proceeds to the Company of approximately $653,000, or $628,000 net of $25,000 of issuance costs. The Company determined the impact of this modification to be an increase in the fair value of the warrants of $65,000. Because the modification applied to a sole holder of Series 2 Warrants, the $65,000 increase in fair value was recorded as an expense in the condensed consolidated statement of operations for the three months ended March 31, 2020. The modification did not result in the reclassification of the equity-classified Series 1 Warrants from additional paid-in-capital to liability classification, and as of March 31, 2020, all 8,280,000 Series 2 Warrants have been exercised.

December 2019 PIPE Financing Warrants

In December 2019, the Company entered into a securities purchase agreement with certain investors pursuant to which the Company, in a Private Placement, sold (i) an aggregate of 2,500,000 unregistered shares of the Company's common stock, and (ii) Warrants to purchase up to an aggregate of approximately 1,250,000 shares of common stock, for an aggregate purchase price of $1,500,000 (see Note 10). The warrants have an exercise price of $0.78 per share and become exercisable on June 24, 2020 (6 months after their issuance date) and have a five-year term.

The warrants were valued at $686,000 using the Black-Scholes option pricing model as follows: exercise price of $0.78 per share, stock price of $0.62 per share, expected life of five years, volatility of 143%, and a risk-free rate of 2.42%. As the common stock and warrants were issued in a unit structure, the aggregate proceeds of $1,500,000 were allocated to the two securities using the relative fair value method, resulting with the common stock and warrants being allocated $1,035,000 and $465,000, respectively. The warrants were classified in stockholders' equity.

9. Convertible Preferred Stock

At March 31, 2020, convertible preferred stock consisted of the following:

(in thousands, except share data) Series	Shares Authorized	Issued and Outstanding	Carrying Value	Liquidation Preference per Share
A	5,524,926	5,524,926	$ 10,375	$ 1.665
B	11,000	1,971	476	—
B-1	63	—	—	—
B-2	10,165	7,534	916	—
Non-designated	5,453,846	—	—	—
Total	11,000,000	5,534,431	$ 11,767	

At December 31, 2019, convertible preferred stock consisted of the following:

(in thousands, except share data) Series	Shares Authorized	Issued and Outstanding	Carrying Value	Liquidation Preference per Share
A	5,524,926	5,524,926	$ 9,895	$ 1.665
B	11,000	1,971	476	
B-1	63	—	—	
B-2	10,165	10,165	1,236	
Non designated	5,453,846	—	—	—
Total	11,000,000	5,537,062	$ 11,607	

Series A Redeemable Convertible Preferred Stock

In March 2018, the Company entered into a stock purchase agreement with Sagard Capital Partners, L.P. pursuant to which the Company, in a private placement, agreed to issue and sell to Sagard 5,524,926 shares of the Company's Series A convertible participating preferred stock, $0.0001 par value per share, for gross proceeds of $9,199,000, or $9,000,000 net of issuance costs. The preferred stock is convertible into approximately 473,565 shares of common stock at the option of the holder at an effective conversion price of $19.425 per share. Subject to certain limited exceptions, the shares of Preferred Stock could not be offered, pledged or sold by Sagard for one year from the date of issuance. The conversion price is subject to certain adjustments in the event of any stock dividend, stock split, reverse stock split, combination or other similar recapitalization.

Holders of the Series A shares are entitled to participate equally and ratably with the holders of shares of common stock in all dividends paid and distributions made to the holders of the common stock as if, immediately prior to each record date of the common stock, the shares of Series A then outstanding were converted into shares of common stock.

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company or deemed liquidation event, the holders of Series A shares then outstanding shall be entitled to be paid in cash out of the assets of the Company before any payment shall be made to the holders of common stock or shares of any series or class of preferred or other capital stock then outstanding that by its terms is junior to the Series A in respect of the preferences as to distributions and payments upon such liquidation event by reason of their ownership, an amount per share of Series A equal to one times the Series A original issue price.

The Series A convertible preferred shares are redeemable by Sagard Capital upon a Redemption Event that is not solely within the control of the Company. Were a Redemption Event to occur as of the Measurement Date (the later of April 30, 2021 and the date on which the Company files its Form 10-Q for the three months ending March 31, 2021, but in no event later than September 30, 2021), the holders of at least a majority of the shares of Series A convertible preferred stock then outstanding may require the Company to redeem all Series A shares for cash at a per share purchase price equal to $2.3057. Any one of the following conditions can result in a Redemption Event: (i) revenue attributable to the Mytesi product for the six-month period ended March 31, 2021 is less than $22.0 million; (ii) the daily volume weighted average price (“VWAP”) of the Company's common stock on Nasdaq for the 30 days prior to a Measurement Date is less than $105.00; (iii) the Company fails to file with the Securities and Exchange Commission (“SEC”) on or before June 30, 2021, its Form 10-Q for the three months ending March 31, 2021.

During the three months ended December 31, 2019, the Company determined that a Redemption Event was probable as of July 1, 2019. The Company is accreting the carrying value to the redemption amount of $12,739,000.

The redemption amount of the Series A convertible preferred stock is $12,739,000 as of March 31, 2020 and December 31, 2019. The carrying value of the Series A convertible preferred stock was $10,375,000 and $9,895,000 as of March 31, 2020 and December 31, 2019, respectively.

In March 2019, the Company and Sagard Capital Partners, L.P. amended certain terms of the agreement, such that the effective conversion price was adjusted to $19.425 per share.

The preferred stock has been classified outside of stockholders' equity in accordance with authoritative guidance for the classification and measurement of potentially redeemable securities.

Series B Convertible Preferred Stock

In July 2019, the Company entered into an underwriting agreement relating to the public offering comprised of (1) 2,886,500 Class A Units, priced at a public offering price of $2.00 per unit, with each unit consisting of (i) one share of the Company’s voting common stock, (ii) one Series 1 warrant to purchase one share of Common Stock and (2) 10,787 Class B Units, priced at a public offering price of $1,000 per unit, with each Class B unit consisting of (i) one

share of Series B convertible preferred stock with a stated value of $1,000 and convertible into 500 shares of Common Stock, (ii) 500 Series 1 Warrants and (iii) 500 Series 2 Warrants, at a public offering price of $1,000 per Class B Unit.

The Company sold 10,787 Class B Units, comprised of 10,787 shares of Series B convertible preferred stock, Series 1 warrants to purchase 5,393,500 shares of common stock and Series 2 warrants to purchase 5,393,500 shares of common stock. The total gross proceeds to the Company from the offering of the Class B Units were $10,787,000, of which $4,240,000 was allocated to the Series B convertible preferred stock, $3,274,000 to the Series 1 Warrants and $3,274,000 to the Series 2 Warrants. Issuance costs of $1,635,000 were allocated to the Class B Units.

Holders of the Series B shares are entitled to participate equally and ratably with the holders of shares of common stock in all dividends paid and distributions made to the holders of the common stock as if, immediately prior to each record date of the common stock, the shares of Series B then outstanding were converted into shares of common stock. With certain exceptions, the shares of Series B Convertible Preferred Stock have no voting rights. However, as long as any shares of Series B Convertible Preferred Stock remain outstanding, the Company shall not, without the affirmative vote of holders of a majority of the then outstanding shares of Series B Convertible Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Series B Convertible Preferred Stock or alter or amend the Series B Certificate of Designation or (b) enter into any agreement with respect to any of the foregoing. Each share of Series B Convertible Preferred Stock is convertible at any time at the holder’s option into 500 shares of Common Stock, which conversion ratio will be subject to adjustment for stock splits, stock dividends, distributions, subdivisions and combinations and other similar transactions.

On the July 23, 2019 issuance date, the effective conversion price per share was less than the fair value of the underlying common stock. As a result, the Company determined that there was a Beneficial Conversion Feature of $4,240,000.

Because the Company's Series B Convertible Preferred Stock does not have a stated conversion date and was immediately convertible at the issuance date, the Company recorded a deemed dividend charge of $4,240,0000 for the accretion of the discount on the Series B Convertible Preferred Stock.

The preferred stock has been classified in stockholders' equity in accordance with authoritative guidance.

During July and August 2019, certain investors converted 8,816 Series B convertible preferred shares into 4,408,000 shares of the Company’s common stock at the stated conversion ratio. As of March 31, 2020 and December 31, 2020, there remained 1,971 shares of Series B Convertible Preferred Stock outstanding.

In March 2020, the Company entered into a Warrant Exercise and Preferred Stock Amendment Agreement with a holder of its Series 2 Warrants, pursuant to which the holder agreed to exercise in cash its Series 2 Warrants to purchase an aggregate of 1,250,000 shares of Common Stock, in consideration of the Company reducing the warrant exercise price from $2.00 to $0.5227 per share, for gross proceeds to the Company of approximately $653,000 (see Note 8). As a further inducement to enter into the Amendment Agreement, the Company agreed to reduce the conversion price of the Company’s Series B convertible preferred stock from $2.00 to $0.4456, resulting in the application of accounting per ASC 260-10-S99-2. Because the reduction to the conversion price was an inducement, the Company applied the guidance in ASC 470-20, resulting in the recording of an inducement charge of $1,647,000 in the condensed consolidated statement of operations for the three months ended March 31, 2020.

Series B-1 Convertible Preferred Stock

In October 2019, the Company entered into a Warrant Exercise Agreement with the sole remaining holder of the Series B Convertible Preferred Stock (the Exercising Holder), who owned Series 1 Warrants exercisable for 1,250,000 shares of Common Stock. Pursuant to the terms of the Warrant Exercise Agreement, the Company had the right (a purchased put option) to require the Exercising Holder to exercise all or a portion of its Series 1 Warrants in accordance with the existing terms of the Series 1 Warrants, in exchange for the Company’s agreement to issue to the Exercising Holder a number of shares of the Company’s Series B-1 Convertible Preferred Stock, with a stated value of $12,000, in an amount equal to one Series B-1 Preferred Share for every 19,841 Series 1 Warrant Shares issued by the

Company to the Exercising Holder. The purpose of the Company entering into the agreement was to enable the Company to monetize the remaining Series 1 Warrants. To the extent that all Series 1 Warrants held by the Exercising Holder were exercised at their $1.40 exercise price, the Company would receive aggregate gross proceeds of approximately $1,750,000 and, in turn, have issued 63 shares of Series B-1 Preferred Stock to the Exercising Holder.

On October 3 and October 9, 2019, in two separate transactions, the Company exercised its purchased put option (see Note 3) to require the Exercising Holder to exercise all of its 1,250,000 Series 1 warrants (see Note 8), upon which the Company issued 1,250,000 common shares to the Exercising Holder in return for aggregate gross proceeds of $1,750,000. In consideration (the strike price) of the exercising the warrants, the Company issued 63 shares of Series B-1 Convertible Preferred Stock to the Exercising Holder.

On the October 3, 2019 issuance date, the effective conversion price was less than the fair value of the underlying common stock. As a result, the Company determined that there was a Beneficial Conversion Feature of $146,000. Because the Company's Series B-1 Convertible Preferred Stock does not have a stated conversion date and was immediately convertible at the issuance date, the Company recorded a deemed dividend charge of $146,000 for the accretion of the discount on the Series B-1 Convertible Preferred Stock.

On the October 9, 2019 issuance date, the effective conversion price was less than the fair value of the underlying common stock. As a result, the Company determined that there was a Beneficial Conversion Feature of $385,000. Because the Company's Series B-1 Preferred Stock does not have a stated conversion date and was immediately convertible at the issuance date, the Company recorded a deemed dividend charge of $385,000 for the accretion of the discount on the Series B-1 Preferred Stock.

The Series B-1 Preferred Stock was classified in stockholders' equity in accordance with authoritative guidance.

In December 2019, the sole investor in the Series B-1 Preferred Stock converted its entire holding of 63 shares of the Series B-1 Preferred Stock into 630,063 shares of the Company’s common shares at the stated conversion ratio. As of December 31, 2019, there were no shares of the Series B-1 Preferred Stock outstanding.

Series B-2 Convertible Preferred Stock

In December 2019, the Company entered into an exchange agreement with Oasis Capital, pursuant to which Oasis Capital gave up (i) its remaining unexercised Prepaid Forward contracts (see Note 10) exercisable for 1,236,223 shares of the Company’s common stock and (ii) 695,127 common shares held as an investment by Oasis Capital, in exchange for 10,165 shares of the Company’s newly authorized Series B-2 Convertible Preferred Stock.

Holders of the Series B-2 Convertible Preferred Stock are entitled to receive dividends on shares of Series B-2 Convertible Preferred Stock equal (on an as-if-converted-to-Common-Stock basis) to and in the same form as dividends actually paid on shares of the Common Stock when, as and if such dividends are paid on shares of the Common Stock. No other dividends shall be paid on shares of the Series B-2 Convertible Preferred Stock.

The shares of Series B-2 Convertible Preferred Stock have no voting rights. However, as long as any shares of Series B-2 Convertible Preferred Stock remain outstanding, the Company shall not, without the affirmative vote of holders of a majority of the then outstanding shares of Series B-2 Convertible Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Series B-2 Convertible Preferred Stock or alter or amend the Series B-2 Certificate of Designation or (b) enter into any agreement with respect to any of the foregoing.

Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, the Holders of the Series B-2 Convertible Preferred Stock are entitled to receive out of the assets, whether capital or surplus, of the Company the same amount that a holder of common stock would receive if the Series B-2 Convertible Preferred Stock were fully converted to Common Stock which amounts shall be paid *pari passu* with all holders of Common Stock.

Each share of Series B-2 Convertible Preferred Stock is convertible at any time at the holder’s option into 190 shares of Common Stock, as determined by dividing the $153.90 stated value of each Series B-2 Convertible Preferred

Share by the $0.81 conversion price ($153.90 divided by 0.81 = 190 conversion ratio), and which conversion ratio is subject to adjustment for stock splits, stock dividends, distributions, subdivisions and combinations and other similar transactions as specified in the Series B-2 Certificate of Designation.

The Series B-2 Convertible Preferred Stock was classified in stockholders' equity in accordance with authoritative guidance.

In January 2020, a holder of the Series B convertible preferred stock converted 2,631 preferred shares into 499,890 shares of common stock.

10. Stockholders' Equity

Common Stock

As of March 31, 2020 and December 31, 2019, the Company had reserved shares of common stock for issuance as follows:

	March 31, 2020 (unaudited)	December 31, 2019
Options issued and outstanding	4,508,021	3,902,675
Inducement options issued and outstanding	74	74
Options available for grant under stock option plans	160,697	479,829
Restricted stock unit awards issued and outstanding	5,613	5,613
Warrants issued and outstanding	17,622,930	19,421,892
Series A convertible preferred stock	473,565	473,565
Series B convertible preferred stock	4,423,250	985,500
Series B-2 convertible preferred stock	1,431,460	1,931,350
Total	28,625,610	27,200,498

The holders of common stock are entitled to one vote for each share of common stock held. The common stockholders are also entitled to receive dividends whenever funds and assets are legally available and when declared by the Board of directors.

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. Shares of the Company's non-voting common stock have the same rights to dividends and other distributions and are convertible into shares of the Company's common stock on a 1,050-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.

The Company is authorized to issue a total number of 210,000,000 shares, of which 150,000,000 shares are Common Stock, 50,000,000 are non-voting common stock and 10,000,000 are preferred stock.

Reverse stock-splits

On June 3, 2019, the Company filed the Certificate of Fifth Amendment to its Third Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware to effect a 1-for-70 reverse stock split of the Company’s issued and outstanding shares of voting common stock, effective June 7, 2019. The reverse split has been retroactively reflected in all voting common stock, warrants, and common stock option shares disclosed in these

condensed consolidated financial statements. The non-voting common stock and the convertible preferred stock were excluded from the reverse split.

Transactions with Oasis Capital

January 2019 SPA

On January 7, 2019, Jaguar entered into a common stock purchase agreement with Oasis Capital, relating to an offering of an aggregate of up to 76,190 shares of common stock via an equity line of credit. Under the terms of the purchase agreement, the Company has the right to "put," or sell, up to 76,190 shares of common stock to Oasis Capital for an amount equal to the product of (i) the number of shares set forth on the applicable put notice (minus the deposit and clearing fees associated with such purchase) and (ii) a fixed price of $52.50 per share or such other price agreed upon between the Company and Oasis Capital. Jaguar had the option to increase the equity line of credit by an additional 114,286 shares of common stock by notifying Oasis Capital at any time after the effective date of the purchase agreement. In March 2019, Jaguar exercised this option. As of March 31, 2019, the Company had sold all of the 76,190 shares of common stock of the equity line and all 114,286 shares of common stock from the option to Oasis Capital, or a total of 190,476 shares.

March 2019 SPA

In March 2019, Jaguar entered into a securities purchase agreement with Oasis Capital pursuant to which Jaguar agreed to issue and sell, in a registered public offering by Jaguar directly to Oasis, an aggregate of 19,019 shares of common stock at an offering price of $14.00 for gross proceeds of approximately $266,000. Between March 24, 2019, the date of the March CSPA, and March 31, 2020, the Company sold an aggregate of 19,019 shares of Common Stock pursuant to the CSPA for aggregate gross proceeds of approximately $266,000.

March 2020 ELOC (Equity Line of Credit)

In March 2020, the Company entered into an equity purchase agreement (the “March 2020 ELOC”) with Oasis Capital, which provides that Oasis Capital is committed to purchase up to an aggregate of $2.0 million shares of the Company’s common stock over the 36-month term of the March 2020 ELOC.

Pursuant to the terms and conditions of the March 2020 ELOC, on any trading day selected by the Company (such date the “Put Date”), after the Securities and Exchange Commission has declared effective the registration statement registering the sale of the shares of Common Stock that may be issued to Oasis Capital LLC under the March 2020 ELOC, the Company has the right, in its sole discretion, to present to Oasis Capital LLC with a purchase notice (each a “Put Notice”), directing Oasis Capital to purchase up to the lesser of (i) 200,000 shares of Common Stock or (ii) 20% of the average trading volume of Common Stock in the 10 trading days immediately preceding the date of such Put Notice, at a per share price equal to $0.436 (each an “Option 1 Put”), provided that the aggregate of all Option 1 Puts and Option 2 Puts (described below) does not exceed $2.0 million.

In addition, on any date on which Oasis Capital LLC receives shares of Common Stock in connection with a Put Notice (the “Clearing Date”), the Company also has the right, in its sole discretion, to present to Oasis Capital with a Put Notice (each an “Option 2 Put”) directing Oasis Capital LLC to purchase an amount of Common Stock equal to the lesser of (i) such amount that equals 10% of the daily trading volume of the Common Stock on the date of such Put Notice and (ii) $200,000, provided that the aggregate amount of the Option 1 Put and Option 2 Put on any Put Date or Clearing Date does not exceed $500,000 and the aggregate amount of all Option 1 Puts and Option 2 Puts does not exceed $2.0 million. The purchase price per share pursuant to such Option 2 Put is equal to $0.436. The Threshold Price (defined later) and the Purchase Price will be adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction occurring during the period used to compute the Threshold Price or the Purchase Price.

The Company will control the timing and amount of sales of Common Stock to Oasis Capital LLC. Oasis Capital LLC has no right to require any sales by the Company but is obligated to make purchases from the Company as

directed by the Company in accordance with the March 2020 ELOC. The shares to be issued to Oasis under the March 2020 ELOC were registered with the SEC in Apri1 2020. As of March 31, 2020, the Company had not exercised any of its put options to require Oasis to purchase common stock under the equity purchase agreement. On March 24, 2020, the Company entered into an equity purchase agreement with Oasis Capital, LLC, which provides that, upon the terms and subject to the conditions and limitations set forth therein, Oasis Capital is committed to purchase up to an aggregate of $2.0 million of shares of Common Stock over the 36-month term of the ELOC Purchase Agreement. Concurrently with entering into the ELOC Purchase Agreement, the Company also entered into a registration rights agreement with Oasis Capital, in which the Company agreed to file one or more registration statements, registering the sale of the shares of Common Stock that may be issued to Oasis Capital under the ELOC Purchase Agreement.

March 2020 PIPE Financing

In March 2020, Company entered into a securities purchase agreement (the “PIPE Purchase Agreement”) with certain investors, pursuant to which the Company agreed to issue and sell to the Investors in a private placement an aggregate of 1,714,283 shares of the Company’s common stock, for an aggregate purchase price of approximately $720,000, or $668,578 net of $51,422 of issuance costs.

11. 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. 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. As of March 31, 2020, there were 384 options outstanding.

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 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 replaced the 2013 Plan except that all outstanding options under the 2013 Plan remain outstanding until exercised, canceled or expired.

As of March 31, 2020, there were 4,508,021 options outstanding and 160,697 options available for grant.

Stock Options and Restricted Stock Units ("RSUs")

The following table summarizes incentive plan activity for the three months ended March 31, 2020 (*unaudited*):

	Shares Available for Grant	Stock Options Outstanding	RSUs Outstanding	Weighted Average Stock Option Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value*
Outstanding at December 31, 2019	479,829	3,902,675	5,613	$ 5.20	9.56	$ —
Additional shares authorized	286,229	—	—	—	—	
Options granted	(810,000)	810,000	—	0.45	—	—
Options canceled	204,639	(204,639)	—	3.40	—	—
Options canceled not rolled back into the 2013 Plan	—	(15)	—	—	—	—
Outstanding at March 31, 2020	160,697	4,508,021	5,613	$ 4.43	9.34	$ 27,832
Exercisable at March 31, 2020		1,230,522		$ 11.01	8.94	$ —
Vested and expected to vest at March 31, 2020		3,968,171		$ 4.83	9.32	$ —

* Fair market value of JAGX common stock on March 31, 2020 was $0.48 per share.

The intrinsic value is calculated as the difference between the exercise price of the underlying options and the fair market value of the Company's common stock for options that were in-the-money.

No options were exercised in the three months ended March 31, 2020.

The weighted average grant date fair value of stock options granted was $0.41 and $17.50 per share during the three months ended March 31, 2020 and 2019, respectively.

The number of options that vested in the three months ended March 31, 2020 and 2019 was 333,926 and 7,480, respectively. The grant date weighted average fair value of options that vested in the three months ended March 31, 2020 and 2019 was $2.38 and $132.81, respectively.

Stock-Based Compensation

The following table summarizes stock-based compensation expense related to stock options, inducement stock options and RSUs for the three months ended March 31, 2020 and 2019, and are included in the condensed consolidated statements of operations as follows:

	Three Months Ended March 31,	
	2020	2019
(in thousands)	(unaudited)	
Research and development expense	$ 202	$ 67
Sales and marketing expense	56	34
General and administrative expense	502	326
Total	$ 760	$ 427

As of March 31, 2020, the Company had $4,311,000 of unrecognized stock-based compensation expense for options, inducement options and restricted stock units outstanding, which is expected to be recognized over a weighted-average period of 1.83 years.

The estimated grant-date fair value of stock option grants for the three months ended March 31, 2020 and 2019 was calculated using the Black-Scholes - Merton option-pricing model using the following weighted-average assumptions:

	Three Months Ended March 31,	
	2020	2019
	(unaudited)	
Weighted-average volatility	150.1 %	108.3 - 108.5 %
Weighted-average expected term (years)	5.0	5.8
Risk-free interest rate	0.5 %	2.5 - 2.6 %
Expected dividend yield	—	—

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 March 31, 2020.

12. Net Loss Per Share

The following table presents the calculation of basic and diluted net loss per share of common stock for the periods indicated:

	Three Months Ended March 31,	
(In thousands, except share and per share data)	2020	2019
Net loss attributable to common shareholders (basic and diluted)	$ (8,416)	$ (8,304)
Shares used to compute net loss per common share, basic and diluted	15,141,906	493,202
Net loss per share attributable to common shareholders, basic and diluted	$ (0.56)	$ (16.84)

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 three months ended March 31, 2020 and 2019 because their inclusion would be anti-dilutive.

	March 31, 2020	March 31, 2019
	(unaudited)	
Options issued and outstanding	4,508,021	40,625
Inducement options issued and outstanding	74	2,984
Restricted stock units issued and outstanding	5,613	5,613
Warrants issued and outstanding	17,622,930	71,821
Series A convertible preferred stock	473,565	33,149,556
Series B convertible preferred stock	4,423,250	—
Series B-2 convertible preferred stock	1,431,460	—

Convertible debt	—	10,849
Total	28,464,913	33,281,448

13. Segment Information

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 non-infectious diarrhea in adults with HIV/AIDS on antiretroviral therapy.

The Company's reportable segments net revenues and net loss for the three months ended March 31, 2020 and 2019 consisted of:

(in thousands)	Three Months Ended March 31, 2020	2019
	(unaudited)	
Revenue from external customers		
Human Health	$ 835	$ 1,543
Animal Health	34	47
Consolidated Totals	$ 869	$ 1,590
Segment net loss		
Human Health	$ (3,200)	$ (5,512)
Animal Health	(4,736)	(2,792)
Consolidated Totals	$ (7,936)	$ (8,304)

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

(in thousands)	March 31, 2020	December 31, 2019
Segment assets	(unaudited)	
Human Health	$ 30,743	$ 32,432
Animal Health	68,381	68,169
Total	$ 99,124	$ 100,601

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

(in thousands)	March 31, 2020	December 31, 2019
	(unaudited)	
Total assets for reportable segments	$ 99,124	$ 100,601
Less: Investment in subsidiary	(29,241)	(29,241)
Less: Intercompany loan	(36,607)	(34,950)
Consolidated Totals	$ 33,276	$ 36,410

14. Subsequent Events

Atlas Patent Sale and License Agreement

On April 15, 2020, the Company entered into a patent purchase agreement with Atlas Sciences, LLC (“Atlas”), pursuant to which the Atlas agreed to purchase certain patents and patent applications (the “Patent Rights”) relating to Napo’s NP-500 drug product candidate for an upfront cash payment of $1.5 million. Napo and the Purchaser completed the sale simultaneously with the execution of the Purchase Agreement. The Purchase Agreement includes representations, warranties, and covenants customary for a transaction of this type.

Concurrently with the patent purchase, the Company entered into a license agreement with Atlas pursuant to which Atlas granted Jaguar an exclusive 10-year license to use the Patent Rights and improvements thereon to develop and commercialize NP-500 in all territories worldwide except greater China (i.e., China, Hong Kong, Taiwan and Macau), inclusive of the right to sublicense NP-500 development and commercialization rights (“the License”). Except for the License, Atlas retains all rights, title and interest in and to the Patent Rights, including all improvements and enhancements to the Patent Rights made or created by the Company under the License Agreement or made or created by or on behalf of Atlas during the term of the License Agreement.

As consideration for the License, the Company is obligated to initiate a proof of concept Phase 2 study of NP-500 under an investigational new drug (“IND”) application with the U.S. Food and Drug Administration or an IND-equivalent dossier under appropriate regulatory authorities (the “Phase 2 study”) by October 15, 2020. If the Company fails to initiate the Phase 2 study by this date for any reason, including the timely receipt of adequate funding to initiate the Phase 2 study, the Company will incur a trial delay fee equal to $2,265,000 (the “Trial Delay Fee”), which amount is payable monthly over a period of approximately ten months. Atlas has the right to terminate the License in the event that the Company (i) fails to complete the Phase 2 study within five years of April 15, 2020 or (ii) has not timely initiated the Phase 2 study and thereafter fails to make three or more consecutive Trial Delay Payments.

Accounts Receivable Purchase Agreement with Oasis Capital, LLC

In May 2020, the Company entered into an accounts receivable purchase agreement with Oasis pursuant to which Oasis has initially agreed to purchase all of the Company's accounts receivable related to the April 2020 sales of the Company's Mytesi drug product to Cardinal Health, Inc. (the "April 2020 Accounts Receivable"). The April 2020 Accounts Receivable has a gross value of $2,754,000.

Per the terms of the agreement, Oasis will receive a fee of 5.45% (the "Fee") of the $2,754,000 April 2020 Accounts Receivable following their purchase of the April 2020 Accounts Receivable for $1,032,000 (the "Purchase Price"). Oasis will return to the Company within five days any amounts collected that exceeds the sum of the Purchase Price and the Fee. As with all Mytesi gross sales, the April 2020 Accounts Receivable will be reduced by Medicare, ADAP 340B chargebacks, returns, and wholesale distribution fees based on historical trends to determine net sales.

Under the agreement, Oasis is entitled to a one-time transaction fee of $25,000 and may be entitled to additional transaction fees to the extent Oasis purchases additional accounts receivable under the agreement, which fees will not exceed $5,000 per transaction.

The initial term of the agreement is one year, during which period Oasis, in addition to the April 2020 receivables, can purchase additional receivables. The agreement will automatically renew for successive one-year periods unless notice of non-renewal is provided by the Company at least 30 days prior to the expiration of a term. Notwithstanding the foregoing, either Oasis or the Company may terminate the agreement on 60 days' prior written notice.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of financial condition and results of operations should be read together with the condensed consolidated financial statements and the related notes included in Item 1 of Part I of this Quarterly

Report on Form 10-Q, and with our audited consolidated financial statements and the related notes included in our Annual Report on Form 10-K for the year ended December 31, 2019.

The discussion and analysis below includes certain forward-looking statements related to our research and development and commercialization of our products in the U.S., our future financial condition and results of operations and potential for profitability, the sufficiency of our cash resources, our ability to obtain additional equity or debt financing or other means of accelerating the payment of accounts receivable, if needed, possible partnering or other strategic opportunities for the development of our products, as well as other statements related to the progress and timing of product development, present or future licensing, collaborative or financing arrangements or that otherwise relate to future periods, which are all forward-looking statements as defined by the Private Securities Litigation Reform Act of 1995. These statements represent, among other things, the expectations, beliefs, plans and objectives of management and/or assumptions underlying our judgments concerning the future financial performance and other matters discussed in this document. The words "may," "will," "should," "plan," "believe," "estimate," "intend," "anticipate," "project," and "expect" and similar expressions are intended to connote forward-looking statements. All forward-looking statements involve certain risks, uncertainties and other factors described in our Annual Report on Form 10-K, that could cause our actual commercialization efforts, financial condition and results of operations, and business prospects and opportunities to differ materially from these expressed in, or implied by, those forward-looking statements. We caution investors not to place significant reliance on the forward-looking statements contained in this report. These statements, like all statements in this report, speak only as of the date of this report (unless another date is indicated), and we undertake no obligation to update or revise forward-looking statements.

Overview

We are a commercial stage pharmaceuticals company focused on developing novel, sustainably derived gastrointestinal products on a global basis. Our wholly-owned subsidiary, Napo Pharmaceuticals, Inc. ("Napo"), focuses on developing and commercializing proprietary human gastrointestinal pharmaceuticals for the global marketplace from plants used traditionally in rainforest areas. Our Mytesi ("Crofelemer") product is approved by the U.S. Food and Drug Administration for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy.

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 as of December 31, 2013, Jaguar was a wholly-owned subsidiary of Napo, and Jaguar was a majority-owned subsidiary of Napo until the close of the Company's initial public offering on May 18, 2015. 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. Most of the activities of the Company are now focused on the commercialization of Mytesi and development of follow-on indications for crofelemer and a second-generation anti-secretory product, lechlemer. In the field of animal health, we have limited activities which are focused on developing and commercializing first-in-class gastrointestinal products for dogs, dairy calves, foals, and high value horses.

We believe Jaguar is poised to realize a number of synergistic, value adding benefits—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. As previously announced, Jaguar, through Napo, now holds extensive global rights for Mytesi, and crofelemer manufacturing is being conducted at a multimillion-dollar commercial manufacturing facility that has been FDA-inspected and approved. Additionally, several of the drug product candidates in Jaguar's Mytesi pipeline are backed by what we believe are strong Phase 2 and proof of concept evidence from completed human clinical trials.

Mytesi is a novel, first-in-class anti-secretory agent which has a basic normalizing effect locally on the gut, and this mechanism of action has the potential to benefit multiple disorders. Mytesi is in development for multiple possible follow-on indications, including cancer therapy-related diarrhea; orphan-drug indications for infants and children with congenital diarrheal disorders and short bowel syndrome (SBS); supportive care for inflammatory bowel disease (IBD); irritable bowel syndrome (IBS); and for idiopathic/functional diarrhea. In addition, a second-generation anti-secretory agent, lechlemer, is in development for cholera. Mytesi previously received orphan-drug designation for SBS.

Financial Operations Overview

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 was $7,936,000 and $8,303,000 for the three months ended March 31, 2020 and 2019, respectively. As of March 31, 2020, we had a total stockholders' equity of $6,233,000, an accumulated deficit of $141,026,000, and cash of $1,215,000. We expect to continue to incur losses and experience increased expenditures 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 additional commercialization activities.

Revenues

Our product and collaboration revenue consist of the following:

- Revenues from the sale of our human drug Mytesi, which is sold through distributors and wholesalers.

- Revenues from the sale of our animal products branded as Neonorm Calf and Neonorm Foal. Our Neonorm and botanical extract products are primarily sold to distributors, who then sell the products to the end customers.

See “Results of Operations” below for more detailed discussion on revenues

Cost of Revenue

Cost of revenue consists of direct drug substance and drug product materials expense, direct labor, distribution fees, royalties and other related expenses associated with the sale of our products.

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, and reforestation expenses. Clinical and contract manufacturing expense consists primarily of costs to conduct stability, safety and efficacy studies, and manufacturing startup at an outsourced API provider in Italy. It also includes expenses with a third-party provider for the transfer of the Mytesi manufacturing process, and the related feasibility and validation activities.

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 and we track 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 decrease unless we secure partnership agreements to expand clinical trials in other indications.

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 Mytesi. We do not currently have any marketing or promotional expenses related to Neonorm Calf or Neonorm Foal in the three months ended March 31, 2020.

We expect sales and marketing expense to increase going forward as we focus on expanding our market access activities and commercial partnerships for the development of follow-on indications of Mytesi and Crofelemer.

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.

In the near term, we expect general and administrative expense to decrease as we focus on our pipeline development and market access expansion. This will include efforts to grow the business without adding headcount or increasing facilities.

Interest Expense

Interest expense consists primarily of non-cash and cash interest costs related to our borrowings.

Critical Accounting Policies and Significant Judgments and Estimates

The preparation of consolidated 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 consolidated 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 consolidated financial statements require significant judgments and estimates. For additional information relating to these and other accounting policies, see Note 2 to our audited consolidated financial statements and the related notes included in our Annual Report on Form 10-K for the year ended December 31, 2019.

Revenue Recognition

The Company recognizes revenue in accordance with ASC Topic 606, *Revenue from Contracts with Customers* (“ASC 606”), which was adopted on January 1, 2018, using the modified retrospective method, which was elected to

apply to all active contracts as of the adoption date. Application of the modified retrospective method did not impact amounts previously reported by the Company, nor did it require a cumulative effect adjustment upon adoption, as the Company's method of recognizing revenue under ASC 606 yielded similar results to the method utilized immediately prior to adoption. Accordingly, there was no effect to each financial statement line item as a result of applying the new revenue standard.

Practical Expedients, Elections, and Exemptions

We recognize revenue in accordance with the core principle of ASC 606 or when there is a transfer of control of promised goods or services to customers in an amount that reflects the consideration that we expect to be entitled to in exchange for those goods or services.

We used a practical expedient available under ASC 606-10-65-1(f)4 that permits us to consider the aggregate effect of all contract modifications that occurred before the beginning of the earliest period presented when identifying satisfied and unsatisfied performance obligations, transaction price, and allocating the transaction price to the satisfied and unsatisfied performance obligations.

We also used a practical expedient available under ASC 606-10-32-18 that permits us not to adjust the amount of consideration for the effects of a significant financing component if, at contract inception, the expected period between the transfer of promised goods or services and customer payment is one year or less.

We have elected to treat shipping and handling activities as fulfillment costs.

Additionally, we have elected to record revenue net of sales and other similar taxes.

Contracts

Effective January 16, 2019, Napo Pharmaceuticals, Inc. engaged Cardinal Health as its exclusive third party logistics distribution agent for commercial sales for the Company’s Mytesi product and to perform certain other services which include, without limitation, storage, distribution, returns, customer support, financial support, EDI and system access support (Exclusive Distribution Agreement).

In addition to the terms and conditions of the Agreement, Cardinal Health’s purchase of products, and assumption of title therein, is set forth in the Title Model Addendum. The Title Model Addendum states that upon receipt of product at the 3PL Facility (Cardinal Health in La Vergne, Tennessee) from the Company, title and risk of loss for the Mytesi product purchased by Cardinal Health (excluding consigned inventory) shall pass to Cardinal Health, and title and risk of loss for consigned inventory shall remain with Client until purchased by Cardinal Health in accordance with this Addendum. Napo Pharmaceuticals, Inc. considers Cardinal Health the Company’s exclusive customer for Mytesi products per the Cardinal Health Exclusive Distribution agreement.

Our Neonorm and botanical extract products are primarily sold to distributors, who then sell the products to the end customers. Since 2014, we entered into several distribution agreements with established distributors such as Animart, Vedco, VPI, RJ Matthews, Henry Schein, and Stockmen Supply to distribute the Company's products in the United States, Japan, and China. The distribution agreements and the related purchase order together meet the contract existence criteria under ASC 606-10-25-1. Jaguar sells directly to its customers without the use of an agent.

Performance obligations

For the products sold by each of Napo and Jaguar, the single performance obligation identified above is our promise to transfer our Mytesi product to Distributors based on specified payment and shipping terms in the arrangement. Product warranties are assurance type warranties that does not represent a performance obligation.

Transaction price

For both Jaguar and our Napo subsidiary, the transaction price is the amount of consideration to which we expect to collect in exchange for transferring promised goods or services to a customer. The transaction price of Mytesi and Neonorm is the Wholesaler Acquisition Cost ("WAC"), net of discounts, returns, and price adjustments.

Allocate transaction price

For both Jaguar and our Napo subsidiary, the entire transaction price is allocated to the single performance obligation contained in each contract.

Point in time recognition

For both Jaguar and our Napo subsidiary, a single performance obligation is satisfied at a point in time, upon the FOB terms of each contract when control, including title and all risks, has transferred to the customer.

Disaggregation of Product Revenue

Human

Sales of Mytesi are recognized as revenue when the products are delivered to the wholesaler. Revenues from the sale of Mytesi were $835,000 and $1,543,000 for the three months ended March 31, 2020 and 2019, respectively. Deductions from revenue are derived from reserves for estimated product returns based on historical returns experience. If actual returns differed from our historical experience, changes to the reserved could be required in future periods. Additional deductions are wholesaler fees which are based on our agreement with Cardinal Health, sales discounts, and Medicare rebates which are derived from data collected by Cardinal Health through various sources.

Animal

The Company recognized Neonorm revenues of $34,000 and $47,000 for the three months ended March 31, 2020 and 2019, respectively. Revenues are recognized upon shipment which is when title and control is transferred to the buyer. 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.

Indefinite-lived Intangible Assets

Indefinite-lived Intangible Assets

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. In connection with each annual impairment assessment and any interim impairment assessment in which indicators of impairment have been identified, we compare the fair value of the asset as of the date of the assessment with the carrying value of the asset on the condensed consolidated balance sheet. If impairment is indicated by this test, the intangible asset is written down by the amount by which the discounted cash flows expected from the intangible asset exceeds its carrying value. Fair value determinations require considerable judgement and are sensitive to changes in underlying assumptions, 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 factors. If current expectations of growth rates are not met or market factors outside of our control, such as discount rates, change significantly, this may lead to a further impairment in the future. 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. We recorded no impairment in the three months ended March 31, 2020 and 2019. The impairment loss is measured based on the excess of the carrying amount over the asset's fair value. Definite-lived intangible assets are amortized on a straight-line basis over the estimated periods benefited and are reviewed when appropriate for possible impairment.

Accrued Research and Development Expenses

As part of the process of preparing our condensed consolidated 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. Clinical and contract manufacturing expense consists primarily of costs to conduct stability, safety and efficacy studies, and manufacturing startup at an outsourced API provider in Italy. It also includes expenses with a third-party provider for the transfer of the Mytesi manufacturing process, and the related feasibility and validation activities.

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.

Results of Operations

Comparison of the Three Months Ended March 31, 2020 and 2019

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 March 31, 2020 and 2019 together with the change in such items in dollars and as a percentage.

	Three Months Ended March 31,			
(in thousands)	2020	2019	Variance	Variance %
Product revenue	$ 869	$ 1,590	$ (721)	(45.3)%
Total revenue	869	1,590	(721)	(45.3)%
Operating Expenses				
Cost of product revenue	676	865	(189)	(21.8)%
Research and development	1,582	1,421	161	11.3 %
Sales and marketing	1,469	1,565	(96)	(6.1)%
General and administrative	3,149	3,514	(365)	(10.4)%
Series B convertible preferred stock inducement expense	1,647	—	1,647	100.0 %

Total operating expenses	8,523	7,365	1,158	15.7 %
Loss from operations	(7,654)	(5,775)	(1,879)	32.5 %
Interest expense	(199)	(547)	348	(63.6)%
Other income (expense), net	(82)	6	(88)	(1,466.7)%
Change in fair value of financial instruments	(1)	(46)	45	(97.8)%
Loss on extinguishment of debt	—	(1,942)	1,942	(100.0)%
Net loss	(7,936)	(8,304)	368	(4.4)%
Net loss attributable to common shareholders	$ (8,416)	$ (8,304)	$ 112	(1.3)%

Revenue

Sales and Allowances

Due to the Company's arrangements, including elements of variable consideration, gross product sales are reduced in order to reflect the expected consideration to arrive at net product sales. Deductions to reduce gross product sales to net product sales in the three months ended March 31, 2020 and 2019 were as follows:

	Three Months Ended March 31,			
(in thousands)	2020	2019	Variance	Variance %
Gross product sales				
Mytesi	$ 1,304	$ 2,144	$ (840)	(39.2)%
Neonorm	34	47	(13)	(27.7)%
Total gross product sales	1,338	2,191	(853)	(38.9)%
Medicare rebates	(68)	(116)	48	(41.4)%
Sales discounts	(261)	(348)	87	(25.0)%
Sales returns	(18)	(32)	14	(43.8)%
Wholesaler fee	(122)	(105)	(17)	16.2 %
Net product sales	$ 869	$ 1,590	$ (721)	(45.3)%

Product Revenue

Our gross product revenues were $1,338,000 and $2,191,000 for the three months ended March 31, 2020 and 2019, respectively. These periods reflect revenue from the sale of our human drug Mytesi and our animal products branded as Neonorm Calf and Neonorm Foal.

Human

Sales of Mytesi are recognized as revenue when the products are delivered to the wholesalers. Our gross revenues from the sale of Mytesi were $1,304,000 and $2,144,000 in the three months ended March 31, 2020 and 2019, respectively. The decrease in sales of Mytesi is due to a decrease in the wholesaler demand in the first three months of 2020 mostly due to the transition in distributors during 2019, which saw additional bottles purchased in the three months ended March 31, 2019 as the new distributor was stocking their initial inventory of Mytesi.

Sales discounts were $261,000 and $348,000 for the three months ended March 31, 2020 and 2019, respectively, a decrease of $87,000. Sales discounts include discounts for prompt payments from customers and an estimated allowance for chargebacks on sales. Of the total sales discounts, allowances for chargebacks were $201,000 and $319,000 for the three months ended March 31, 2020 and 2019, respectively. These allowances for chargebacks were approximately 15% on Mytesi gross product sales for the three months ended March 31, 2020 and 2019. The decrease in allowance is mostly due to less bottles sold period over period.

Animal

Our Neonorm product revenues were $34,000 and $47,000 for the three months ended March 31, 2020 and 2019, respectively. Focus on sales and marketing for Neonorm products had decreased during 2020.

Cost of Product Revenue

(in thousands)	Three Months Ended March 31, 2020	2019	Variance	Variance %
Cost of Product Revenue				
Material cost	$ 332	$ 512	$ (180)	(35.2)%
Direct labor	149	123	26	21.1 %
Distribution fees	44	90	(46)	(51.1)%
Royalties	5	55	(50)	(90.9)%
Other	146	85	61	71.8 %
Total	$ 676	$ 865	$ (189)	(21.8)%

Cost of product revenue decreased $189,000 from $865,000 in the three months ended March 31, 2019 to $676,000 for the same period in 2020. The decrease in cost of product revenue period over period was due to decreased sales of Mytesi in the three months ended March 31, 2020.

Research and Development

The following table presents the components of research and development expense for the three months ended March 31, 2020 and 2019 together with the change in such components in dollars and as a percentage:

(in thousands)	Three Months Ended March 31, 2020	2019	Variance	Variance %
Research and Development:				
Personnel and related benefits	$ 376	$ 554	$ (178)	(32.1)%
Materials expense and tree planting	37	31	6	19.4 %
Travel, other expenses	—	18	(18)	(100.0)%
Clinical and contract manufacturing	406	601	(195)	(32.4)%
Stock-based compensation	202	67	135	201.5 %
Other	561	150	411	274.0 %
Total	$ 1,582	$ 1,421	$ 161	11.3 %

Research and development expense increased $161,000 from $1,421,000 in the three months ended March 31, 2019 to $1,582,000 for the three months ended March 31, 2020 due primarily to:

- Clinical and contract manufacturing expense decreased $195,000 from $601,000 in the three months ended March 31, 2019 to $406,000 in the same period in 2020 primarily due to a decrease in contract manufacturing costs for enhanced manufacturing process improvements.

- Personnel and related benefits decreased $178,000 from $554,000 in the three months ended March 31, 2019 to $376,000 in the same period in 2020 due to changes in headcount and related salaries.

- Other expenses, consisting primarily of consulting, formulation and regulatory fees, increased $411,000 from $150,000 in the three months ended March 31, 2019 to $561,000 in the same period in 2020. Consulting expenses increased by $133,000 due to an increase in clinical trial consultants, which is consistent with the increased activity in development of multiple follow-on indications for Mytesi. Direct R&D testing costs increased $169,000 due to an increase in R&D work. Regulatory expenses increased by $38,000.

We expect research and development expense to decrease unless we secure partnership agreements to expand clinical trials in other indications.

Sales and Marketing

The following table presents the components of sales and marketing (S&M) expense for the three months ended March 31, 2020 and 2019 together with the change in such components in dollars and as a percentage:

	Three Months Ended March 31,			
(in thousands)	2020	2019	Variance	Variance %
Sales and Marketing:				
Personnel and related benefits	$ 795	$ 1,041	$ (246)	(23.6)%
Stock-based compensation	56	34	22	64.7 %
Direct marketing fees and expense	378	356	22	6.2 %
Other	240	134	106	79.1 %
Total	$ 1,469	$ 1,565	$ (96)	(6.1)%

Sales and marketing expense decreased $96,000 from $1,565,000 in the three months ended March 31, 2019 to $1,469,000 for the three months ended March 31, 2020. The following table presents the components of S&M expense for the years ended:

- Direct marketing and sales expense increased $22,000 from $356,000 in the three months ended March 31, 2019 to $378,000 for the same period in 2020 due to an increase in marketing programs for Mytesi.

- Personnel and related benefits decreased $246,000 from $1,041,000 in the three months ended March 31, 2019 to $795,000 in the same period in 2020 due to sales force reduction.

- Other expenses increased $106,000 from $134,000 in the three months ended March 31, 2019 to $240,000 in the same period in 2020 largely due to additional marketing consulting costs of $90,000.

General and Administrative

	Three Months Ended March 31,			
	2020	2019	Variance	Variance %
General and Administrative:				
Personnel and related benefits	$ 461	$ 448	$ 13	2.9 %
Audit, tax and accounting services	58	270	(212)	(78.5)%
Third-party consulting services	296	552	(256)	(46.4)%
Legal services	773	759	14	1.8 %
Travel, other expenses	26	54	(28)	(51.9)%
Stock-based compensation	502	326	176	54.0 %
Rent and lease expense	203	175	28	16.0 %
Public company expense	42	187	(145)	(77.5)%
Other	788	743	45	6.1 %
Total	$ 3,149	$ 3,514	$ (365)	(10.4)%

General and administrative expenses decreased $365,000 from $3,514,000 in the three months ended March 31, 2019 to $3,149,000 for the same period in 2020 primarily due to decreases in accounting fees, third-party consulting, , and public company expenses:

- Accounting fees decreased $212,000 from $270,000 in the three months ended March 31, 2020 to $58,000 in the same period in 2020, mostly due to change in the timing of fees billings.

- Consulting fees decreased $256,000 from $552,000 in the three months ended March 31, 2019 to $296,000 in the same period in 2020, due to the switch to fulltime employees instead of consultants in the Finance department.

- Stock-based compensation expense increased $176,000 from $326,000 in the three months ended March 31, 2019 to $502,000 in the same period in 2020 due to an increase in the volume of option grants to new and existing employees.

- Public company expenses decreased $145,000 from $187,000 in the three months ended March 31, 2020 to $42,000 in the same period in 2020 primarily due to change in the timing of filings related costs.

In the near term, we expect general and administrative expense to remain the same as we focus on other areas of operations. This will include efforts to grow the business without adding headcount or increasing facilities.

Series B convertible preferred stock inducement expense

On March 24, 2020, the Company entered into a warrant exercise and preferred stock amendment agreement with a holder of its Series 2 warrants previously issued in the Company's registered public offering on July 23, 2019, pursuant to which the holder agreed to exercise in cash its warrants to purchase an aggregate of 1,250,000 shares of common stock, at a reduced exercise price of $0.5227 per share for gross proceeds to the Company of approximately $653,000. As further inducement to enter into the amendment agreement, the Company agreed to reduce the conversion price of the Company's Series B convertible preferred stock from $2.00 to $0.4456, which is equal to the Minimum Price plus $0.01. The modification of the conversion price of the Series B convertible preferred shares were qualitatively considered an extinguishment and the Company followed guidance in ASC 260-10-S99-2 and recorded a loss of $1,647,000 and derecognizing the Series B convertible preferred shares.

Liquidity and Capital Resources

Sources of Liquidity

We have incurred net losses since our inception. For the three months ended March 31, 2020 and 2019, we had net losses of $7.9 million and $8.3 million, respectively. We expect to incur additional losses in the near-term future. At March 31, 2020, we had an accumulated deficit of $141.0 million. To date, we have generated only limited revenue, and we may never achieve revenue sufficient to offset our expenses.

We had cash of $1.2 million as of March 31, 2020. We do not believe our current capital is sufficient to fund our operating plan through one year from the issuance of these unaudited condensed consolidated financial statements. Our independent registered public accounting firm has included an explanatory paragraph in its audit report included in our Annual Report on Form 10-K for the year ended December 31, 2019 regarding our assessment of substantial doubt about our ability to continue as a going concern. Our condensed consolidated financial statements do not include any adjustments that may result from the outcome of this uncertainty.

We have funded our operations primarily through the issuance of equity and debt financing, in addition to sales of our commercial products. Our funding activities in the three months ended March 31, 2020 were as follows:

- On February 24, 2020, the Company entered into a warrant exercise agreement with a holder of Series 1 Warrants previously issued in the Company's registered public offering on July 23, 2019 and its warrants previously issued in private placements in March through June of 2019 ("Bridge Warrants"), pursuant to which the Holder agreed to exercise in cash its warrants to purchase an aggregate of 458,022 shares of the Company's common stock, par value $0.0001 per share, at a reduced exercise price of $0.692 per share, which is the Minimum Price (as defined under Nasdaq Listing Rule 5635(d)) as of the date of such Exercise Agreement, for gross proceeds to the Company of approximately $317,000.
- On March 4, 2020, entered into a royalty interest purchase agreement with Iliad Research and Trading, L.P., a Utah limited partnership affiliated with Chicago Venture Partners, L.P., pursuant to which the Company sold a royalty interest entitling Purchaser to receive $500,000 of future royalties on sales of Mytesi and certain up-front license fees and milestone payments from licensees and/or distributors for an aggregate purchase price of $350,000.
- On March 5, 2020, the Company entered into a warrant exercise agreement with a holder of Series 2 Warrants previously issued in registered public offering on July 23, 2019, pursuant to which the Holder agreed to exercise in cash its warrants to purchase an aggregate of 90,940 shares of the Company's common stock, par value $0.0001 per share, at a reduced exercise price of $0.605 per share, which is the Minimum Price (as defined under Nasdaq Listing Rule 5635(d)) as of the date of such Exercise Agreement, for gross proceeds to the Company of approximately $55,000.
- On March 23, 2020, the Company entered into a Private Investment in Public Equity ("PIPE") with certain investors, pursuant to which the Company agreed to issue and sell to the Investors in a private placement an aggregate of 1,714,283 unregistered shares for an aggregate purchase price of approximately $720,000.
- On March 24, 2020, Jaguar and Ionic Ventures LLC ("Ionic") entered into a warrant exercise and preferred stock amendment agreement with a holder of Series 2 Warrants previously issued in the Company's registered public offering on July 23, 2019, pursuant to which the Holder agreed to exercise in cash its warrants to purchase an aggregate of 1,250,000 shares of Common Stock, at a reduced exercise price of $0.5227 per share, which is a 20% premium to the Minimum Price (as defined under Nasdaq Listing Rule 5635(d)) as of the date of such Amendment Agreement, for gross proceeds of approximately $653,400. As further inducement to enter into the Amendment Agreement, the Company agreed to reduce the conversion price of the Company's Series B convertible preferred stock from $2.00 to $0.4456, which is equal to the Minimum Price plus $0.01.

We expect our expenditures will continue to increase as we continue our efforts to develop our products 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 one year from the issuance of these unaudited condensed consolidated financial statements. 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 condensed consolidated financial statements.

Cash Flows for the Three Months Ended March 31, 2020 Compared to the Three Months Ended March 31, 2019

The following table shows a summary of cash flows for the three months ended March 31, 2020 and 2019:

(in thousands)	Three Months Ended March 31, 2020	2019
Total cash used in operating activities	$ (4,296)	$ (3,465)
Total cash used in investing activities	(7)	—
Total cash provided by financing activities	2,023	3,469
Net increase in cash	$ (2,280)	$ 4

Cash Used in Operating Activities

During the three months ended March 31, 2020, net cash used in operating activities of $4,296,000 resulted from our net loss of $7,936,000 and an increase in fair value of warrants of $1,000, adjusted by $85,000 in amortized expense on modifications of warrants, depreciation and amortization expenses of $432,000, amortization of debt discounts and debt issuance costs of $14,000, stock-based compensation of $760,000, amortization of operating lease right-of-use assets of $191,000, inducement charge of $1,647,000 on the modification of Series B convertible preferred shares, and changes in operating assets and liabilities of $512,000.

During the three months ended March 31, 2019, net cash used in operating activities of $3,465,000 resulted from our net loss of $8,304,000, adjusted for a reduction in the fair value of warrant liabilities of $46,000, debt discounts and debt issuance costs of $178,000, stock-based compensation of $427,000, depreciation and amortization expenses of $437,000, loss on the extinguishment of debt of $1,942,000 and of changes in operating assets and liabilities of $1,809,000.

Cash Used in Investing Activities

During the three months ended March 31, 2020, cash used in investing activities was $7,000 and consisted of cash used to purchase property and equipment. During the three months ended March 31, 2019, there was no cash used in investing activities.

Cash Provided by Financing Activities

During the three months ended March 31, 2020, net cash provided by financing activities of $2,023,000 consisted of $698,000 in net proceeds received from 1,714,283 shares of common stock issued via a PIPE financing, $350,000 in net proceeds received from issuance of a note payable, $1,025,000 in net proceeds received from exercises of warrants to purchase a total of 1,798,962 shares of common stock, offset by $50,000 in principal payments of the note payable.

During the three months ended March 31, 2019, net cash provided by financing activities of $3,469,000 primarily consisted of $2,769,000 in net proceeds received from the issuance of common stock and $800,000 in proceeds received from the issuance of notes payable, offset by $100,000 in repayments of notes payable.

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.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

Our management, Chief Executive Officer and Principal Financial and Accounting Officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2020. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Principal Financial and Accounting Officer, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, our Chief Executive Officer and Principal Financial and Accounting Officer concluded that our disclosure controls and procedures were not effective at the reasonable assurance level as of March 31, 2020. This conclusion was based on the material weaknesses in our internal control over financial reporting as further described below.

Material Weaknesses

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected and corrected on a timely basis.

In connection with the preparation of our annual financial statements for the year ended December 31, 2019, we identified a material weakness in our internal control over financial reporting related to staff turnover in our accounting department. We did not maintain a sufficient complement of internal personnel with appropriate knowledge, experience and/or training commensurate with our financial reporting requirements. We relied on outside consulting technical experts and did not maintain adequate internal qualified personnel to properly supervise and review the information provided by the outside consulting technical experts to ensure certain significant complex transactions and technical matters were properly accounted for. In addition, we identified inadequate internal technical staffing levels and expertise to properly supervise and review the information of the outside consulting technical experts to properly apply ASC 815-40 for liability classification of certain warrants and ASC 470-50 and ASC 470-60 to properly reflect the accounting impact to multiple modifications of the Company’s debt instruments. We did not have adequate policies and procedures in place to ensure the timely, effective review of assumptions used in measuring the fair value of certain financial instruments. We did not have adequate policies and procedures in place to ensure the timely, effective review of

compliance with contractual covenants in certain financial instruments. This material weakness has not been remediated as of March 31, 2020.

In connection with preparation of our interim financial statements for the three months ended March 31, 2020, we identified a material weakness in our internal control over financial reporting related to our financial statement preparation and review process. The primary factors contributing to the material weaknesses were as follows:

- We did not have adequate policies and procedures in place to ensure the timely and effective preparation and review of the financial statements.

- We did not have sufficient resources with appropriate knowledge, experience and/or training commensurate with our financial reporting requirements to assist us in our timely and efficient preparation and review over our financial reporting.

Remediation Efforts to Address Material Weaknesses

We have prepared a preliminary remediation plan to address the underlying causes of the material weaknesses described above. The preliminary remediation plan includes:

- Reassessing the design and operation of internal controls over financial reporting and review procedures over the preparation of our financial statements:
- Hiring and training of permanent accounting personnel or using consultants to provide support during our quarterly and annual preparation, review, and reporting of our financial statements.
- Maintain adequate internal qualified personnel to properly supervise and review the information provided by the outside consulting technical experts to ensure certain significant complex transactions and technical matters were properly accounted for.

We cannot assure you that the measures we may take in response to these material weaknesses will be sufficient to remediate such material weaknesses or to avoid potential future material weaknesses.

Internal Control over Financial Reporting

Based on their evaluation as of the end of the period covered by this Quarterly Report on Form 10 Q, our Chief Executive Officer and Principal Financial and Accounting Officer have concluded that, as of such date, our disclosure controls and procedures were not effective due to the existence of material weaknesses in the design of our internal controls over financial reporting relating (i) to staff turnover in our accounting department, and (ii) to inadequate policies and procedures in place to ensure the timely and effective preparation and review of the financial statements.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected on a timely basis. We plan to enhance existing controls and design and implement new controls applicable to staff, to ensure that our staff is accurately trained to properly understand and review financial transactions. We plan to devote significant time and attention to remediate the above material weaknesses as soon as reasonably possible. As we continue to evaluate our controls, we will make the necessary changes to improve the overall design and operation of our controls. We believe these actions will be sufficient to remediate the identified material weaknesses and strengthen our internal control over financial reporting; however, there can be no guarantee that such remediation will be sufficient. We will continue to monitor the effectiveness of our controls and will make any further changes management determines appropriate.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. — OTHER INFORMATION

Item 1. Legal Proceedings.

March 2018 Demand Letter relating to 2018 Special Meeting of Stockholders

While not a legal proceeding, on March 27, 2018, we received a demand letter from a law firm representing a purported stockholder, relating to certain approvals obtained at a special meeting of stockholders on March 12, 2018 (the "2018 Special Meeting"). The demand letter alleges that we miscalculated the votes with respect to (i) the proposal to amend our Third Amended and Restated Certificate of Incorporation as filed with Secretary of State of the State of Delaware on March 15, 2018 (the "COI"), which increased the authorized shares of Common Stock from 250,000,000 to 500,000,000 (the "Share Increase Proposal") and (ii) the proposal to amend the COI to effect a reverse stock split at a ratio of not less than 1-for-1.2 and not greater than 1-for-10 (the "Former Reverse Stock Split Proposal").We did not implement the Former Reverse Stock Split Proposal. In addition, at the 2018 annual meeting of stockholders held on May 18, 2018, stockholders approved amendments to the COI to (i) effect a reverse stock split at a ratio of not less than 1-for-11 and not greater than 1-for-15 and (ii) decrease the number of authorized shares of Common Stock to 150,000,000.

On September 5, 2018, we responded to the law firm, indicating that the Board unanimously rejected the demands set forth in the demand letter (the "Demand Letter Claims"). While no proceedings with respect to the demand letter were ever initiated and we believe that the allegations set forth in the demand letter were without merit and would have vigorously defended against any such proceeding, the Demand Letter Claims were settled with a release of all such claims in March 2019 without any material financial settlement costs incurred by us.

July 2017 Complaint Relating to the Merger

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 (the "Plaintiff") on behalf of shareholders of the Company who held shares on April 12, 2017 and were entitled to vote at the 2017 Special Shareholders Meeting, against the Company and certain individuals who were directors as of the date of the vote (collectively, the "Defendants"), in a matter captioned Tony Plant v. Jaguar Animal Health, Inc., et al., making 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 claims alleged false and misleading information provided to investors in the Joint Proxy Statement/Prospectus on Form S-4 (File No. 333 217364) declared effective by the Commission on July 6, 2017 related to the solicitation of votes from shareholders to approve the merger and certain transactions related thereto. The Company accepted service of the complaint and summons on behalf of itself and the United States-based director Defendants on November 1, 2017. The Company has not accepted service on behalf of, and Plaintiff has not yet served, the non-U.S.-based director Defendants.

On October 3, 2017, Plaintiff filed a motion seeking appointment as lead plaintiff and appointment of Monteverde & Associates PC as lead counsel. That motion was granted. Plaintiff filed an amended complaint against the Company and the United States based director Defendants on January 10, 2018. The Defendants filed a motion to dismiss on March 12, 2018, for which oral arguments were held on June 14, 2018. The court dismissed the amended complaint on September 20, 2018. Plaintiff was entitled to amend that complaint within 20 days from the date of dismissal. On October 10, 2018, Plaintiff filed a second amended complaint to focus on the Company's commercial strategy in support of Equilevia and the related disclosure statements in the Form S-4 described above. On November 6, 2018, the Defendants moved to dismiss the second amended complaint. The Defendants argue in their motion that the second amended complaint fails to state a claim upon which relief can be granted because the omissions and misrepresentations alleged in the complaint are immaterial as a matter of law. The court denied the Defendants' motion to dismiss on June 28, 2019. The Company answered the second amended complaint on August 2, 2019; the answer denied the material allegations of the second amended complaint. The parties are now engaged in discovery. If the Plaintiff were able to prove his allegations in this matter and to establish the damages he asserts, then an adverse ruling could have a material adverse impact on the Company. The Company believes that it is not probable that an asset has been impaired or a liability has been incurred as of the date of the financial statements and the amount of any potential loss is not reasonably estimable.

On May 4, 2020, Jaguar Health, Inc. received a letter from the Committee on Oversight and Reform of the U.S. House of Representatives (the "Committee") regarding the list price adjustment of Mytesi. Among other things, the Committee expressed an interest in understanding whether the price adjustment was connected to the Company's expectation that it could market crofelemer to treat coronavirus patients given the Company's submission of a request to the U.S. Food and Drug Administration for Emergency Use Authorization ("EUA") for crofelemer for the symptomatic relief of diarrhea and other gastrointestinal symptoms in patients with COVID-19 and for patients with COVID-19 who have diarrhea associated with certain antiviral treatments, which submission was denied by the FDA on April 7 as previously disclosed.

The Company intends to cooperate with the Committee's inquiry and has prepared a public statement regarding the price adjustment, which is available on the Company's website at https://jaguarhealth.gcs-web.com/company-statement. In its statement, the Company explains that the decision to adjust the price for crofelemer was made in December 2019 as part of expanding the Company's comprehensive patient access program, and had the Company received EUA, it would have deferred the price adjustment until after the emergency use period ended.

Other than as described above, there are currently no claims or actions pending against us, the ultimate disposition of which could have a material adverse effect on our results of operations, financial condition or cash flows.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Other than the shares of our common stock sold pursuant to the securities purchase agreement with certain investors and equity purchase agreement with Oasis Capital, LLC, each as disclosed on our Form 8-K filed with the SEC on March 26, 2020, there were no unregistered sales of equity securities during the period.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit No.	Description
3.1	Third Amended and Restated Certificate of Incorporation of Jaguar Health, Inc. (f/k/a Jaguar Animal Health, Inc.) (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K (No. 001-36714) filed on August 1, 2017).
3.2	Certificate of Second Amendment of the Third Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Form 8-K of Jaguar Health, Inc. filed June 1, 2018, File No. 001-36714).
3.3	Certificate of Third Amendment of the Third Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.2 to the Form 8-K of Jaguar Health, Inc. filed June 1, 2018, File No. 001-36714).
3.4	Certificate of Designation of Preferences, Rights, and Limitations of Series B Preferred Stock (incorporated by reference to Exhibit 3.1 to the Form 8-K of Jaguar Health, Inc. filed July 23, 2019, File No. 001-36714).
3.5	Certificate of Designation of Preferences, Rights, and Limitations of Series B-1 Preferred Stock (incorporated by reference to Exhibit 3.1 to the Form 8-K of Jaguar Health, Inc. filed October 3, 2019, File No. 001-36714).
3.6	Certificate of Designation of Preferences, Rights, and Limitations of Series B-2 Preferred Stock (incorporated by reference to Exhibit 3.1 to the Form 8-K of Jaguar Health, Inc. filed December 26, 2019, File No. 001-36714).
3.7	Certificate of Amendment to the Certificate of Designation of Series B Preferred Stock (incorporated by reference to Exhibit 3.1 to the Form 8-K of Jaguar Health, Inc. filed March 26, 2020, File No. 001-36714).
4.1	Royalty Interest, dated March 4, 2020, by and between Jaguar Health, Inc. and Iliad Research and Trading L.P. (incorporated by reference to Exhibit 4.1 to the Form 8-K of Jaguar Health, Inc. filed March 6, 2020, File No. 001-36714).
10.1	First Amendment to the Exchange Agreement, dated January 22, 2020, by and between Jaguar Health, Inc. and Oasis Capital, LLC (incorporated by reference to Exhibit 10.1 to the Form 8-K/A of Jaguar Health filed January 27, 2020 File No. 001-36714).
10.2	Form of Warrant Exercise Agreement by and between Jaguar Health, Inc. and the Holder named therein (incorporated by reference to Exhibit 10.1 to the Form 8-K of Jaguar Health filed February 28, 2020 File No. 001-36714).
10.3	Securities Purchase Agreement, dated March 4, 2020, by and between Jaguar Health, Inc. and Iliad Research and Trading, L.P. (incorporated by reference to Exhibit 10.1 to the Form 8-K of Jaguar Health filed March 6, 2020 File No. 001-36714).
10.4	Securities Purchase Agreement, dated March 23, 2020, by and between Jaguar Health, Inc. and the investors named therein (incorporated by reference to Exhibit 10.1 to the Form 8-K of Jaguar Health filed March 26, 2020 File No. 001-36714).
10.5	Warrant Exercise and Preferred Stock Amendment Agreement, dated March 24, 2020, by and between Jaguar Health, Inc. and Holder named therein (incorporated by reference to Exhibit 10.2 to the Form 8-K of Jaguar Health filed March 26, 2020 File No. 001-36714).
10.6	Leak-Out Agreement, dated March 24, 2020, by and between Jaguar Health, Inc. named therein (incorporated by reference to Exhibit 10.3 to the Form 8-K of Jaguar Health filed March 26, 2020 File No. 001-36714).
10.7	Equity Purchase Agreement, dated March 24, 2020, by and between Jaguar Health, Inc. and Oasis Capital, LLC (incorporated by reference to Exhibit 10.4 to the Form 8-K of Jaguar Health filed March 26, 2020 File No. 001-36714).
10.8	Registration Rights Agreement, dated March 24, 2020, by and between Jaguar Health, Inc. and Oasis Capital, LLC (incorporated by reference to Exhibit 10.5 to the Form 8-K of Jaguar Health filed March 26, 2020 File No. 001-36714).
10.9	Landlord Letter of Credit Agreement, dated March 24, 2020, by and between Jaguar Health, Inc. and Charles Conte (incorporated by reference to Exhibit 10.6 to the Form 8-K of Jaguar Health filed March 26, 2020 File No. 001-36714).

31.1*	Principal Executive Officer's Certification Pursuant to Section 302 of the Sarbanes- Oxley Act of 2002.
31.2*	Principal Financial Officer's Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification Pursuant to 18 U.S.C. § 1350 (Section 906 of Sarbanes-Oxley Act of 2002).
32.2**	Certification Pursuant to 18 U.S.C. § 1350 (Section 906 of Sarbanes-Oxley Act of 2002).
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

** In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 34 47986, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Form 10 Q and will not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934 (the “Exchange Act”) or deemed to be incorporated by reference into any filing under the Exchange Act or the Securities Act of 1933 except to the extent that the registrant specifically incorporates it by reference.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: May 14, 2020

JAGUAR HEALTH, INC.

By: /s/ Carol R. Lizak
Principal Financial and Accounting Officer

Exhibit 31.1

PRINCIPAL EXECUTIVE OFFICER'S CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Lisa A. Conte, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Jaguar Health, Inc. for the quarter ended March 31, 2020;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 14, 2020

/s/ Lisa A. Conte
Lisa A. Conte
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

PRINCIPAL FINANCIAL OFFICER'S CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Carol Lizak, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Jaguar Health, Inc. for the quarter ended March 31, 2020;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 14, 2020

/s/ Carol Lizak
Carol Lizak
Principal Financial and Accounting Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Jaguar Health, Inc. (the "Company") on Form 10-Q for the quarter ended March 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned officer of the Company certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to such officer's knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 14, 2020

/s/ Lisa A. Conte
Lisa A. Conte
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Jaguar Health, Inc. (the "Company") on Form 10-Q for the quarter ended March 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned officer of the Company certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to such officer's knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 14, 2020

/s/ Carol Lizak
Carol Lizak
Principal Financial and Accounting Officer