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

FORM 10-Q

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Quarterly Period Ended March 31, 2016

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: 001-37428

RITTER PHARMACEUTICALS, INC.
(Exact name of Registrant as specified in its Charter)

Delaware	**26-3474527**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer I dentification Number)

1880 Century Park East, Suite 1000
Los Angeles, CA 90067
(Address and zip code of principal executive offices)

Registrant's Telephone Number, Including Area Code: **(310) 203-1000**

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 [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No [ ]

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

Large Accelerated Filer	[ ]	Accelerated Filer	[ ]
Non-Accelerated Filer (Do not check if a smaller reporting company)	[ ]	Smaller Reporting Company	[X]

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

As of May 6, 2016, there were 8,584,661 shares of the issuer's common stock, par value $0.001 per share, outstanding.

TABLE OF CONTENTS

PART I — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

RITTER PHARMACEUTICALS, INC.
CONDENSED BALANCE SHEETS

	March 31, 2016 (unaudited)	December 31, 2015
ASSETS		
Current assets		
Cash and cash equivalents	$ 14,088,541	$ 15,819,566
Prepaid expenses	144,005	189,136
Total current assets	14,232,546	16,008,702
Other assets	10,326	10,326
Property and equipment, net	26,866	20,688
Total Assets	**$ 14,269,738**	**$ 16,039,716**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 2,128,065	$ 739,357
Accrued expenses	204,178	614,141
Other liabilities	1,223	1,223
Total current liabilities	2,333,466	1,354,721
Stockholders' equity		
Preferred stock, $0.001 par value; 5,000,000 shares authorized; 0 shares issued and outstanding as of March 31, 2016 and December 31, 2015	—	—
Common stock, $0.001 par value; 25,000,000 shares authorized as of March 31, 2016 and December 31, 2015; 8,584,661 and 8,582,004 shares issued and outstanding as of March 31, 2016 and December 31, 2015, respectively	8,585	8,582
Additional paid-in capital	42,139,079	41,759,355
Accumulated deficit	(30,211,392)	(27,082,942)
Total stockholders' equity	11,936,272	14,684,995
Total Liabilities and Stockholders' Equity	**$ 14,269,738**	**$ 16,039,716**

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

RITTER PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF OPERATIONS
(Unaudited)

	For the Three Months Ended March 31,	
	2016	**2015**
Operating costs and expenses		
Research and development	$ 1,882,848	$ 31,460
Patent costs	32,364	62,274
General and administrative	1,235,018	1,302,565
Total operating costs and expenses	3,150,230	1,396,299
Operating loss	(3,150,230)	(1,396,299)
Other income		
Interest income	20,566	2,204
Other income	1,214	7,091
Total other income	21,780	9,295
Net loss	**$ (3,128,450)**	**$ (1,387,004)**
Cumulative preferred stock dividends	—	(149,283)
Accretion of discount of Series C preferred stock	—	(31,818)
Net loss attributable to common stockholders	$ (3,128,450)	$ (1,568,105)
Net loss attributable to common stockholders per share, basic and diluted	$ (0.36)	$ (3.37)
Weighted average shares outstanding, basic and diluted	8,583,259	465,384

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

RITTER PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF CASH FLOWS
(Unaudited)

	For the Three Months Ended March 31,	
	2016	**2015**
Cash flows from operating activities		
Net loss	$ (3,128,450)	$ (1,387,004)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	1,254	303
Stock-based compensation	377,597	799,125
Changes in operating assets and liabilities:		
Prepaid expenses	45,131	762
Accounts payable	1,388,708	(80,874)
Accrued expenses	(409,963)	50,001
Other liabilities	—	(839)
Net cash used in operating activities	**(1,725,723)**	**(618,526)**
Cash flows from investing activities		
Purchases of property and equipment	(7,432)	—
Net cash used in investing activities	**(7,432)**	**—**
Cash flows from financing activities		
Proceeds from exercise of options on common stock	2,130	—
Deferred offering costs	—	(153,409)
Net cash provided by (used in) financing activities	**2,130**	**(153,409)**
Net decrease in cash and cash equivalents	**(1,731,025)**	**(771,935)**
Cash and cash equivalents at beginning of year	**15,819,566**	**2,747,248**
Cash and cash equivalents at end of year	**$ 14,088,541**	**$ 1,975,313**
Supplemental disclosure of cash flow information		
Cash paid for interest	$ —	$ —
Cash paid for taxes	$ —	$ —
Supplemental disclosure of noncash financing activities		
Cumulative preferred stock dividends	$ —	$ 149,283
Accretion of discount on Series C preferred stock	$ —	$ 31,818

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

NOTE 1 — ORGANIZATION AND PRINCIPAL ACTIVITIES

Ritter Pharmaceuticals, Inc. ("Ritter" or the "Company") is a Delaware corporation headquartered in Los Angeles, California. The Company was formed as a Nevada limited liability company on March 29, 2004 under the name Ritter Natural Sciences, LLC, and converted into a Delaware corporation on September 16, 2008.

Ritter Pharmaceuticals, Inc. develops novel therapeutic products that modulate the human gut microbiome to treat gastrointestinal diseases. The Company is advancing human gut health research by exploring the metabolic capacity of the gut microbiota, and translating the functionality of these microbiome modulators into safe and effective applications. The Company's lead drug candidate, RP-G28, has the potential to become the first Food and Drug Administration ("FDA") approved drug for lactose intolerance, a condition that affects more than one billion people worldwide.

The Company currently operates in one business segment focusing on the development and commercialization of RP-G28. The Company is not organized by market and is managed and operated as one business. A single management team reports to the chief operating decision maker, the Chief Executive Officer. The Company does not currently operate any separate lines of business or separate business entities.

Initial Public Offering

On June 24, 2015, the Company's registration statement on Form S-1 (File No. 333-202924) relating to its initial public offering of its common stock was declared effective by the Securities and Exchange Commission ("SEC"). The shares began trading on the NASDAQ Capital Market on June 24, 2015. The initial public offering closed on June 29, 2015, and 4,000,000 shares of common stock were sold at an initial public offering price of $5.00 per share.

The Company paid to the underwriters underwriting discounts and commissions of approximately $1.6 million in connection with the offering. In addition, the Company incurred expenses of approximately $1 million in connection with the offering. Thus, the net offering proceeds to the Company, after deducting underwriting discounts and commissions and offering expenses, were approximately $17.4 million.

Capitalization

In connection with the Company's initial public offering in June 2015, the Company effected a 1–for-7.15 reverse split of its common stock. All references to shares of common stock outstanding, average number of shares outstanding and per share amounts in these financial statements and notes to financial statements have been adjusted to reflect the reverse split on a retroactive basis.

NOTE 2 — BASIS OF PRESENTATION

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") and include all adjustments necessary for the fair presentation of the Company's financial position for the periods presented.

The accompanying interim period unaudited condensed financial statements have also been prepared in accordance with GAAP and applicable rules and regulations of the SEC regarding interim financial reporting. The condensed balance sheet as of March 31, 2016, the condensed statements of operations for the three months ended March 31, 2016 and 2015, and the condensed statements of cash flows for the three months ended March 31, 2016 and 2015, are unaudited, but include all adjustments, consisting only of normal recurring adjustments, which the Company considers necessary for a fair presentation of its financial position, operating results and cash flows for the periods presented. The condensed balance sheet at December 31, 2015 has been derived from audited financial statements included in the Annual Report on Form 10-K filed with the SEC on March 21, 2016. The results for the three months ended March 31, 2016 are not necessarily indicative of the results expected for the full fiscal year or any other period.

The accompanying interim period unaudited condensed financial statements and related financial information included in this Quarterly Report on Form 10-Q should be read in conjunction with the audited financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2015.

Going Concern and Liquidity

The accompanying condensed financial statements have been prepared assuming the Company will continue as a going concern, which contemplates, among other things, the realization of assets and satisfaction of liabilities in the normal course of business. The Company has not generated any product revenue and has not achieved profitable operations. At March 31, 2016, the Company had working capital of approximately $11.9 million, an accumulated deficit of approximately $30.2 million, and cash and cash equivalents of approximately $14.1 million. There is no assurance that profitable operations will ever be achieved, and, if achieved, could be sustained on a continuing basis. In addition, development activities, clinical and pre-clinical testing, and commercialization of the Company's products will require significant financing. These matters, among others, raise substantial doubt about the Company's ability to continue as a going concern.

Since inception, the operations of the Company have been funded through the sale of common shares, preferred shares and convertible debt. Management cannot be certain that additional funding will be available on acceptable terms, or at all. To the extent that the Company raises additional funds by issuing equity securities, the Company's stockholders may experience significant dilution. Any debt financing, if available, may involve restrictive covenants that impact the Company's ability to conduct business. If the Company is not able to raise additional capital when required or on acceptable terms, the Company may have to (i) significantly delay, scale back or discontinue the development and/or commercialization of one or more product candidates; (ii) seek collaborators for product candidates at an earlier stage than otherwise would be desirable and on terms that are less favorable than might otherwise be available; (iii) relinquish or otherwise dispose of rights to technologies, product candidates or products that the Company would otherwise seek to develop or commercialize.

The financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

NOTE 3 — SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

There have been no material changes in the Company's significant accounting policies as of and for the three months ended March 31, 2016, as compared with the significant accounting policies described in the Company's Annual Report on Form 10-K for the year ended December 31, 2015.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash consists of amounts held in a financial institution and consists of immediately available fund balances. The funds were maintained at a stable financial institution, generally at amounts in excess of federally insured limits. As of March 31, 2016 and December 31, 2015, approximately $13.8 million and approximately $15.6 million, respectively, in cash and cash equivalents were uninsured. The Company has not experienced any loss on deposits of cash and cash equivalents to date.

Clinical Trial and Pre-Clinical Study Accruals

The Company makes estimates of accrued expenses as of each balance sheet date in its financial statements based on the facts and circumstances known to it at that time. Accrued expenses for pre-clinical studies and clinical trials are based on estimates of costs incurred and fees that may be associated with services provided by contract research organizations, clinical trial investigational sites, and other related vendors. Payments under certain contracts with such parties depend on factors such as successful enrollment of patients, site initiation and the completion of milestones. In accruing service fees, management estimates the time period over which services will be performed and the level of effort to be expended in each period. If possible, the Company obtains information regarding unbilled services directly from these service providers. However, the Company may be required to estimate these services based on other information available to it. If the Company underestimates or overestimates the activity or fees associated with a study or service at a given point in time, adjustments to research and development expenses may be necessary in future periods. Historically, estimated accrued liabilities have approximated actual expense incurred. Subsequent changes in estimates may result in a material change in the Company's accruals.

Recent Accounting Pronouncements

In February 2016, the Financial Accounting Standards Board issued Accounting Standards Update 2016-02, *Leases (Topic 842)* ("ASU 2016-02"). The provisions of ASU 2016-02 set out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e. lessees and lessors). The new standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight line basis over the term of the lease, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases today. Topic 842 supersedes the previous lease standard, Topic 840 *Leases*. The guidance is effective for annual periods and interim periods within those annual periods beginning after December 15, 2018, and is effective for the Company for the year ending December 31, 2019. The Company is currently evaluating the impact that the implementation of this standard will have on the Company's consolidated financial statements.

NOTE 4 — PROPERTY AND EQUIPMENT

Property and equipment consists of the following:

	Estimated Life	March 31, 2016	December 31, 2015
Computer equipment	5 years	$ 10,274	$ 9,696
Furniture and fixtures	7 years	22,694	15,840
Total property and equipment		32,968	25,536
Accumulated depreciation		(6,102)	(4,848)
Property and equipment, net		$ 26,866	$ 20,688

Depreciation expense of approximately $1,250 and $300 was recognized for the three months ended March 31, 2016 and 2015, respectively, and is classified in general and administrative expense in the accompanying unaudited condensed statements of operations.

NOTE 5 — COMMITMENTS AND CONTINGENCIES

Master Services Agreement

On December 30, 2015, the Company entered into a Master Service Agreement with Covance, Inc. ("Covance"), with an effective date of December 29, 2015. Pursuant to the terms of the Master Service Agreement, Covance (or one or more of its affiliates) will provide Phase 1, 2, 3, and 4 clinical services for a clinical study or studies to the Company, and, at the request of the Company, assist with the design of such studies, in accordance with the terms of separate individual project agreements to be entered into by the parties. The term of the agreement is for three years and will renew automatically for successive one year periods unless Covance is no longer providing services under the agreement or either party has terminated the agreement upon written notice. The Company may terminate the Master Service Agreement or any individual project agreement entered into under the Master Service Agreement prior to the applicable study's completion at any time for any reason upon 30 days written notice to Covance, except when the reason for termination is the safety of subjects, in which case it may be terminated immediately. Covance may not terminate any individual project agreement without cause, except when the reason for the termination is the safety of subjects, in which case it may be terminated immediately. In the event of a termination of the Master Service Agreement, Covance will be entitled to full payment for (i) work performed on the applicable project through the date work on such project is concluded and (ii) reimbursement for all non-cancellable and non-refundable expenses and financial obligations which Covance (or an affiliate) has incurred or undertaken on behalf of the Company.

Clinical Supply and Cooperation Agreement with Ricerche Sperimentali Montale ("Ricerche") and Inalco SpA ("Inalco")

Effective July 24, 2015, the Company entered into an amended Clinical Supply and Cooperation Agreement (the "Amended Supply Agreement") with Ricerche and Inalco (collectively, "RSM"). The Amended Supply Agreement amends certain terms of the Clinical Supply and Cooperation Agreement, dated December 16, 2009, amended on September 25, 2010 (the "Existing Supply Agreement").

Under the Existing Supply Agreement, RSM granted the Company an exclusive worldwide option in a specified field and territory to assignment of all right, title and interest to a purified Galacto-oligosaccharides product ("Improved GOS"), the composition of matter of the Improved GOS and any information relating to the Improved GOS, including certain specified technical information and other intellectual property rights (the "Improved GOS IP"). Pursuant to the amended terms, the Company could exercise the option by paying RSM $800,000 within ten days after the effective date of the Amended Supply Agreement. The Company exercised this option on July 30, 2015 and RSM transferred the Improved GOS IP to the Company. Under the terms of the Existing Supply Agreement, if a further option payment of $1 million due in the future is not made, the Company may be required to return the Improved GOS IP to RSM.

The Amended Supply Agreement also provides that the Company must pay RSM $400,000 within 10 days following FDA approval of a new drug application for the first product owned or controlled by the Company using Improved GOS as its active pharmaceutical ingredient. In addition, the Company agreed to purchase 350 kilos of Improved GOS for the sum of $250 per kilo for clinical supply of Improved GOS instead of $2,000 per kilo as under the Existing Supply Agreement.

In consideration for RSM entering into the Amended Supply Agreement, the Company issued 100,000 shares of its common stock, par value $0.001 per share (the "RSM Shares"), to RSM on November 30, 2015. Fair value of these shares totaling $416,000 was recognized in stockholders' equity in the balance sheet as of December 31, 2015. The stock purchase agreement includes a lock-up agreement by RSM in favor of the Company pursuant to which RSM will not be able to sell the RSM Shares for a period ending on the earlier of (i) the public release by us of the final results of our Phase 2b/3 clinical trial of RP-G28 and (ii) the filing of the Company's Form 10-Q with the Securities and Exchange Commission for the fiscal quarter in which the Company receives the results of its Phase 2b/3 clinical trial of RP-G28.

Lease Agreement

The Company leases office space for its headquarters in California. Until September 30, 2015, the Company leased office and storage space pursuant to a two-year agreement which called for a minimum monthly rent of approximately $5,000 and an annual increase of 3%.

On July 9, 2015, the Company entered into a lease with Century Park, a California limited partnership, pursuant to which the Company is leasing approximately 2,780 square feet of office space in Los Angeles, California for its headquarters. The lease provides for a term of sixty-one (61) months, commencing on October 1, 2015. The Company paid no rent for the first month of the term and will pay base rent of $9,174 per month for months 2 through 13 of the term, with increasing base rent for each twelve-month period thereafter under the term of the lease to a maximum of $10,325 per month for months 50 through 61. The base rent payments do not include the Company's proportionate share of any operating expenses, including real estate taxes. The Company has the option to extend the term of the lease for one five-year term, provided that the rent would be subject to market adjustment at the beginning of the renewal term.

Rent expense, which is recognized on a straight-line basis over the lease term, was approximately $28,700 and $15,300 for the three months ended March 31, 2016 and 2015, respectively, and is recorded in general and administrative expenses in the accompanying unaudited condensed statements of operations.

Employment Agreements

Michael D. Step

On December 2, 2014, Michael D. Step accepted an offer letter from the Company setting forth the terms of his employment as Chief Executive Officer. The offer letter provides that Mr. Step is entitled to an annual base salary of $360,000 and a total of three grants of options to purchase common stock of the Company.

The first two options entitle Mr. Step to purchase 646,537 and 73,377 shares of the Company's common stock, respectively, for an exercise price of $5.86 per share. Each of these options was immediately exercisable in full as of the date of the grant, with 44/48^{ths} of the total number of shares covered by each option subject to a right of repurchase by the Company upon termination of Mr. Step's employment with the Company for any reason. This right of repurchase lapses over a period of 44 months, with 1/44th of the total number of shares subject to the right of repurchase lapsing on January 1, 2015 and on the first day of each month thereafter. In addition, the right of repurchase will lapse in its entirety upon a termination of the employment under certain circumstances.

The third option became exercisable upon the closing of the Company's initial public offering on June 29, 2015. The option is for a total of 163,799 shares of the Company's common stock, which, together with the shares subject to the first option, represent 7.5% of the shares of common stock deemed to be outstanding at June 29, 2015 on a fully-diluted basis, after giving effect to the number of shares subject to the third option. Seventy-five percent of the shares subject to the third option are subject to a right of repurchase by the Company upon termination of Mr. Step's employment for any reason. This right of repurchase lapses with respect to 1/36th of the total number of shares subject to the right of repurchase on the first day of each month following the date on which the third option becomes exercisable. In addition, the right of repurchase will lapse in its entirety upon Mr. Step's termination of employment under certain circumstances.

Additionally, under the terms of his Executive Severance and Change in Control Agreement, also effective on December 2, 2014, Mr. Step is entitled to receive certain payments in the event his employment is terminated under certain scenarios.

Andrew Ritter and Ira Ritter

On September 25, 2013, the board of directors approved the Executive Compensation Plan (the "Compensation Plan") setting forth certain compensation to be paid to Andrew Ritter, the current President and former Chief Executive Officer, and Ira Ritter, the current Chief Strategic Officer ("CSO"), for their respective contributions to the Company. Effective June 29, 2015, in connection with the Company's initial public offering, Andrew Ritter and Ira Ritter accepted offer letters from the Company setting forth the terms of their employment as President and CSO, respectively. The offer letters superseded the Compensation Plan.

Their respective offer letters provide that Andrew Ritter is entitled to an annual base salary of $310,000 and Ira Ritter is entitled to an annual base salary of $295,000. In accordance with his offer letter, Andrew Ritter also became entitled to receive up to $180,000 payable over a three-year period for tuition reimbursement of which an aggregate of $145,000 has been paid. An accrual of $35,000 in tuition reimbursement for Andrew Ritter was recorded in accrued liabilities in the accompanying unaudited condensed balance sheet as of March 31, 2016 and $75,000 was recognized in general and administrative expenses in the accompanying unaudited condensed statements of operations for the three months ended March 31, 2016.

Additionally, under the terms of their Executive Severance and Change in Control Agreements, also effective on June 29, 2015, each of Andrew Ritter and Ira Ritter is entitled to receive certain payments in the event their employment is terminated under certain scenarios.

Pursuant to their respective offer letters, Andrew Ritter and Ira Ritter each have the opportunity to earn an annual bonus based upon a percentage of their base salary and the achievement of specific performance as determined by the Company. The initial target bonus opportunities are 40% and 35% of the base salary for Andrew Ritter and Ira Ritter, respectively. The board of directors determined that the specific performance requirements were met for fiscal year 2015 and accordingly, Andrew Ritter received 40% of his base salary, or $124,000 and Ira Ritter received 35% of his base salary, or $103,250. These bonus payments were recognized in general and administrative expense in the statements of operations for the year ended December 31, 2015.

Pursuant to the Compensation Plan, as in effect prior to entering into their offer letters, Andrew Ritter and Ira Ritter had bonus opportunities to, upon the satisfaction of the events described below, each potentially receive the following cash payments and each potentially receive the following options to purchase up to 48,951 shares of our common stock (the "Executive Options") pursuant to the 2008 Stock Plan:

- *FDA Meeting Bonus Opportunities*. Each executive was entitled to receive, and in April 2013 each executive received, a one-time cash bonus of $10,000 for a milestone associated with meeting with the FDA regarding RP-G28's path to FDA approval. In addition, upon satisfaction of this milestone, the executives became entitled to 3,496 of the Executive Options. 2,360 shares of the Executive Options vested and became exercisable as of the grant date of September 25, 2013, with the balance of the 1,136 shares vesting ratably in 36 equal monthly installment beginning on September 30, 2013.

- *Clinical Trial Funding Commitment Bonus Opportunities*. Each executive was entitled to receive a one-time cash bonus of $75,000 upon our receipt of a commitment by a third party to fund a Phase 2 or later clinical trial; provided, however, that no such bonus would be paid at any time we had less than $2,000,000 in available cash. In addition, upon the satisfaction of this milestone, 35% of 10,489 shares of the Executive Options would vest and become exercisable, with the balance of the 10,489 shares vesting in 36 equal monthly installments beginning on the last day of the following month. The board of directors determined that this milestone was satisfied; accordingly, each executive received a bonus of $75,000 which was recognized in general and administrative expenses in the statements of operations for the year ended December 31, 2015. In addition, 3,671 shares of the Executive Options vested and became exercisable as of June 29, 2015, with the balance of 6,818 shares vesting ratably on a monthly basis beginning July 31, 2015.

- *Fundraising Bonus Opportunities*. Each executive was entitled to receive (i) a one-time cash bonus of $50,000 upon the sale of additional equity capital for cash, in one or more closings after July 17, 2012, and/or the actual deployment of funds by a third party for a clinical trial in an aggregate amount in excess of $2,000,000 and (ii) a one-time cash bonus of $150,000 upon the sale of additional equity capital for cash, in one or more closings after July 17, 2012 and/or the actual deployment of funds by a third party for a clinical trial in an aggregate amount in excess of $10,000,000 (which such bonus would be reduced by any cash bonus paid under subsection (i)); provided, however, that no bonus under subsection (i) or (ii) would be paid at any time we had less than $2,000,000 in available cash. In addition, upon the satisfaction of the milestone described in subsection (i), 35% of 6,993 shares of the Executive Options would vest and become exercisable, with the balance of the 6,993 shares vesting in 36 equal monthly installments beginning on the last day of the following month, and, upon satisfaction of the milestone described in subsection (ii), 35% of 13,986 shares of the Executive Options would vest and become exercisable, with the balance of the 13,986 shares vesting in 36 monthly installments beginning on the last day of the following month. The board of directors determined that this milestone as described in subsection (ii) above was satisfied upon the closing of our initial public offering on June 29, 2015 raising approximately $17.4 million, net of offering costs; accordingly, each executive received a bonus of $150,000 which was recognized in general and administrative expenses in the statements of operations for the year ended December 31, 2015. In addition, 4,895 shares of the Executive Options vested and became exercisable as of June 29, 2015, with the balance of 9,091 shares vesting ratably on a monthly basis beginning July 31, 2015.

- *License Event Bonus Opportunities*. Each executive was entitled to receive the following bonus payments in connection with the closing of an exclusive license of RP-G28 and/or any future product candidate developed by the Company from time to time during the term of the Compensation Plan by and/or any option to exclusively license such product candidate to a third party (referred to under the Compensation Plan as a "License Event") with a minimum upfront payment to the Company of $2,000,000:

    - A graduated cash bonus equal to (i) 5% of the Initial Period License Payment (as defined in the Compensation Plan) up to $5,000,000; (ii) 4% of the Initial Period License Payment in excess of $5,000,000 up to $10,000,000; and (iii) 3% of the Initial Period License Payment in excess of $10,000,000. In addition, upon our receipt of an Initial Period License Payment of more than $2,000,000, 35% of 45,454 shares of their Executive Options will vest and become exercisable, with the balance of the 45,454 shares vesting in 36 monthly installments beginning on the last day of the following month.

    - A cash bonus equal to 3% of any Annual Excess Milestone Payments (as defined in the Compensation Plan); provided, however that no such bonus may be paid at any time the Company has less than $1,000,000 in available cash. In addition, upon our receipt of an Annual Excess Milestone Payment, 35% of 6,993 shares of their Executive Options will vest and become exercisable, with the balance of the 6,993 shares vesting in 36 monthly installments beginning on the last day of the following month.

As of December 31, 2015, 27,972 of the maximum 48,951 Executive Options potentially issuable to each executive had been issued to each executive subject to the vesting conditions described above.

Legal

The Company is not currently involved in any legal matters arising in the normal course of business. From time to time, the Company could become involved in disputes and various litigation matters that arise in the normal course of business. These may include disputes and lawsuits related to intellectual property, licensing, contract law and employee relations matters. Periodically, the Company reviews the status of significant matters, if any exist, and assesses its potential financial exposure. If the potential loss from any claim or legal claim is considered probable and the amount can be estimated, the Company accrues a liability for the estimated loss. Legal proceedings are subject to uncertainties, and the outcomes are difficult to predict. Because of such uncertainties, accruals are based on the best information available at the time. As additional information becomes available, the Company reassesses the potential liability related to pending claims and litigation.

NOTE 6 — STOCKHOLDERS' EQUITY

Common Stock

As of December 31, 2014, the Company was authorized to issue 50,000,000 shares of common stock with a par value of $0.001 per share. Effective June 17, 2015, the Company effected a 1-for-7.15 reverse stock split and all common share amounts and per share amounts reflected in these unaudited condensed financial statements and notes to unaudited condensed financial statements have been adjusted to reflect that reverse stock split. The Company amended and restated its Certificate of Incorporation on June 29, 2015 ("the Amended Certificate") and reduced the authorized shares of the Company's common stock to 25,000,000 with a par value of $0.001 per share.

As of March 31, 2016, the Company has a total of 8,584,661 shares of common stock issued and outstanding.

Initial Public Offering

On June 29, 2015, the Company closed its initial public offering, selling 4,000,000 shares of the Company's common stock at an initial public offering price of $5.00 per share, for aggregate gross proceeds to the Company of $20 million. The Company paid to the underwriters underwriting discounts and commissions of approximately $1.6 million in connection with the offering, and approximately $1 million of other expenses in connection with the offering. The underwriters paid an aggregate purchase price of $100 for warrants to purchase 160,000 shares of the Company's common stock, representing 4.0% of the initial public offering shares, at an exercise price of $6.25 per share, which equaled 125.0% of the initial public offering price. The warrants are exercisable on June 29, 2016 and expire on June 29, 2020. Effective prior to the closing of the initial public offering, the Company converted all of its outstanding shares of Series A-1, Series A-2, Series A-3, Series B, and Series C preferred into an aggregate of 3,322,652 shares of the Company's common stock.

Common Stock Purchase Agreement

On December 18, 2015, the Company entered into a common stock purchase agreement (the "Purchase Agreement"), with Aspire Capital Fund, LLC, an Illinois limited liability company, ("Aspire Capital"), which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of $10.0 million of the Company's shares of common stock over the approximately 30-month term of the Purchase Agreement. In consideration for entering into the Purchase Agreement, concurrently with the execution of the Purchase Agreement, the Company issued to Aspire Capital 188,864 shares of the Company's common stock as a commitment fee (the "Commitment Shares"). The fair value of the Commitment Shares were capitalized and recorded as a reduction of additional paid-in capital. Upon execution of the Purchase Agreement, the Company agreed to sell to Aspire Capital 500,000 shares of common stock, or the Initial Purchase Shares, at $2.00 per share for proceeds of $1.0 million. Concurrently with entering into the Purchase Agreement, the Company also entered into a registration rights agreement with Aspire Capital, ("Registration Agreement"), in which the Company agreed to file one or more registration statements, as permissible and necessary to register under the Securities Act of 1933, as amended, (the "Securities Act"), the sale of the shares of our common stock that have been and may be issued to Aspire Capital under the Purchase Agreement. On December 31, 2015, the Company filed a registration statement on Form S-1 (File No. 333-208818) pursuant to the terms of the Registration Agreement, which registration statement was declared effective on February 11, 2016.

Preferred Stock

The Company's board of directors is authorized, subject to any limitations prescribed by law, to provide for the issuance of the authorized shares of preferred stock in series and to establish the number of shares to be included in each such series, and to fix the designation, powers, preferences and rights of the shares of each such series and any qualifications, limitations or restrictions thereon.

Pursuant to the Amended Certificate, as of June 29, 2015, the Company was authorized to issue 5,000,000 shares of preferred stock, $0.001 par value per share. Prior to the Amended Certificate and as of December 31, 2014, the Company was authorized to issue 7,200,000 shares, 1,687,500 shares, 4,220,464 shares, 7,658,182 shares, and 4,500,000 shares of Series A-1, Series A-2, Series A-3, Series B, and Series C preferred stock, respectively, with a par value of $0.001 per share.

Upon the closing of the Company's initial public offering, all outstanding shares of convertible preferred stock and preferred stock subject to redemption were converted into an aggregate of 3,322,652 shares of common stock. The following provides material terms and certain historical information regarding the Series A-1, Series A-2, Series A-3, Series B and Series C Preferred Stock prior to their conversion to common stock:

Redemption. At any time after five years following the date of the initial issuance of the Series A-3, Series B, or Series C preferred stock, as applicable, and at the option of the holders of a majority of the then outstanding shares of Series A-3, Series B, and Series C preferred stock, voting together as a single class, the Company was required to redeem any outstanding shares that have not been converted by paying cash in an amount per share equal to the liquidation preference of $0.62 and $1.30 for the Series A-3 and Series C preferred stock, respectively, and $1.19 per share, plus any accrued but unpaid dividends, for the Series B preferred stock. Given the holders' redemption option, the Series A-3, Series B, and Series C preferred stock is classified as preferred stock subject to redemption in the accompanying balance sheets.

Dividends. The holders of outstanding shares of preferred stock were entitled to receive dividends, when, as and if declared by the Company's board of directors. The annual dividend rate was $0.00556 per share for the Series A-1 preferred stock, $0.032 per share for the Series A-2 preferred stock, $0.04957 per share for the Series A-3 preferred stock, $0.09524 per share for the Series B preferred stock, and $0.104 for Series C preferred stock (subject to adjustment). The right to receive dividends on shares of Series B preferred stock was cumulative and the dividends accrue to holders of Series B preferred stock whether or not dividends are declared or paid in a calendar year. Undeclared dividends in arrears for the Series B preferred stock was approximately $2 million and $1.7 million as of June 29, 2015 and December 31, 2014, respectively. The right to receive dividends on shares of Series A and Series C preferred stock was not cumulative and no right to such dividends accrued to holders of Series A or Series C preferred stock.

Liquidations. In the event of any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, Series B and Series C preferred stockholders receive an amount per share equal to the sum of the original purchase price of $1.19 plus all cumulative but unpaid dividends for Series B, and $1.30 for Series C. If upon the liquidation, the available assets are insufficient to permit payments to Series B and Series C holders, the entire assets legally available will be distributed in a pro rata basis among the holders in proportion to the full amounts they would otherwise be entitled to receive. Upon the completion of the distribution to the holders of the Series B and Series C preferred stock, the holders of the Series A preferred stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Company to the holders of all other capital stock by reason of their ownership of such stock, an amount per share equal to the sum of the original issue price per share of $0.07, $0.40, and $0.62 for Series A-1, Series A-2, and Series A-3 preferred stock, respectively, plus any accrued but unpaid dividends on the preferred stock. Any remaining assets are distributed pro rata among the preferred and common shareholders.

Series C Financing

In December 2014, the Company issued an aggregate of 2,369,228 shares of Series C preferred stock and warrants to purchase an aggregate of 331,358 shares of the Company's common stock (the "Warrants"), for aggregate gross proceeds of $3,081,893 (the "Series C Financing"). All of these shares of Series C preferred stock were converted into 331,358 shares of the Company's common stock prior to the closing of the initial public offering. Each Warrant has a term of seven years and provides for the holder to purchase one share of the Company's common stock at a purchase price of $9.30 per share of common stock. The Warrants are indexed to the Company's own stock and classified within stockholders' equity. The gross proceeds were allocated to the Series C preferred stock and Warrants on a relative fair value basis, resulting in a per share value of $7.83 for the Series C preferred stock. The allocation of proceeds to the Warrants creates a discount of $1.47 in the initial carrying per share value of the Series C preferred stock, which was recognized as accretion, similar to preferred stock dividends, over the five-year period prior to optional redemption by the holders.

In connection with the Series C Financing, all of the 2014 Notes were converted into shares of Series C preferred stock and Warrants with no gain recognized or loss incurred upon extinguishment of the notes in 2014.

Prepaid Forward Sale of Preferred Stock

Research and Development Agreement & License

On November 30, 2010, the Company concurrently entered into a Research and Development Agreement & License ("R&D Agreement") and a Put and Call Option Agreement ("Option Agreement") with two commonly controlled entities, Kolu Pohaku Technologies, LLC ("KPT") and Kolu Pohaku Management, LLC ("KPM"). The R&D Agreement was subsequently amended on July 6, 2011, September 30, 2011, February 6, 2012 and November 4, 2013 to increase the funding received by the Company.

The R&D Agreement between the Company and KPM and KPT, a Qualified High Technology Business within the meaning of Hawaii Revised Statutes, called for KPT to make a series of payments to the Company totaling $1,750,000 in exchange for the Company performing research and development activities in Hawaii for the benefit of KPT (referred to herein as the KP Research). The KP Research consisted of the initial phase of research, including the conduct of Phase II clinical trials in Hawaii for RP-G28. Pursuant to the terms of the R&D Agreement, the Company maintained ownership of the results of the Company's ongoing research related to RP-G28, but KPT maintained ownership of the results of the KP Research. Inventions, developments and improvements arising out of the KP Research were owned by KPT. Under the terms of the R&D Agreement, the Company would bear any costs involved in obtaining patents for any inventions, developments or improvements resulting from the Research Project. In exchange for the irrevocable, perpetual, exclusive, worldwide right and license to the results of the KP Research, as they are generated under this R&D Agreement, the Company agreed to pay a quarterly royalty payment to KPT of $32,000 commencing March 31, 2015 and continuing through December 31, 2035 or until such time as the KPM put or call option (as described below) was exercised. On March 26, 2015, the Company exercised the KPM put option and issued 1,469,994 shares of Series B preferred stock to KPM, resulting in the full satisfaction of the Company's obligation to make royalty payments to KPT.

Option Agreement

Pursuant to the terms of the KPM Option Agreement, the Company had the right to put 1,469,994 shares of the Company's Series B Preferred Stock ("Series B") to KPM and KPM had the option to call the same amount of shares of Series B from the Company at any time after December 31, 2014. The number of shares was determined by dividing the $1,750,000 of payments made by KPT to the Company under the R&D Agreement by the Series B original issue price of $1.19. Exercise of the put or call option would result in full satisfaction of the Company's obligation to make royalty payments to KPT under the R&D Agreement and KPT's right, title and interest in the research conducted pursuant to the R&D Agreement would become the property of the Company. On March 26, 2015, the Company exercised its right to the KPM put option and issued 1,469,994 shares of Series B preferred stock to KPM. Pursuant to the terms of the KPM Option Agreement, this resulted in the full satisfaction of the Company's obligation to make royalty payments to KPT under the R&D Agreement and also resulted in the termination of the R&D Agreement and all of KPT's right, title and interest in and to the KP Research, which rights now belong to the Company.

The Company converted these shares into an aggregate of 205,593 shares of the Company's common stock upon the closing of the initial public offering.

NOTE 7 — WARRANTS

The following represents a summary of the warrants outstanding at March 31, 2016 and changes during the period then ended:

	Warrants	Weighted Average Exercise Price
Outstanding at December 31, 2015	578,323	$ 8.45
Granted	—	$ —
Exercised/Expired/Forfeited	—	—
Outstanding at March 31, 2016	578,323	$ 8.45
Exercisable at March 31, 2016	418,323	$ 9.30

NOTE 8 — STOCK-BASED COMPENSATION

Terms of the Company's share-based compensation are governed by the Company's 2015 Equity Incentive Plan, 2009 Stock Plan and 2008 Stock Plan (collectively the "Plans".) The Plans permit the Company to grant non-statutory stock options, incentive stock options and other equity awards to the Company's employees, outside directors and consultants; however, incentive stock options may only be granted to the Company's employees. Beginning June 29, 2015, no further awards may be granted under the 2009 Stock Plan or 2008 Stock Plan. As of March 31, 2016, the aggregate number of shares of common stock available for issuance under the 2015 Equity Incentive Plan is 145,448. However, to the extent awards under the 2008 Plan or 2009 Plan are forfeited or lapse unexercised or are settled in cash, the common stock subject to such awards will be available for future issuance under the 2015 Equity Incentive Plan.

The exercise price for options issued under the Plans is determined by the board of directors, but will be (i) in the case of an incentive stock option (A) granted to an employee who, at the time of grant of such option, is a 10% stockholder, no less than 110% of the fair market value per share on the date of grant; or (B) granted to any other employee, no less than 100% of the fair market value per share on the date of grant; and (ii) in the case of a nonstatutory stock option, no less than 100% of the fair market value per share on the date of grant. The options awarded under the Plans shall vest as determined by the board of directors but shall not exceed a ten-year period.

Options Issued to Directors and Employees as Compensation

Pursuant to the terms of the Plans, from inception to December 31, 2015, the Company issued options to purchase an aggregate of 2,026,712 shares to its executive officers and employees of the Company and non-employee directors for their services on the board of directors and its committees. Of these, 124,064 options were expired or exercised and 1,902,648 options remain outstanding as of December 31, 2015. The exercise prices of these option grants, as determined by the Company's board of directors, range from $0.79 to $13.23 per share, and a portion of these vest subject to certain performance conditions.

During the three months ended March 31, 2016, the Company granted an aggregate of 20,000 non-qualified 10-year term options to purchase shares of the Company's common stock to its employees. No options expired or were exercised during this three-month period. As of March 31, 2016, a total of 1,922,648 options issued to executive officers, non-executive employees and non-employee directors remain outstanding. The exercise prices of these option grants, as determined by the Company's board of directors, range from $0.79 to $13.23 per share, and a portion of these vest subject to certain performance conditions.

The Company recognized stock-based compensation expense for these services within general and administrative expense in the accompanying unaudited condensed statements of operations of approximately $378,000 and $800,000 for the three months ended March 31, 2016 and 2015, respectively. As of March 31, 2016, there was approximately $1.3 million of total unrecognized compensation cost related to unvested stock-based compensation arrangements. This cost is expected to be recognized over a weighted average period of 1.4 years.

Options Issued to Nonemployees for Services Received

The Company has issued options to purchase an aggregate of 110,573 shares of the Company's common stock since inception to December 31, 2015 to non-employee consultants under the Plans. Of these, 74,687 options were forfeited or exercised, and 35,886 options remain outstanding as of December 31, 2015.

During the three months ended March 31, 2016, the Company granted an aggregate of 7,000 non-qualified 10-year term options to purchase shares of the Company's common stock to its nonemployee contractors and 2,657 options were exercised. As of March 31, 2016, a total of 40,229 options issued to nonemployees remain outstanding. The exercise prices of the outstanding options, as determined by the Company's board of directors, range from $0.72 to $2.25 per share. These outstanding options, with the exception of an option to purchase an aggregate of 7,272 shares granted to a consultant, vest 25% upon the first anniversary of the vesting commencement date with the remaining options vesting monthly in equal amounts over 36 months. The option granted to the consultant in March 2011, vested 25% on the date of grant with the remaining shares vesting monthly in equal amounts over 36 months.

The Company recognized stock-based compensation expense for these services of approximately $90 and $120 for the three months ended March 31, 2016 and 2015, respectively, within research and development expense in the accompanying unaudited condensed statements of operations.

Options Valuation

The Company calculates the fair value of stock-based compensation awards granted to employees and nonemployees using the Black-Scholes option-pricing method. If the Company determines that other methods are more reasonable, or other methods for calculating these assumptions are prescribed by regulators, the fair value calculated for the Company's stock options could change significantly. Higher volatility and longer expected lives would result in an increase to stock-based compensation expense to non-employees determined at the date of grant.

Stock-based compensation expense to non-employees affects the Company's general and administrative expenses and research and development expenses.

The fair value of each stock option granted has been determined using the Black-Scholes option-pricing model. The material factors incorporated in the Black-Scholes model in estimating the fair value of the options granted for the periods presented were as follows:

	Three months ended March 31,	
	2016	**2015**
Expected dividend yield	0.00%	0.00%
Expected stock-price volatility	53.53% - 59.03%	51.45% - 65.06%
Risk-free interest rate	0.81% - 2.25%	0.77% - 2.00%
Term of options	10	5 - 10
Stock price	$ 1.07 - $1.79	$ 5.86

- *Expected dividend yield.* The expected dividend is assumed to be zero as the Company has never paid dividends and has no current plans to pay any dividends on the Company's common stock.

- *Expected stock-price volatility.* As the Company's common stock only recently became publicly traded, the expected volatility is derived from the average historical volatilities of publicly traded companies within the Company's industry that the Company considers to be comparable to the Company's business over a period approximately equal to the expected term.

- *Risk-free interest rate.* The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero coupon U.S. Treasury notes with maturities approximately equal to the expected term.

- *Expected term.* The expected term represents the period that the stock-based awards are expected to be outstanding. The Company's historical share option exercise experience does not provide a reasonable basis upon which to estimate an expected term because of a lack of sufficient data. Therefore, the Company estimates the expected term by using the simplified method provided by the SEC. The simplified method calculates the expected term as the average of the time-to-vesting and the contractual life of the options.

In addition to the assumptions used in the Black-Scholes option-pricing model, the Company also estimates a forfeiture rate to calculate the stock-based compensation for the Company's equity awards. The Company will continue to use judgment in evaluating the expected volatility, expected terms and forfeiture rates utilized for the Company's stock-based compensation calculations on a prospective basis.

Significant factors, assumptions and methodologies used in determining the estimated fair value of our common stock

The Company is also required to estimate the fair value of the common stock underlying the Company's stock-based awards when performing the fair value calculations using the Black-Scholes option-pricing model. The board of directors, with the assistance of management, determined the fair value of the Company's common stock on each grant date. Option grants are based on the estimated fair value of the Company's common stock on the date of grant, which is determined by taking into account several factors, including the following:

- the prices at which convertible preferred stock and the rights were sold, preferences, and privileges of the convertible preferred stock relative to those of the Company's common stock, including the liquidation preferences of the convertible preferred stock;
- important developments in the Company's operations;
- actual operating results and financial performance of the Company;
- conditions in the Company's industry and the economy in general;
- stock price performance of comparable public companies;
- the estimated likelihood of achieving a liquidity event, such as an initial public offering or an acquisition of the Company, given prevailing market conditions; and
- the illiquidity of the common stock underlying stock options.

The table below presents the prices received from sales to third parties of the Company's common stock and various classes of our preferred stock from inception to date:

Year	Share Class	Price per Share
2005	Common Stock[(a)]	$ 1.79
2006	Series A-2 Preferred Stock[(a)(b)]	$ 0.40
2008 – 2009	Series A-3 Preferred Stock[(b)]	$ 0.62
2010 – 2013	Series B Preferred Stock[(b)]	$ 1.19
2014	Series C Preferred Stock[(b)]	$ 1.30

(a) After giving effect to the Company's conversion from a limited liability company to a corporation.

(b) Each share of preferred stock was converted into shares of the Company's common stock on a 7.15-for-1 basis, after giving effect to the reverse stock split, which was effected on June 17, 2015.

For options issued from inception to 2013, in determining the estimated fair value of the Company's common stock, the Company's board of directors, with the assistance of management, used the market approach to estimate the enterprise value of the Company in accordance with the American Institute of Certified Public Accountants ("AICPA") Accounting and Valuation Guide, Valuation of Privately-Held Company Equity Securities Issued as Compensation (the "AICPA Guide") for the three valuation dates of November 7, 2013, July 31, 2012, and December 31, 2010. The Market Approach is one of the three approaches (along with the Income Approach and Asset Approach) used to estimate enterprise and equity value. The market approach employs analysis using comparable companies in determining the value of the entity. Both public and private companies, if publicly available information exists, are considered in the market approach. Two information points commonly available — company valuation and transaction value — are used for their respective methodologies. There are a number of different methods within the Market Approach that may be used: the three main methods utilized are: the Guideline Pubic Companies Method; the Guideline Transactions Method; and the Backsolve Method.

Given the early stage of the Company, the Backsolve Method was used to estimate the fair value of the Company's securities. This method derives an implied market value of invested capital from a transaction involving a company's own securities. The price of a company's security that was involved in a recent arms-length transaction is used as a reference point in an allocation of value. The Company first raised additional capital through the sales of the Company's limited liability company units ("LLC units"). These units later converted into common shares and preferred shares upon the Company's conversion to a corporation. Subsequent to the Company's corporation conversion, additional capital was raised through the sales of the Company's Series A-2, Series A-3, Series B, and Series C preferred shares at the price of $0.07, $0.40, $0.62, $1.19, and $1.30, respectively.

The Company valued LLC units and common stock (after converting to a corporation) from inception through 2009 by reference to the Company's sales of units and/or common stock and preferred stock over the period. Beginning in 2010, the Company valued its common stock using the Backsolve Method. The Backsolve Method requires consideration of the rights and preferences of each class of equity and solving for the total market value of invested capital that is consistent with a recent transaction in the Company's own securities, considering the rights and preferences of each class of equity. However, management has decided that the liquidation preferences between the Company's preferred shares and common shares are immaterial for a pre-revenue company.

Per the AICPA Guide, the Backsolve Method is generally the most reliable indicator of value of early-stage enterprises with no product revenue or cash flow, if relevant and reliable transactions have occurred in our equity securities. This methodology is also prescribed by the AICPA when a valuation is conducted in close proximity to the date of a financing transaction, and when other methodologies are deemed less reliable.

The stage of development of RP-G28 was reflected in the Company's selection of the term and volatility estimates used in the analysis. The estimate of the term considers the Company's existing cash runway and the time to the next potential financing or liquidity event, while the volatility estimate reflects the relative riskiness of the Company's equity securities (or asset base) relative to the general stock market.

Management estimated the implied market value of invested capital of the Company by backsolving for the purchase price of the Company's preferred shares for one common share through the option-pricing method. The premise of this method is that the transaction implied a market price for a share which in turn implied values for the other classes of equity based on relative claims on equity value, such as liquidation preferences and conversion rights. The application of the backsolve method considering the Company's capital structure yielded a total market value of invested capital of approximately $15.5 million, $14.4 million, and $8.9 million, of which approximately $819,000, $870,000, and $670,000 were allocated to the total value of common stock as of the Company's three valuation dates of November 7, 2013, July 31, 2012, and December 31, 2010, respectively.

On the three valuation dates of November 7, 2013, July 31, 2012, and December 31, 2010, after estimating the market value of invested capital, the Company allocated it to the various equity classes comprising the subject company's capitalization table. This process ultimately results in creating a final estimate of value for the subject company's underlying equity interests. While there are many different value allocation methods, these various methods can be grouped into three general categories as defined by the AICPA Guide, one of which is the Option-Pricing Method (OPM).

The Company used the OPM to allocate market value of invested capital to the various equity classes and debt comprising the Company's capitalization structure. The Company chose the OPM over other acceptable methods due to the complex capital structure, the uncertainty related to market conditions, and the lack of visibility on an imminent exit event. Under the OPM, each equity class is modeled as a call option with a distinct claim on the equity of the Company. The option's exercise price is based on the Company's total equity value available for each participating equity holder. The characteristics of each equity class determine the equity class' claim on the total equity value. By constructing a series of options in which the exercise price is set at incremental levels of value, which correspond to the equity value necessary for each level of equity to participate, the Company determined the incremental option value of each series. When multiplied by the percentage of ownership of each equity class participating under that series, the result is the incremental value allocated to each class under that series.

The OPM relies on the Black-Scholes option-pricing model to value the call options on the Company's invested capital. The following inputs were applied in the Black-Scholes calculations of the OPM:

	Valuation Dates		
	November 7, 2013	July 31, 2012	December 31, 2010
Risk-free rate	0.55%	0.57%	2.01%
Maturity (years)	3.00	4.00	5.00
Volatility	58.00%	61.00%	61.00%

Discounts ranging from 35.8% to 40% were applied for lack of control and lack of marketability for the common stock. The calculation resulted in a fair value for the common stock of $1.17, $1.19, and $1.03 per share as of the Company's three valuation dates of November 7, 2013, July 31, 2012, and December 31, 2010, respectively.

For options issued in 2014, given the Company's distinct possible exit scenarios of an initial public offering, the Company used the probability weighted expected return method (PWERM) to estimate the fair value of the Company's common equity. Under this method, an analysis of future values of a company is performed for several likely liquidity scenarios. The value of the common stock is determined for each scenario at the time of each future liquidity event and discounted back to the present using a risk-adjusted discount rate. The present values of the common stock under each scenario are then weighted based on the probability of each scenario occurring to determine the value for the common stock. The Company's management determined the probability weighting of potential liquidity events to be 45% for an initial public offering and 55% for other scenarios, which represents all other likely outcomes for the Company.

Management estimated the implied market value of invested capital of the Company by backsolving for the purchase price of the Company's preferred shares for one common share through the use of OPM. The application of the backsolve method considering the capital structure yielded a total market value of invested capital of approximately $25.2 million, of which approximately $1.4 million was allocated to the total value of common stock as of the Company's valuation date of October 31, 2014.

Given the lack of marketability for the common stock, the Company applied a discount of 21.4% for using the average strike put option approach. This resulted in a probability weighted common share value, after adjustment, of $5.86 per share as of valuation date of October 31, 2014.

Stock-based Compensation Summary Tables

Information regarding the Company's stock option grants to the Company's employees and non-employees, along with the estimated fair value per share of the underlying common stock, for stock options granted since 2005 is summarized as follows:

Grant Date	Number of Common Shares Underlying Options Granted	Exercise Price per Common Share	Estimated Fair Value per Share of Common Stock	Intrinsic Value Per Option
2005	58,321	$ 0.07	$ 1.79	$ 1.72
2009	60,559	$ 0.72 - $0.79	$ 4.43	$ 3.71 - $3.64
2011	33,846	$ 1.03	$ 1.00	$ 0.00
2012	60,019	$ 1.14	$ 1.14	$ 0.00
2013	100,000	$ 1.14 - $1.30	$ 1.14	$ 0.00
2014	1,626,740	$ 5.86 - $13.23	$ 5.86	$ 0.00
2015	34,000	$ 2.25	$ 2.25	$ 0.00
2016	27,000	$ 1.39	$ 1.39	$ 0.00

The following represents a summary of the options granted to employees and non-employees outstanding at March 31, 2016 and changes during the period then ended:

	Options	Weighted Average Exercise Price
Outstanding at December 31, 2015	1,938,534	$ 7.081
Granted	27,000	1.390
Exercised/Expired/Forfeited	(2,657)	(0.798)
Outstanding at March 31, 2016	1,962,877	$ 7.011
Exercisable at March 31, 2016	791,824	$ 5.334
Expected to be vested	1,171,053	$ 8.145

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with our interim unaudited condensed financial statements and related notes included in this Quarterly Report on Form 10-Q ("Quarterly Report") and the audited financial statements and notes thereto as of and for the year ended December 31, 2015 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on March 21, 2016 ("2015 Annual Report"). As used in this report, unless the context suggests otherwise, "we," "us," "our," or "Ritter" refer to Ritter Pharmaceuticals, Inc. All common share amounts and per share amounts in this Quarterly Report have been adjusted to reflect a 7.15-to-1 reverse stock split of our common stock. In addition to historical information, this discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions.

Special Note Regarding Forward-Looking Statements and Industry Data

This Quarterly Report contains forward-looking statements that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this Quarterly Report, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth are forward-looking statements. The words "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

Some of the factors that we believe could cause actual results to differ from those anticipated or predicted include:

- our ability to obtain additional financing;
- the accuracy of our estimates regarding expenses, future revenues and capital requirements;
- the success and timing of our preclinical studies and clinical trials;
- our ability to obtain and maintain regulatory approval for RP-G28 and any other product candidates we may develop, and the labeling under any approval we may obtain;
- regulatory developments in the United States and other countries;
- the performance of third-party manufacturers;
- our ability to develop and commercialize our product candidates;
- our ability to obtain and maintain intellectual property protection for our product candidates;
- the successful development of our sales and marketing capabilities;
- the potential markets for our product candidates and our ability to serve those markets;
- the rate and degree of market acceptance of any future products;
- the success of competing drugs that are or become available; and
- the loss of key scientific or management personnel.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events, competitive dynamics, and healthcare, regulatory and scientific developments and depend on the economic circumstances that may or may not occur in the future or may occur on longer or shorter timelines than anticipated. Although we believe that we have a reasonable basis for each forward-looking statement contained in this Quarterly Report, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this Quarterly Report. In addition, even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate are consistent with the forward-looking statements contained in this Quarterly Report, they may not be predictive of results or developments in future periods.

Any forward-looking statement that we make in this Quarterly Report speaks only as of the date of such statement, and we undertake no obligation to update such statements to reflect events or circumstances after the date of this Quarterly Report. You should also read carefully the factors described in the "Risk Factors" section of this Quarterly Report to better understand the risks and uncertainties inherent in our business and underlying any forward-looking statements.

This Quarterly Report includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third-parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data.

Overview

Ritter Pharmaceuticals, Inc. develops novel therapeutic products that modulate the human gut microbiome to treat gastrointestinal diseases. We are advancing human gut health research by exploring the metabolic capacity of the gut microbiota and translating the functionality of prebiotic-based therapeutics into applications intended to have a meaningful impact on a patient's health. We have completed a Phase 2a clinical trial of our leading product candidate, RP-G28, an orally administered, high purity oligosaccharide.

We have devoted substantially all of our resources to development efforts relating to RP-G28, including conducting clinical trials of RP-G28, providing general and administrative support for these operations and protecting our intellectual property. We currently do not have any products approved for sale and we have not generated any revenue from product sales since our inception. From our inception through June 28, 2015, we funded our operations primarily through the private placement of preferred stock, common stock and promissory notes.

On June 24, 2015, our registration statement on Form S-1 (File No. 333-202924) relating to our initial public offering of our common stock was declared effective by the SEC. The shares began trading on the NASDAQ Capital Market on June 24, 2015. The initial public offering closed on June 29, 2015, and 4,000,000 shares of common stock were sold at an initial public offering price of $5.00 per share, for aggregate gross proceeds to us of $20 million.

We paid to the underwriters underwriting discounts and commissions of approximately $1.6 million in connection with the offering. In addition, we incurred expenses of approximately $1 million in connection with the offering. Thus, the net offering proceeds to us, after deducting underwriting discounts and commissions and offering expenses, were approximately $17.4 million.

We have incurred net losses in each year since our inception, including net losses of approximately $3.1 million for the three months ended March 31, 2016. We had an accumulated deficit of approximately $30.2 million as of March 31, 2016. Substantially all our net losses resulted from costs incurred in connection with our research and development programs, stock-based compensation, and from general and administrative costs associated with our operations.

We expect to continue to incur significant expenses and increasing operating losses for at least the next several years. We anticipate that our expenses will increase substantially as we:

- complete the development of our lead product candidate, RP-G28, for the reduction of symptoms associated with lactose intolerance in patients;
- seek to obtain regulatory approvals for RP-G28;
- outsource the commercial manufacturing of RP-G28 for any indications for which we receive regulatory approval;
- contract with third parties for the sales, marketing and distribution of RP-G28 for any indications for which we receive regulatory approval;
- maintain, expand and protect our intellectual property portfolio;
- continue our research and development efforts; and
- add operational, financial and management information systems and personnel, including personnel to support our product development and commercialization efforts.

We do not expect to generate revenue from product sales unless and until we successfully complete development and obtain marketing approval for one or more of our product candidates, which we expect will take a number of years and is subject to significant uncertainty. Accordingly, we anticipate that we will need to raise additional capital in addition to the net proceeds received in our initial public offering, and any proceeds received from our sale of shares of common stock to Aspire Capital Fund, LLC ("Aspire Capital") pursuant to the common stock purchase agreement with Aspire Capital, dated December 18, 2015 (the "Aspire Purchase Agreement"), prior to the commercialization of RP-G28 or any other product candidate. Until such time, if ever, as we can generate substantial revenue from product sales, we expect to finance our operating activities through a combination of equity offerings, debt financings, government or other third-party funding, commercialization, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. Our failure to raise capital or enter into such other arrangements as and when needed would have a negative impact on our financial condition and our ability to develop our product candidates.

Financial Overview

Revenue

We have not generated any revenue since our inception. Our ability to generate revenue in the future will depend almost entirely on our ability to successfully develop, obtain regulatory approval for and then successfully commercialize RP-G28 in the United States. In the event we choose to pursue a partnering arrangement to commercialize RP-G28 or other products outside the United States, we would expect to initiate additional research and development and clinical trial activities in the future.

Research and Development Expenses

Since our inception, we have focused our resources on our research and development activities, including conducting nonclinical studies and clinical trials, manufacturing development efforts and activities related to regulatory filings for RP-G28. Our research and development expenses consist primarily of:

- fees paid to consultants and CROs, including in connection with our nonclinical and clinical trials, and other related clinical trial fees, such as for investigator grants, patient screening, laboratory work, clinical trial database management, clinical trial material management and statistical compilation and analysis;
- costs related to acquiring and manufacturing clinical trial materials;
- depreciation of equipment, computers and furniture and fixtures;
- costs related to compliance with regulatory requirements; and
- overhead expenses for personnel in research and development functions.

From inception through March 31, 2016, we have incurred approximately $7.9 million in research and development expenses. We plan to increase our research and development expenses for the foreseeable future as we continue the development of RP-G28 for the reduction of symptoms associated with lactose intolerance in patients and other indications, subject to the availability of additional funding.

The successful development of our clinical and preclinical product candidates is highly uncertain. At this time, we cannot reasonably estimate the nature, timing or costs of the efforts that will be necessary to complete the remainder of the development of any of our clinical or preclinical product candidates or the period, if any, in which material net cash inflows from these product candidates may commence. This is due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- the scope, rate of progress and expense of our ongoing, as well as any additional, clinical trials and other research and development activities;
- future clinical trial results; 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 product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those that we currently anticipate will be required for the completion of clinical development of a product candidate or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development.

RP-G28

Our research and development resources are focused on the Phase 2b and Phase 3 RP-G28 trials and our other planned clinical and nonclinical studies and other work needed to submit RP-G28 for the reduction of symptoms associated with lactose intolerance in patients for regulatory approval in the United States and Europe. We have incurred and expect to continue to incur expenses in connection with these efforts, including:

- conducting our Phase 2b/3 clinical trials as adaptive design Phase 2b/3 clinical trials;
- working with our CRO to prepare for launch of the Phase 2b/3 trials; and
- working with our third-party drug formulator to produce sufficient drug product for the adaptive design Phase 2b/3 clinical trials and other contemplated trials.

Patent Costs

Patent costs consist primarily of professional fees for legal services to prosecute patents and maintain patent rights.

General and Administrative Expenses

General and administrative expenses include allocation of facilities costs, salaries, benefits, and stock-based compensation for employees, professional fees for directors, fees for independent contractors and accounting and legal services.

We expect that our general and administrative expenses will increase as we continue to operate as a public company and will increase further if RP-G28 is approved for commercialization. We believe that these increases will likely include increased costs for director and officer liability insurance, and increased fees for outside consultants, lawyers and accountants, among other expenses.

Interest Income and Interest Expense

Interest income consists of interest earned on our cash.

Critical Accounting Policies and Estimates

This discussion and analysis is based on our financial statements, which have been prepared in accordance with GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in our financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to fair value of financial instruments, research and development costs, accrued expenses and stock-based compensation. We base our estimates on historical experience, known trends and events and various other factors we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. There have been no material changes in our significant accounting policies as of and for the three months ended March 31, 2016, as compared with the significant accounting policies described in our Annual Report on Form 10-K for the year ended December 31, 2015.

While our significant accounting policies are more fully described in Note 3 to this Quarterly Report appearing in “Item 1. Unaudited Condensed Financial Statements,” we believe that the following accounting policies are the most critical to aid you in fully understanding and evaluating our financial condition and results of operations.

Fair Value of Financial Instruments

Fair value measurement guidelines are prescribed by GAAP to value financial instruments. The guidance includes a definition of fair value, prescribes methods for measuring fair value, establishes a fair value hierarchy based on the inputs used to measure fair value and expands disclosures about the use of fair value measurements.

The valuation techniques utilized are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect internal market assumptions. Assets are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

These two types of inputs create the following fair value hierarchy:

Level 1 — Quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 1 primarily consists of financial instruments whose value is based on quoted market prices such as exchange-traded instruments and listed equities.

Level 2 — Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 includes financial instruments that are valued using models or other valuation methodologies. These models consider various assumptions, including volatility factors, current market prices and contractual prices for the underlying financial instruments. Substantially all of these assumptions are observable in the marketplace, can be derived from observable data or are supported by observable levels at which transactions are executed in the marketplace.

Level 3 — Unobservable inputs for the asset or liability. Financial instruments are considered Level 3 when their fair values are determined using pricing models, discounted cash flows or similar techniques and at least one significant model assumption or input is unobservable

The carrying amounts reported in the balance sheet for cash and cash equivalents, prepaid expenses, accounts payable and accrued expenses, approximate the fair values due to the short-term nature of the instruments.

Research and Development Costs

We expense the cost of research and development as incurred. Research and development expenses comprise costs incurred in performing research and development activities, including clinical study costs, contracted services, and other external costs. Nonrefundable advance payments for goods and services that will be used in future research and development activities are expensed when the activity is performed or when the goods have been received, rather than when payment is made, in accordance with ASC 730, *Research and Development*.

Accrued Expenses

As part of the process of preparing our financial statements, we are required to estimate our accrued expenses. This process involves reviewing quotations and contracts, identifying services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost. The majority of our service providers invoice us monthly in arrears for services performed or when contractual milestones are met. We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. The significant estimates in our accrued research and development expenses include fees due to service providers.

We base our expenses on our estimates of the services received and efforts expended pursuant to quotes and contracts with our service providers that conduct research and development on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the research and development expense. In accruing service fees, 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 accrual accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and could result in us reporting amounts that are too high or too low in any particular period.

Stock-based Compensation

In June 2015, we adopted a new equity incentive plan, or the 2015 Equity Incentive Plan, to replace our prior 2008 Stock Plan and 2009 Stock Plan. Terms of our share-based compensation are governed by the 2015 Equity Incentive Plan, 2009 Stock Plan and 2008 Stock Plan (collectively, the "Plans"). The Plans permit us to grant non-statutory stock options, incentive stock options and other equity awards to our employees, outside directors and consultants; however, incentive stock options may only be granted to our employees. Beginning June 29, 2015, no further awards may be granted under the 2009 Stock Plan or 2008 Stock Plan. As of March 31, 2016, the aggregate number of shares of common stock available for issuance under the 2015 Equity Incentive Plan was 145,448. However, to the extent awards under the 2008 Plan or 2009 Plan are forfeited or lapse unexercised or are settled in cash, the common stock subject to such awards will be available for future issuance under the 2015 Equity Incentive Plan.

The exercise price for options issued under the Plans is determined by our board of directors, but will be (i) in the case of an incentive stock option (A) granted to an employee who, at the time of grant of such option, is a 10% stockholder, no less than 110% of the fair market value per share on the date of grant; or (B) granted to any other employee, no less than 100% of the fair market value per share on the date of grant; and (ii) in the case of a nonstatutory stock option, no less than 100% of the fair market value per share on the date of grant. The options awarded under the Plans shall vest as determined by our board of directors but shall not exceed a ten-year period.

Options Issued to Directors and Employees as Compensation

Pursuant to the terms of the Plans, from inception to December 31, 2015, the Company issued options to purchase an aggregate of 2,026,712 shares to its executive officers and employees of the Company and non-employee directors for their services on the board of directors and its committees. Of these, 124,064 options were expired or exercised and 1,902,648 options remain outstanding as of December 31, 2015. The exercise prices of these option grants, as determined by the Company's board of directors, range from $0.79 to $13.23 per share, and a portion of these vest subject to certain performance conditions.

During the three months ended March 31, 2016, the Company granted an aggregate of 20,000 non-qualified 10-year term options to purchase shares of the Company's common stock to its employees and no options expired or were exercised. As of March 31, 2016, a total of 1,922,648 options issued to executive officers, non-executive employees and non-employee directors remain outstanding. The exercise prices of these option grants, as determined by the Company's board of directors, range from $0.79 to $13.23 per share, and a portion of these vest subject to certain performance conditions.

The Company recognized stock based compensation expense for these services within general and administrative expense in the accompanying unaudited condensed statements of operations of approximately $378,000 and $800,000 for the three months ended March 31, 2016 and 2015, respectively. As of March 31, 2016, there was approximately $1.3 million of total unrecognized compensation cost related to unvested stock-based compensation arrangements. This cost is expected to be recognized over a weighted average period of 1.4 years.

Options Issued to Nonemployees for Services Received

The Company has issued options to purchase an aggregate of 110,573 shares of the Company's common stock since inception to December 31, 2015 to non-employee consultants under the Plans. Of these, 74,687 options were forfeited or exercised, and 35,886 options remained outstanding as of December 31, 2015.

During the three months ended March 31, 2016, the Company granted an aggregate of 7,000 non-qualified 10-year term options to purchase shares of the Company's common stock to its nonemployee contractors and 2,657 options were exercised. As of March 31, 2016, a total of 40,299 options issued to nonemployees remain outstanding. The exercise prices of the outstanding options, as determined by the Company's board of directors, range from $0.72 to $2.25 per share. These outstanding options, with the exception of an option to purchase an aggregate of 7,272 shares granted to a consultant, vest 25% upon the first anniversary of the vesting commencement date with the remaining options vesting monthly in equal amounts over 36 months. The option granted to the consultant in March 2011, vested 25% on the date of grant with the remaining shares vesting monthly in equal amounts over 36 months.

The Company recognized stock-based compensation expense for these services of approximately $90 and $120 for the three months ended March 31, 2016 and 2015, respectively, within research and development expense in the accompanying unaudited condensed statements of operations.

Options Valuation

The Company calculates the fair value of stock-based compensation awards granted to employees and nonemployees using the Black-Scholes option-pricing method. If the Company determines that other methods are more reasonable, or other methods for calculating these assumptions are prescribed by regulators, the fair value calculated for the Company's stock options could change significantly. Higher volatility and longer expected lives would result in an increase to stock-based compensation expense to non-employees determined at the date of grant.

Stock-based compensation expense to non-employees affects the Company's general and administrative expenses and research and development expenses.

The fair value of each stock option granted has been determined using the Black-Scholes option-pricing model. The material factors incorporated in the Black-Scholes model in estimating the fair value of the options granted for the periods presented were as follows:

	Three months ended March 31,	
	2016	**2015**
Expected dividend yield	0.00%	0.00%
Expected stock-price volatility	53.53% - 59.03%	51.45% - 65.06%
Risk-free interest rate	0.81% - 2.25%	0.77% - 2.00%
Term of options	10	5 - 10
Stock price	$ 1.07 - $1.79	$ 5.86

- *Expected dividend yield.* The expected dividend is assumed to be zero as the Company has never paid dividends and has no current plans to pay any dividends on the Company's common stock.

- *Expected stock-price volatility.* As the Company's common stock only recently became publicly traded, the expected volatility is derived from the average historical volatilities of publicly traded companies within the Company's industry that the Company considers to be comparable to the Company's business over a period approximately equal to the expected term.

- *Risk-free interest rate.* The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero coupon U.S. Treasury notes with maturities approximately equal to the expected term.

- *Expected term.* The expected term represents the period that the stock-based awards are expected to be outstanding. The Company's historical share option exercise experience does not provide a reasonable basis upon which to estimate an expected term because of a lack of sufficient data. Therefore, the Company estimates the expected term by using the simplified method provided by the SEC. The simplified method calculates the expected term as the average of the time-to-vesting and the contractual life of the options.

In addition to the assumptions used in the Black-Scholes option-pricing model, the Company also estimates a forfeiture rate to calculate the stock-based compensation for the Company's equity awards. The Company will continue to use judgment in evaluating the expected volatility, expected terms and forfeiture rates utilized for the Company's stock-based compensation calculations on a prospective basis.

Stock-based Compensation Summary Tables

Information regarding the Company's stock option grants to the Company's employees and non-employees, along with the estimated fair value per share of the underlying common stock, for stock options granted since 2005 is summarized as follows:

Grant Date	**Number of Common Shares Underlying Options Granted**	**Exercise Price per Common Share**	**Estimated Fair Value per Share of Common Stock**	**Intrinsic Value Per Option**
2005	58,321	$ 0.07	$ 1.79	$ 1.72
2009	60,559	$ 0.72 - $0.79	$ 4.43	$ 3.71 - $3.64
2011	33,846	$ 1.03	$ 1.00	$ 0.00
2012	60,019	$ 1.14	$ 1.14	$ 0.00
2013	100,000	$ 1.14 - $1.30	$ 1.14	$ 0.00
2014	1,626,740	$ 5.86 - $13.23	$ 5.86	$ 0.00
2015	34,000	$ 2.25	$ 2.25	$ 0.00
2016	27,000	$ 1.39	$ 1.39	$ 0.00

The following represents a summary of the options granted to employees and non-employees outstanding at March 31, 2016 and changes during the period then ended:

	Options	Weighted Average Exercise Price
Outstanding at December 31, 2015	1,938,534	$ 7.081
Granted	27,000	1.390
Exercised/Expired/Forfeited	(2,657)	(0.798)
Outstanding at March 31, 2016	1,962,877	$ 7.011
Exercisable at March 31, 2016	791,824	$ 5.334
Expected to be vested	1,171,053	$ 8.145

Jumpstart Our Business Startups Act of 2012 (the "JOBS Act")

On April 5, 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended (the Securities Act), for complying with new or revised accounting standards. In other words, an "emerging growth company" can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to use the extended transition period for complying with new or revised accounting standards under Section 102(b)(1) of the JOBS Act. This election allows us to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. As a result of this election, our financial statements may not be comparable to companies that comply with public company effective dates.

We are in the process of evaluating the benefits of relying on other exemptions and reduced reporting requirements provided by the JOBS Act. Subject to certain conditions set forth in the JOBS Act, as an "emerging growth company," we intend to rely on certain of these exemptions, including without limitation, (i) providing an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act and (ii) complying with any requirement that may be adopted by the PCAOB regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements, known as the auditor discussion and analysis. We will remain an emerging growth company until the earlier of (i) the last day of the fiscal year (a) following the fifth anniversary of the date we completed our initial public offering, which was June 29, 2015, (b) in which we have total annual gross revenue of at least $1.0 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeded $700.0 million as of the prior June 30th, and (ii) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

Results of Operations

Comparison of the Three Months Ended March 31, 2016 and 2015

The following table summarizes our results of operations for the three months ended March 31, 2016 and 2015, together with the changes in those items in dollars and as a percentage:

	For the Three Months Ended March 31,		Dollar	Percentage
	2016	2015	Change	Change
Statement of Operations Data:				
Operating costs and expenses				
Research and development	$ 1,882,848	$ 31,460	$ 1,851,388	5,885%
Patent costs	32,364	62,274	(29,910)	(48%)
General and administrative	1,235,018	1,302,565	(67,547)	(5%)
Total operating costs and expenses	3,150,230	1,396,299	1,753,931	126%
Loss from operations	(3,150,230)	(1,396,299)	(1,753,931)	126%
Other income				
Interest income	20,566	2,224	18,362	833%
Other income	1,214	7,091	(5,877)	(83%)
Total other income	21,780	9,295	12,485	134%
Net loss	**$ (3,128,450)**	**$ (1,387,004)**	**$ (1,741,446)**	**126%**

Research and Development Expenses

Research and development expenses were approximately $1.9 million and $31,000 for the three months ended March 31, 2016 and 2015, respectively. The increase in research and development expenses of approximately $1.9 million, or 5,885%, for the three months ended March 31, 2016 was primarily attributable to the approximately $1.5 million of fees paid to our CRO as part of our Phase 2b/3 clinical trial that was initiated in March 2016, with the remaining increase due to costs relating to manufacturing clinical trial materials and fees paid to consultants related to the clinical trial.

Patent Costs

Patent costs were approximately $32,000 and $62,000 for the three months ended March 31, 2016 and 2015, respectively, representing a decrease of $30,000, or 48%. This decrease was mainly due to the timing of prosecuting patents and maintaining patent rights.

General and Administrative Expenses

General and administrative expenses were approximately $1.2 million and $1.3 million for the three months ended March 31, 2016 and 2015, respectively. The slight decrease in general and administrative expenses of approximately $68,000, or 5%, was primarily due to higher stock-based compensation expense during the first three months of 2015 as compared to the same 2016 period. Offsetting the decrease in stock-based compensation for the first three months ended March 31, 2016, was an increase in headcount and higher costs of operating as a public company.

Other Income

Interest income was approximately $21,000 and $2,000 for the three months ended March 31, 2016 and 2015, respectively. The increase of approximately $18,000, or 833%, during the three months ended March 31, 2016 was primarily due to interest earned on increased cash balances resulting from the net proceeds of our initial public offering.

Other income was approximately $1,000 and $7,000 for the three months ended March 31, 2016 and 2015, respectively. The decrease of $6,000, or 83% was a result of a gain on the settlement of accounts payable in the prior year three months ended March 31, 2015 that was not realized in the same 2016 period.

Liquidity and Capital Resources

Sources of Liquidity

Since our inception, we have incurred net losses and negative cash flows from operations, and, as of March 31, 2016, we had an accumulated deficit of approximately $30.2 million. Substantially all our net losses resulted from costs incurred in connection with our research and development programs, stock-based compensation, and from general and administrative costs associated with our operations.

At March 31, 2016, after consummation of our initial public offering, we had working capital of $11.9 million, and cash of $14.1 million. We have not generated any product revenues and have not achieved profitable operations.

Aspire Capital Financing Arrangement

On December 18, 2015, we entered into the Aspire Purchase Agreement with Aspire Capital, which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of $10.0 million of our shares of common stock over the approximately 30-month term of the Aspire Purchase Agreement. Upon execution of the Aspire Purchase Agreement, we sold 500,000 shares of common stock to Aspire Capital at $2.00 per share for proceeds of $1.0 million. We may sell an additional 888,835 shares of common stock to Aspire Capital in the future pursuant to the terms of the Aspire Purchase Agreement.

On February 24, 2016, the conditions necessary for us to sell an additional 888,835 shares of our common stock to Aspire under the Aspire Purchase Agreement were satisfied. On any trading day on which the closing sale price of our common stock exceeds $0.50, we have the right, in our sole discretion, to present Aspire Capital with a purchase notice (each a "Purchase Notice"), directing Aspire Capital (as principal) to purchase up to 100,000 shares of our common stock per trading day, for up to $9.0 million of our common stock in the aggregate at a per share price (the "Purchase Price"), calculated by reference to the prevailing market price of our common stock (as provided in the Aspire Purchase Agreement).

In addition, on any date on which we submit a Purchase Notice for 100,000 shares to Aspire Capital and the closing sale price of our stock is equal to or greater than $0.50 per share of common stock, we also have the right, in our sole discretion, to present Aspire Capital with a volume-weighted average price purchase notice (each a "VWAP Purchase Notice"), directing Aspire Capital to purchase an amount of stock equal to up to 30% of the aggregate shares of our common stock traded on the Nasdaq Capital Market on the next trading day , subject to a maximum number of shares we may determine, and a minimum trading price (as more specifically described below). The purchase price per share pursuant to such VWAP Purchase Notice is calculated by reference to the prevailing market price of our common stock (as provided in the Aspire Purchase Agreement).

The Aspire Purchase Agreement provides that we and Aspire Capital will not effect any sales under the Aspire Purchase Agreement on any purchase date where the closing sale price of our common stock is less than $0.50 per share (the "Floor Price"). This Floor Price and the respective prices and share numbers in the preceding paragraphs will be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction. There are no trading volume requirements or restrictions under the Aspire Purchase Agreement, and we will control the timing and amount of any sales of our common stock to Aspire Capital. Aspire Capital has no right to require any sales by us, but is obligated to make purchases from us as we direct in accordance with the Purchase Agreement. There are no limitations on use of proceeds, financial or business covenants, restrictions on future fundings, rights of first refusal, participation rights, penalties or liquidated damages in the Aspire Purchase Agreement. Aspire Capital may not assign its rights or obligations under the Purchase Agreement. The Purchase Agreement may be terminated by us at any time, at our discretion, without any penalty or cost to us.

We expect to use the Aspire facility to complement, rather than replace, other financing that may be required during the next twelve months to continue our operations and support our capital needs.

Cash Flows

The following table sets forth the significant sources and uses of cash for the periods set forth below:

	For the Three Months Ended March 31,	
	2016	**2015**
Net cash (used in) provided by:		
Operating activities	$ (1,725,723)	$ (618,526)
Investing activities	(7,432)	—
Financing activities	2,130	(153,409)
Net decrease in cash	**$ (1,731,025)**	**$ (771,935)**

Operating Activities

Net cash used in operating activities of approximately $1.7 million during the three months ended March 31, 2016 was primarily a result of our net loss of approximately $3.1 million and a decrease in accrued expenses of approximately $410,000, offset by stock-based compensation of approximately $378,000 and an increase in accounts payable of $1.4 million.

Net cash used in operating activities of approximately $619,000 during the three months ended March 31, 2015 was primarily a result of our net loss of approximately $1.4 million and a decrease in accounts payable of approximately $81,000, offset by stock-based compensation of approximately $799,000 and an increase of approximately $50,000 in accrued expenses.

Investing Activities

Net cash used in investing activities of approximately $7,000 during the three months ended March 31, 2016 was related to our purchase of office furniture and equipment.

Financing Activities

Net cash provided by financing activities of approximately $2,000 during the three months ended March 31, 2016 resulted from net proceeds received from the exercise of options on common stock.

Net cash used in financing activities during the three months ended March 31, 2015 of approximately $153,000 resulted from the deferral of offering costs related to our initial public offering.

Future Funding Requirements

To date, we have not generated any revenue. We do not know when, or if, we will generate any revenue from product sales. We do not expect to generate significant revenue from product sales unless and until we obtain regulatory approval of and commercialize RP-G28 or any of our other product candidates. At the same time, we expect our expenses to increase in connection with our ongoing development activities, particularly as we continue the research, development and clinical trials of, and seek regulatory approval for, our product candidates. Additionally, we have incurred and will continue to incur additional costs associated with operating as a public company. In addition, subject to obtaining regulatory approval of any of our product candidates, we expect to incur significant commercialization expenses for product sales, marketing, manufacturing and distribution. We anticipate that we will need substantial additional funding in connection with our continuing operations.

Based upon our current operating plan, we believe that our existing cash and cash equivalents, together with interest and any proceeds received from our sale of shares of common stock to Aspire Capital in the future pursuant to the Aspire Purchase Agreement, will enable us to fund our operating expenses and capital expenditure requirements through the first quarter of 2017. We intend to devote our existing financial resources to fund the continued clinical development of RP-G28 for the reduction of symptoms associated with lactose intolerance, including our anticipated Phase 2b/3 trials; to fund expenses associated with the manufacture and product development of RP-G28; to explore potential orphan indications; and for general corporate purposes, general and administrative expenses, capital expenditures, working capital and prosecution and maintenance of our intellectual property.

Our future capital requirements will depend on many factors, including:

- the progress, costs, results of and timing of implementing a Phase 2b/3 clinical trials for the reduction of symptoms associated with lactose intolerance in patients;
- the willingness of the EMA or other regulatory agencies outside the United States to accept our Phase 2b/3 and any Phase 3 trials of RP-G28, as well as our other completed and planned clinical and nonclinical studies and other work, as the basis for review and approval of RP-G28 in the European Union for the reduction of symptoms associated with lactose intolerance in patients;
- the outcome, costs and timing of seeking and obtaining FDA, EMA and any other regulatory approvals;
- the number and characteristics of product candidates that we pursue, including our product candidates in preclinical development;
- the ability of our product candidates to progress through clinical development successfully;
- our need to expand our research and development activities;
- the costs associated with securing and establishing commercialization and manufacturing capabilities;
- market acceptance of our product candidates;
- the costs of acquiring, licensing or investing in businesses, products, product candidates and technologies;
- our ability to maintain, expand and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with the licensing, filing, prosecution, defense and enforcement of any patents or other intellectual property rights;
- our need and ability to hire additional management and scientific and medical personnel;
- the effect of competing technological and market developments;
- our need to implement additional internal systems and infrastructure, including financial and reporting systems;
- the economic and other terms, timing of and success of our existing licensing arrangements and any collaboration, licensing or other arrangements into which we may enter in the future; and
- the costs of operating as a public company.

Until such time, if ever, as we can generate substantial revenue from product sales, we expect to finance our cash needs through a combination of equity offerings, debt financings, government or other third-party funding, commercialization, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our common stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through government or other third-party funding, commercialization, marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us.

Contractual Obligations and Commitments

There have been no material changes to our contractual obligations and commitments from those disclosed in our 2015 Annual Report.

Off-Balance Sheet Arrangements

Through March 31, 2016, we do not have any off-balance sheet arrangements, as defined by applicable SEC regulations.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a "smaller reporting company" as defined by Item 10 of Regulation S-K, we are not required to provide the information required by Item 3.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2016, the end of the period covered by this Quarterly Report on Form 10-Q.

Based on our evaluation, we believe that our disclosure controls and procedures as of March 31, 2016 were effective to provide reasonable assurance that the information required to be disclosed by us in reports filed under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. We believe that a controls system, no matter how well designed and operated, cannot provide absolute assurance that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during our first fiscal quarter ended March 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings.

The Company is not currently involved in any legal matters arising in the normal course of business. From time to time, the Company could become involved in disputes and various litigation matters that arise in the normal course of business. These may include disputes and lawsuits related to intellectual property, licensing, contract law and employee relations matters.

Item 1A. Risk Factors.

The risks described in Item 1A. Risk Factors of our 2015 Annual Report could materially and adversely affect our business, financial condition and results of operations. The risk factors discussed in our 2015 Annual Report do not identify all risks that we face because our business operations could also be affected by additional factors that are not presently known to us or that we currently consider to be immaterial to our operations. No material change in the risk factors discussed in our 2015 Annual Report has occurred.

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

Unregistered Sales of Equity Securities

None

Use of Proceeds

On June 24, 2015, our registration statement on Form S-1 (File No. 333-202924) relating to our initial public offering of our common stock was declared effective by the SEC. Our initial public offering closed on June 29, 2015, and 4,000,000 shares of our common stock were sold at an initial public offering price of $5.00 per share, for aggregate gross proceeds to us of $20 million and net proceeds to us, after deducting underwriting discounts and commissions and offering expenses, of approximately $17.4 million.

As of March 31, 2016, proceeds from the initial public offering have been used to fund our Phase 2b/3 trials and product development, including a $0.8 million payment to exercise an option with a research and development supplier and payment of approximately $0.3 million to our CRO, pursuant to a master services agreement. A portion of the proceeds ($227,250) was used to pay the annual bonuses earned by Andrew and Ira Ritter for 2015, based upon the achievement of specific performance goals, pursuant to the terms of their respective offer letters. Remaining proceeds from the initial public offering are expected to be spent to support continued research and development efforts, general corporate purposes, general and administrative expenses, capital expenditures, working capital and prosecution and maintenance of our intellectual property.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None

Item 6. Exhibits.

Exhibit No.	Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
31.1	Certificate of principal executive officer pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2	Certificate of principal financial officer pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1	Certificate of principal executive officer and principal financial officer pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS#	XBRL Instance Document.				
101.SCH#	XBRL Taxonomy Extension Schema Document.				
101.CAL#	XBRL Taxonomy Extension Calculation Linkbase 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.				

XBRL (Extensible Business Reporting Language) information is furnished and not filed herewith, is not a part of a registration statement or Prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, and otherwise is not subject to liability under these sections.

SIGNATURES

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

May 9, 2016

RITTER PHARMACEUTICALS, INC.

By: */s/ Michael D. Step*
Name: Michael D. Step
Title: Chief Executive Officer

Exhibit 31.1

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

I, Michael D. Step, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Ritter Pharmaceuticals, Inc., a Delaware corporation;

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)) 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) 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

(c) 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.

May 9, 2016

By: */s/ Michael D. Step*
Name: Michael D. Step

Exhibit 31.2

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

I, Ellen Mochizuki, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Ritter Pharmaceuticals, Inc., a Delaware corporation;

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)) 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) 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

(c) 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.

May 9, 2016

By: */s/ Ellen Mochizuki*
Name: Ellen Mochizuki
Title: Vice President, Finance (Principal Financial Officer)

Exhibit 32.1

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

Each of the undersigned, Michael D. Step, Chief Executive Officer of Ritter Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and Ellen Mochizuki, Vice President, Finance of the Company, do hereby certify, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002, that, to their respective knowledge (1) the quarterly report on Form 10-Q of the Company for the three months ended March 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 9, 2016

By: */s/ Michael D. Step*
Name: Michael D. Step
Title: Chief Executive Officer (Principal Executive Officer)

May 9, 2016

By: */s/ Ellen Mochizuki*
Name: Ellen Mochizuki
Title: Vice President, Finance (Principal Financial Officer)

These certifications accompanying and being "furnished" with this Report, shall not be deemed "filed" by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to liability under that Section and shall not be deemed to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Report, irrespective of any general incorporation language contained in such filing.