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

**FORM 10-Q**

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

For the Quarterly Period Ended September 30, 2017

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**  
(State or other jurisdiction of  
incorporation or organization)

**26-3474527**  
(I.R.S. Employer  
Identification 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  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  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	<input type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-Accelerated Filer (Do not check if a smaller reporting company)	<input type="checkbox"/>	Smaller Reporting Company	<input checked="" type="checkbox"/>
		Emerging Growth Company	<input checked="" type="checkbox"/>

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

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

As of October 27, 2017, there were 49,506,521 shares of the registrant's common stock, par value \$0.001 per share, outstanding.

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## PART I — FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

RITTER PHARMACEUTICALS, INC.  
CONDENSED BALANCE SHEETS

	<u>September 30, 2017</u> (unaudited)	<u>December 31, 2016</u>
<b>ASSETS</b>		
Current assets		
Cash and cash equivalents	\$ 3,558,874	\$ 7,046,282
Prepaid expenses	260,597	156,752
<b>Total current assets</b>	<b>3,819,471</b>	<b>7,203,034</b>
Other assets	10,326	10,326
Deferred offering costs	310,786	—
Property and equipment, net	19,606	23,542
<b>Total Assets</b>	<b>\$ 4,160,189</b>	<b>\$ 7,236,902</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities		
Accounts payable	\$ 2,745,370	\$ 1,896,368
Accrued expenses	196,578	1,222,735
Other liabilities	15,927	14,736
<b>Total current liabilities</b>	<b>2,957,875</b>	<b>3,133,839</b>
<b>Stockholders' equity</b>		
Preferred stock, \$0.001 par value; 15,000,000 shares authorized; 0 shares issued and outstanding as of September 30, 2017 and December 31, 2016	—	—
Common stock, \$0.001 par value; 225,000,000 shares authorized; 14,756,521 and 11,619,197 shares issued and outstanding as of September 30, 2017 and December 31, 2016, respectively	14,757	11,619
Additional paid-in capital	52,302,244	49,559,020
Accumulated deficit	(51,114,687)	(45,467,576)
<b>Total stockholders' equity</b>	<b>1,202,314</b>	<b>4,103,063</b>
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 4,160,189</b>	<b>\$ 7,236,902</b>

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

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
<b>Operating costs and expenses:</b>				
Research and development	\$ 915,268	\$ 2,348,755	\$ 2,121,898	\$ 7,112,177
Patent costs	47,431	98,908	175,794	199,888
General and administrative	1,052,236	1,091,647	3,367,781	3,533,608
Total operating costs and expenses	<u>2,014,935</u>	<u>3,539,310</u>	<u>5,665,473</u>	<u>10,845,673</u>
Operating loss	(2,014,935)	(3,539,310)	(5,665,473)	(10,845,673)
<b>Other income:</b>				
Interest income	4,083	13,239	18,362	50,466
Other income	—	—	—	1,214
Total other income	<u>4,083</u>	<u>13,239</u>	<u>18,362</u>	<u>51,680</u>
<b>Net loss</b>	<u>\$ (2,010,852)</u>	<u>\$ (3,526,071)</u>	<u>\$ (5,647,111)</u>	<u>\$ (10,793,993)</u>
<b>Net loss per common share — basic and diluted</b>	<u>\$ (0.14)</u>	<u>\$ (0.41)</u>	<u>\$ (0.42)</u>	<u>\$ (1.26)</u>
Weighted-average common shares outstanding — basic and diluted	14,756,521	8,585,406	13,443,007	8,584,442

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

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

	<b>For the Nine Months Ended</b>	
	<b>September 30,</b>	
	<b>2017</b>	<b>2016</b>
<b>Cash flows from operating activities</b>		
Net loss	\$ (5,647,111)	\$ (10,793,993)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	3,936	3,894
Stock-based compensation	746,362	1,041,656
Changes in operating assets and liabilities:		
Prepaid expenses	(103,845)	(57,092)
Accounts payable	849,002	2,131,022
Accrued expenses	(1,026,157)	293,793
Other liabilities	1,191	12,841
<b>Net cash used in operating activities</b>	<b>(5,176,622)</b>	<b>(7,367,879)</b>
<b>Cash flows from investing activities</b>		
Purchases of property and equipment	—	(8,063)
<b>Net cash used in investing activities</b>	<b>—</b>	<b>(8,063)</b>
<b>Cash flows from financing activities</b>		
Proceeds from the issuance of shares from common stock purchase agreement	2,000,000	—
Proceeds from exercise of options on common stock	—	8,504
Deferred offering costs	(310,786)	—
<b>Net cash provided by financing activities</b>	<b>1,689,214</b>	<b>8,504</b>
<b>Net decrease in cash and cash equivalents</b>	<b>(3,487,408)</b>	<b>(7,367,438)</b>
<b>Cash and cash equivalents at beginning of period</b>	<b>7,046,282</b>	<b>15,819,566</b>
<b>Cash and cash equivalents at end of period</b>	<b>\$ 3,558,874</b>	<b>\$ 8,452,128</b>
<b>Supplemental disclosure of cash flow information</b>		
Cash paid for taxes	\$ 800	\$ 72,112
<b>Non-cash financing activities</b>		
Shares issued as a commitment fee	\$ 93,380	—

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

**RITTER PHARMACEUTICALS, INC.**  
**NOTES TO UNAUDITED CONDENSED 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 develops therapeutic products that modulate the human gut microbiome to treat gastrointestinal diseases. The Company conducts human gut health research by exploring metabolic capacity of the gut microbiota and translating the functionality of prebiotic-based therapeutics. The Company’s lead compound, RP-G28, is currently under development for the treatment of lactose intolerance. There currently is no drug approved by the Food and Drug Administration (“FDA”) for the treatment of lactose intolerance, a debilitating disease that affects over 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.

**NOTE 2 — BASIS OF PRESENTATION**

The accompanying unaudited condensed financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) and applicable rules and regulations of the SEC regarding interim financial reporting. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. However, in the opinion of management, all adjustments consisting of normal recurring adjustments considered necessary for a fair presentation of the financial position and results of operations have been included and management believes the disclosures that are made are adequate to make the information presented not misleading.

The condensed balance sheet at December 31, 2016 has been derived from the audited financial statements included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2016 filed with the SEC on February 27, 2017 (the “2016 Annual Report”), but does not include all of the information and footnotes required by GAAP for complete financial statements.

The results for the three and nine months ended September 30, 2017 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 (“Quarterly Report”) should be read in conjunction with the audited financial statements and notes thereto included in the Company’s 2016 Annual Report.

***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. For the nine months ended September 30, 2017, the Company had a net loss of approximately \$5.6 million and had net cash used in operating activities of approximately \$5.2 million. At September 30, 2017, the Company had working capital of approximately \$0.9 million, an accumulated deficit of approximately \$51.1 million, and cash and cash equivalents of approximately \$3.6 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.

**RITTER PHARMACEUTICALS, INC.**  
**NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS**

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 RP-G28; (ii) seek collaborators at an earlier stage than otherwise would be desirable and on terms that are less favorable than might otherwise be available; and/or (iii) relinquish or otherwise dispose of its rights to RP-G28.

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 nine months ended September 30, 2017, as compared with the significant accounting policies described in the Company's 2016 Annual Report.

*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 are maintained at a stable financial institution, generally at amounts in excess of federally insured limits. As of September 30, 2017 and December 31, 2016, approximately \$3.6 million and approximately \$6.8 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.

**RITTER PHARMACEUTICALS, INC.**  
**NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS**

***Recent Accounting Pronouncements***

In February 2016, the Financial Accounting Standards Board (“FASB”) 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 the lease expense is recognized based on an effective interest method or on a straight line basis over the term of the lease. 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 under the 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 financial statements.

On March 30, 2016, the FASB issued Accounting Standards Update No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* (“ASU 2016-09”). Among other things, ASU 2016-09 requires that entities recognize excess tax benefits and deficiencies related to employee share-based payment transactions as income tax expense or benefit. ASU 2016-09 also eliminates the requirement to reclassify excess tax benefits and deficiencies from operating activities to financing activities in the statement of cash flows. The guidance is effective for the annual periods and interim periods within those annual periods beginning after December 15, 2016. The adoption of this standard did not have a material impact on the Company’s financial statements.

On August 26, 2016, the FASB issued Accounting Standards Update No. 2016-15, *Statement of Cash Flows (Topic 230)*, a consensus of the FASB’s Emerging Issues Task Force (“ASU 2016-15”). The new guidance amends Accounting Standards Codification No. 230 (“ASC 230”) to add or clarify guidance on the classification of certain cash receipts and payments in the statement of cash flows. ASC 230 lacks consistent principles for evaluating the classification of cash payments and receipts in the statement of cash flows. This has led to diversity in practice and, in certain circumstances, financial statement restatements. Therefore, the FASB issued the ASU 2016-15 with the intent of reducing diversity in practice with respect to eight types of cash flows. ASU 2016-15 is effective for annual and interim periods in fiscal years beginning after December 15, 2017, and is effective for the Company for the year ending December 31, 2018. The Company is currently evaluating the impact that the implementation of this standard will have on the Company’s financial statements.

In May 2017, the FASB issued Accounting Standards Update No. 2017-09, *Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting* (“ASU 2017-09”). ASU 2017-09 provides guidance on the types of changes to the terms or conditions of share-based payment awards to which an entity would be required to apply modification accounting. An entity would not apply modification accounting if the fair value, vesting conditions, and classification of the awards are the same immediately before and after the modification. The amendments are effective for the Company’s interim and annual reporting periods beginning January 1, 2018. The Company does not expect the adoption of ASU 2017-09 to have a material impact on its financial statements.

Other accounting standards updates effective after September 30, 2017 are not expected to have a material effect on the Company’s financial statements.

**RITTER PHARMACEUTICALS, INC.**  
**NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS**

**NOTE 4 — PROPERTY AND EQUIPMENT**

Property and equipment consists of the following:

	<u>Estimated Life</u>	<u>September 30, 2017</u>	<u>December 31, 2016</u>
Computer equipment	5 years	\$ 10,274	\$ 10,274
Furniture and fixtures	7 years	23,325	23,325
Total property and equipment		33,599	33,599
Accumulated depreciation		(13,993)	(10,057)
Property and equipment, net		<u>\$ 19,606</u>	<u>\$ 23,542</u>

Depreciation expense of approximately \$1,300 was recognized for each of the three months ended September 30, 2017 and 2016 and approximately \$3,900 was recognized for the nine months ended September 30, 2017 and 2016, and 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.

**RITTER PHARMACEUTICALS, INC.**  
**NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS**

Pursuant to the terms of the Amended Supply Agreement, the Company purchased the exclusive worldwide assignment of all right, title and interest to a purified GOS 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") on July 30, 2015 for \$800,000. The Company also issued 100,000 shares of its common stock to RSM pursuant to a stock purchase agreement. The shares issued to RSM were subject to a lock-up agreement, pursuant to which RSM agreed that it would not sell these shares for a period ending on the earlier of (i) the public release by the Company of the final results of its Phase 2b/3 clinical trial of RP-G28 and (ii) the filing of a Form 10-Q with the SEC for the fiscal quarter in which the Company receives the results of its Phase 2b/3 clinical trial of RP-G28, which condition was satisfied with the filing of the Company's quarterly report on Form 10-Q on August 7, 2017.

Under the terms of the Amended Supply Agreement, if the Company fails to make any future option payment to RSM as required under the terms of the Amended Supply Agreement, the Company may be required to return the Improved GOS IP to RSM. The Amended Supply Agreement 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 and to pay RSM the sum of \$250 per kilo for clinical supply of Improved GOS.

***Lease Agreement***

The Company leases office space for its headquarters in California. 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, paid base rent of \$9,174 per month for months 2 through 13 of the term, and will pay base rent of \$9,449 per month for months 14 to 25 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 \$29,000 and \$28,000 for the three months ended September 30, 2017 and 2016, respectively, and \$86,000 for the nine months ended September 30, 2017 and 2016, and is recorded in general and administrative expenses in the accompanying unaudited condensed statements of operations.

***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.

**RITTER PHARMACEUTICALS, INC.**  
**NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS**

**NOTE 6 — STOCKHOLDERS' EQUITY**

*Authorized Shares*

On September 15, 2017, the Company amended its Amended and Restated Certificate of Incorporation to authorize the issuance of up to 225,000,000 shares of common stock, \$0.001 par value per share, and 15,000,000 shares of preferred stock, \$0.001 par value per share.

As of September 30, 2017, the Company had 14,756,521 shares of common stock issued and outstanding. Each share of the Company's common stock is entitled to one vote, and all shares rank equally as to voting and other matters. There are currently no shares of preferred stock issued and outstanding. Any preferred stock issued in the future will have the rights, preferences and privileges that the Company's Board of Directors may determine from time to time.

Aspire Capital Financing Arrangement

On December 18, 2015, the Company entered into a common stock purchase agreement (the "2015 Aspire Purchase Agreement") with Aspire Capital Fund, LLC ("Aspire Capital"), pursuant to which Aspire Capital was committed to purchase up to an aggregate of \$10.0 million of the Company's shares of common stock over the approximate 30-month term of the 2015 Aspire Purchase Agreement. As of September 30, 2017, the Company had issued an aggregate of 4,577,699 shares of its common stock to Aspire Capital under the 2015 Aspire Purchase Agreement for approximate proceeds of \$5.0 million.

On May 4, 2017, the Company terminated the 2015 Aspire Purchase Agreement and entered into a new common stock purchase agreement with Aspire Capital (the "2017 Aspire Purchase Agreement"), which provides that upon the terms and conditions set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$6.5 million of shares of the Company's common stock over the 30-month term of the 2017 Aspire Purchase Agreement. On any trading day on which the closing sale price of the Company's common stock exceeds \$0.25, the Company has the right, in its sole discretion, to present Aspire Capital with a purchase notice, directing Aspire Capital (as principal) to purchase up to 100,000 shares of the Company's common stock per trading day, for up to \$6.5 million of the Company's common stock in the aggregate at a per share price, calculated by reference to the prevailing market price of the Company's common stock (as provided in the 2017 Aspire Purchase Agreement).

As a condition to the 2017 Aspire Purchase Agreement, the Company issued 137,324 shares of its common stock to Aspire Capital as a commitment fee. As of the date of this Quarterly Report, no shares of common stock have been sold to Aspire Capital under the 2017 Aspire Purchase Agreement.

October 2016 Public Offering

On October 31, 2016, the Company closed a public offering, selling 2,127,660 shares of the Company's common stock at a price to the public of \$2.35 per share, for aggregate gross proceeds to the Company of approximately \$5.0 million. The Company paid to the underwriters underwriting discounts and commissions of approximately \$0.4 million in connection with the offering, and approximately \$0.2 million of other expenses in connection with the offering.

**RITTER PHARMACEUTICALS, INC.**  
**NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS**

This offering was made pursuant to a shelf registration statement on Form S-3, which was declared effective by the SEC on August 23, 2016. The shelf registration statement allows the Company to issue, from time to time at prices and on terms to be determined at or prior to the time of an offering, up to \$150,000,000 of any combination of an indeterminate number of shares of common stock, an indeterminate number of shares of preferred stock, an indeterminate principal amount of debt securities, an indeterminate number of warrants, rights and purchase contracts to purchase common stock or debt securities, and an indeterminate number of units. If any debt securities are issued at an original issue discount, then the offering price of such debt securities shall be in such greater principal amount as shall result in an aggregate offering price not to exceed \$150,000,000, less the aggregate dollar amount of all securities previously issued hereunder. The securities registered also include such indeterminate number of shares of common stock and preferred stock that may be issued upon conversion or exchange of convertible or exchangeable securities being registered or pursuant to the anti-dilution provisions of any such securities.

October 2017 Public Offering

On October 3, 2017, the Company closed a public offering, selling an aggregate of (i) 34,550,000 Class A Units consisting of 34,550,000 shares of the Company's common stock and warrants to purchase 34,550,000 shares of the Company's common stock at a public offering price of \$0.40 per unit, and (ii) 9,180 Class B Units consisting of 9,180 shares of Series A Convertible Preferred Stock, with a stated value of \$1,000 per unit, and convertible into an aggregate of 22,950,000 shares of the Company's common stock, and warrants to purchase an aggregate of 22,950,000 shares of the Company's common stock. The warrants have an exercise price of \$0.44, are exercisable upon issuance and expire five years from the date of issuance.

The Company granted the underwriters a 45-day option to purchase an additional 8,625,000 shares of the Company's common stock and/or warrants to purchase an additional 8,625,000 shares of the Company's common stock. As of the closing of the offering, the underwriters have exercised their over-allotment option for warrants to purchase 2,975,000 shares of the Company's common stock.

Aggregate gross proceeds to the Company from the public offering were approximately \$23.0 million. The Company paid to the underwriters underwriting discounts and commissions of approximately \$1.6 million in connection with the offering, and approximately \$0.4 million of other expenses in connection with the offering of which approximately \$0.3 million are recorded as deferred offering costs in the Company's financial statements as of, and for the nine months ended September 30, 2017.

The securities described above were offered by the Company pursuant to a registration statement filed with the SEC that was declared effective on September 28, 2017. The final prospectus relating to the offering was filed with the SEC on October 2, 2017.

**NOTE 7 — WARRANTS**

The following represents a summary of the warrants outstanding at September 30, 2017 and changes during the period then ended:

	Warrants	Weighted Average Exercise Price
Outstanding at December 31, 2016	578,323	\$ 8.45
Granted	—	\$ —
Exercised/Expired/Forfeited	—	\$ —
Outstanding at September 30, 2017	578,323	\$ 8.45
Exercisable at September 30, 2017	578,323	\$ 8.45

**RITTER PHARMACEUTICALS, INC.**  
**NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS**

**NOTE 8 — STOCK-BASED COMPENSATION**

*Equity Incentive Plans*

The Company has issued equity awards pursuant to its 2015 Equity Incentive Plan (the “2015 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. 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.

On June 2, 2017, the stockholders of the Company approved an amendment to the 2015 Plan at the 2017 annual meeting of stockholders, which among other things, increased the number of shares that may be issued pursuant to awards under the 2015 Plan by 838,000 shares of common stock.

On September 15, 2017, the stockholders of the Company approved an amendment to the 2015 Plan at a special meeting of stockholders, which among other things, increased the number of shares that may be issued pursuant to awards under the 2015 Plan by 25,858,711 shares of common stock. As of September 30, 2017, the aggregate number of shares of common stock authorized for issuance under the 2015 Plan, as amended, was 27,500,000.

The following represents a summary of the options granted to employees and non-employees that are outstanding at September 30, 2017 and changes during the period then ended:

	<b>Number of Shares</b>	<b>Weighted- Average Exercise Price</b>	<b>Aggregate Intrinsic Value</b>	<b>Weighted- Average Remaining Contractual Life (in years)</b>
Outstanding at December 31, 2016	2,476,924	\$ 6.01	\$ 497,351	8.3
Options granted	88,000	2.89	—	8.8
Options forfeited	(5,000)	2.89	—	—
Outstanding at September 30, 2017	<u>2,559,924</u>	5.91	—	7.6
Exercisable at September 30, 2017	<u>1,808,972</u>	\$ 5.88	\$ —	7.2

The exercise price for an option 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 non-statutory stock option, no less than 100% of the fair market value per share on the date of grant. The options awarded under the Plans will vest as determined by the Board of Directors but will not exceed a ten-year period.

*Fair Value of Equity Awards*

The Company utilizes the Black-Scholes option pricing model to value awards under its Plans. Key valuation assumptions include:

**RITTER PHARMACEUTICALS, INC.**  
**NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS**

- *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.

The Company elected to adopt the amendments of ASU 2016-09 (described in Note 3) related to the presentation of excess tax benefits on the statement of cash flows using a prospective transition method but does not expect any impact on its financial statements.

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 September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Expected dividend yield	0.00%	0.00%	0.00%	0.00%
Expected stock price volatility	53.08% - 53.68 %	53.60% - 54.73%	53.08% - 53.90%	53.60% - 59.03%
Risk-free interest rate	1.89% - 2.29%	1.29% - 1.71%	1.98% - 2.37%	1.29% - 1.78%
Term of options	10	10	10	10
Stock price	\$0.35 - \$0.65	\$1.27 - \$1.68	\$0.35 - \$1.08	\$1.13 - \$1.68

*Stock-Based Compensation*

The Company recognized stock-based compensation expense for services within general and administrative expense in the accompanying statements of operations of approximately \$203,000 and \$333,000 for the three months ended September 30, 2017 and 2016, respectively, and \$746,000 and \$1,042,000 for the nine months ended September 30, 2017 and 2016, respectively. As of September 30, 2017, there was approximately \$263,000 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 1.1 years.

No stock options were exercised during the three and nine months ended September 30, 2017. Approximately 8,000 options were exercised during the three months ended September 30, 2016, and approximately 11,000 options were exercised during the nine months ended September 30, 2016 with approximate proceeds to the Company of \$9,000. The aggregate intrinsic value of stock options exercised during the nine months ended September 30, 2016 was approximately \$18,000.

## 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, 2016 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 for the fiscal year ended December 31, 2016 filed with the Securities and Exchange Commission ("SEC") on February 27, 2017 (the "2016 Annual Report"). As used in this report, unless the context suggests otherwise, "we," "us," "our," or "Ritter" refer to Ritter Pharmaceuticals, Inc.*

### 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 of 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 RP-G28 and any other product candidates that we may develop in the future;
- our ability to obtain and maintain intellectual property protection for RP-G28 and any other product candidates we may develop in the future;
- the successful development of our sales and marketing capabilities;
- the potential markets for RP-G28 and any other product candidates we may develop in the future and our ability to serve those markets;
- the rate and degree of market acceptance of our products, if approved;
- 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 our 2016 Annual Report and this Quarterly Report to better understand the risks and uncertainties inherent in our business and underlying any forward-looking statements.

## **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 completed a Phase 2a clinical trial of our leading product candidate, RP-G28, an orally administered, high purity oligosaccharide in November 2011.

We completed a Phase 2b/3 multi-center, randomized, double-blind, placebo-controlled, parallel group trial of RP-G28 in October 2016. The purpose of the trial was to evaluate the safety, efficacy and tolerability of two dosing regimens of RP-G28 in patients with moderate to severe lactose intolerance symptoms. Enrollment was initiated in March 2016 and completed in August 2016, achieving our projected enrollment time period. The trial aimed to evaluate a patient’s ability to consume dairy foods post-treatment with improved tolerance and reduced digestive symptoms. A total of 377 subjects were enrolled in the trial with 18 clinical sites participating throughout the United States. Patients underwent a 30-day treatment, followed by a 30-day post-treatment evaluation of dairy tolerance. On October 17, 2016, the last patient completed dosing and all monitoring visits.

We held a Type C meeting with the FDA in March 2017, prior to the unblinding of our Phase 2b/3 data, to discuss our development plans and Phase 2b/3 clinical trial. The focus of the meeting was to obtain the FDA’s feedback on our Phase 2b/3 clinical trial, including our statistical analysis plan (“SAP”) prior to unblinding any data.

The meeting with the FDA was constructive and productively focused on best defining clinically meaningful benefits to patients suffering from lactose intolerance and how to reflect these benefits in endpoints. We modified aspects of our SAP to address certain FDA recommendations, including a change to our primary endpoint, which was changed to combine abdominal pain with relevant secondary endpoints to establish a composite score (abdominal pain, abdominal cramping, abdominal bloating and abdominal gas). The protocol design and the assessment utilized to collect lactose intolerance symptoms remained unchanged.

Topline results of the trial were announced in March 2017. Due to inconsistent data results from one study site, the data from this site was excluded from the primary analysis population (Efficacy Subset mITT). After excluding the data from the one anomalous study site, results showed a clinically meaningful benefit to subjects in the reduction of lactose intolerance symptoms across a variety of outcome measures. The majority of analyses showed positive outcome measures and the robustness of the data point to a clear drug effect. Treatment patients not only reported meaningful reduced symptoms, but also 30 days after taking the treatment, patients reported adequate relief from lactose intolerance symptoms and satisfaction with the results of the treatment, with RP-G28 preventing or treating their lactose intolerance symptoms. Greater milk and dairy product consumption was also reported by patients.

A subset of subjects from our Phase 2b/3 clinical trial has been rolled into a 12-month extension study to evaluate long-term durability of treatment. The study is also evaluating each participant's microbiome, expanding our knowledge of the effects that RP-G28 may have on adapting the gut microbiota in a beneficial manner. The subjects are expected to complete the 12-month evaluation during the fourth quarter of 2017.

We held an End-of-Phase 2 meeting with the FDA's Division of Gastroenterology and Inborn Errors Products in August 2017. The purpose of the meeting was to obtain the FDA's feedback on our Phase 3 program. We reached general consensus with the FDA on certain elements of our current Phase 3 program and have received clear guidance and recommendations on many necessary components of our Phase 3 program; including the clinical, non-clinical, and chemistry, manufacturing and controls (CMC) requirements needed to support an NDA submission.

We have incorporated much of this guidance into our Phase 3 program. Our current Phase 3 clinical program will consist of two confirmatory clinical trials of similar trial design and size as our Phase 2b/3 clinical trial and will include additional components that may allow for claims for durability of effect. These additional trials may be run in parallel.

#### **Financial Overview**

We have incurred net losses in each year since our inception, including net losses of approximately \$5.6 million for the nine months ended September 30, 2017. We had an accumulated deficit of approximately \$51.1 million as of September 30, 2017. Substantially all of our net losses resulted from costs incurred in connection with our research and development programs, patent costs, stock-based compensation, and from general and administrative costs associated with our operations.

#### ***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 clinical research organizations (“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 September 30, 2017, we have incurred approximately \$21.9 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 RP-G28 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 RP-G28 or the period, if any, in which material net cash inflows from RP-G28 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.

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 RP-G28 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.

#### ***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***

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 nine months ended September 30, 2017, as compared with the significant accounting policies described in our 2016 Annual Report.

While our significant accounting policies are more fully described in Note 3 to the financial statements included in this Quarterly Report, 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 accounting principles generally accepted in the United States of America ("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***

Stock-based compensation cost for equity awards granted to employees and nonemployees is measured at the grant date based on the calculated fair value of the award using the Black-Scholes option-pricing model, and is recognized as an expense, under the straight-line method, over the requisite service period (generally the vesting period of the equity grant). If we determine that other methods are more reasonable, or other methods for calculating these assumptions are prescribed by regulators, the fair value calculated for our 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.

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

## Emerging Growth Company Status

On April 5, 2012, the Jumpstart Our Business Startups Act of 2012 (“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, 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 \$1.07 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 September 30, 2017 and 2016

The following table summarizes our results of operations for the three months ended September 30, 2017 and 2016, together with the changes in those items in dollars and as a percentage:

	For the Three Months Ended September 30,		Dollar Change	Percentage Change
	2017	2016		
<b>Statement of Operations Data:</b>				
<i>Operating costs and expenses</i>				
Research and development	\$ 915,268	\$ 2,348,755	\$ (1,433,487)	(61)%
Patent costs	47,431	98,908	(51,477)	(52)%
General and administrative	1,052,236	1,091,647	(39,411)	(4)%
Total operating costs and expenses	2,014,935	3,539,310	(1,524,375)	(43)%
Loss from operations	(2,014,935)	(3,539,310)	1,524,375	43%
<i>Other income</i>				
Interest income	4,083	13,239	(9,156)	(69)%
Total other income	4,083	13,239	(9,156)	(69)%
<b>Net loss</b>	<b>\$ (2,010,852)</b>	<b>\$ (3,526,071)</b>	<b>\$ 1,515,219</b>	<b>43%</b>

#### *Research and Development Expenses*

Research and development expenses decreased by approximately \$1.4 million, or 61%, during the three months ended September 30, 2017 as compared to the three months ended September 30, 2016. The primary reason for this decrease is that our Phase 2b/3 clinical trial, which was initiated in March 2016, was completed during the fourth quarter of 2016. Research and development expenses during the three months ended September 30, 2017 primarily reflect the Phase 2b/3 extension study fees and Phase 3 program planning expenses.

#### *Patent Costs*

Patent costs decreased by approximately \$51,000, or 52%, during the three months ended September 30, 2017 as compared to the three months ended September 30, 2016. The decrease was attributable to the overall timing of certain costs related to our maintenance of patent rights and the prosecution of patents.

#### *General and Administrative Expenses*

General and administrative expenses decreased slightly by approximately \$39,000, or 4%, during the three months ended September 30, 2017 as compared to the three months ended September 30, 2016, mainly due to lower stock-based compensation expense in the current fiscal quarter.

#### *Other Income*

Other income decreased by approximately \$9,000, or 69%, during the three months ended September 30, 2017 as compared to the three months ended September 30, 2016, due to lower interest income for the current fiscal quarter.

## Comparison of the Nine Months Ended September 30, 2017 and 2016

The following table summarizes our results of operations for the nine months ended September 30, 2017 and 2016, together with the changes in those items in dollars and as a percentage:

	For the Nine Months Ended September 30,		Dollar Change	Percentage Change
	2017	2016		
<b>Statement of Operations Data:</b>				
<i>Operating costs and expenses</i>				
Research and development	\$ 2,121,898	\$ 7,112,177	\$ (4,990,279)	(70)%
Patent costs	175,794	199,888	(24,094)	(12)%
General and administrative	3,367,781	3,533,608	(165,827)	(5)%
Total operating costs and expenses	<u>5,665,473</u>	<u>10,845,673</u>	<u>(5,180,200)</u>	<u>(48)%</u>
Loss from operations	<u>(5,665,473)</u>	<u>(10,845,673)</u>	<u>(5,180,200)</u>	<u>48%</u>
<i>Other income</i>				
Interest income	18,362	50,466	(32,104)	(64)%
Other income	—	1,214	(1,214)	(100)%
Total other income	<u>18,362</u>	<u>51,680</u>	<u>(33,318)</u>	<u>(64)%</u>
<b>Net loss</b>	<b>\$ (5,647,111)</b>	<b>\$ (10,793,993)</b>	<b>\$ 5,146,882</b>	<b>48%</b>

### *Research and Development Expenses*

Research and development expenses decreased by approximately \$5.0 million, or 70%, during the nine months ended September 30, 2017 as compared to the same prior year period. The primary reason for the decrease is that our Phase 2b/3 clinical trial, which was initiated in March 2016, was completed during the fourth quarter of 2016. Research and development expenses during the nine months ended September 30, 2017 primarily reflect the Phase 2b/3 extension study fees and Phase 3 program planning expenses.

### *Patent Costs*

The approximate \$24,000, or 12%, decrease in patent costs during the nine months ended September 30, 2017 as compared to the nine months ended September 30, 2016 was mainly attributable to the overall timing of certain costs related to our maintenance of patent rights and the prosecution of patents. As of September 30, 2017, we had 14 issued patents and 27 pending patent applications.

### *General and Administrative Expenses*

General and administrative expenses decreased by approximately \$166,000, or 5%, during the nine months ended September 30, 2017 as compared to the nine months ended September 30, 2016. The decrease was primarily due to lower stock compensation expense that was slightly offset by higher legal fees.

### *Other Income*

Interest income was approximately \$18,000 and \$50,000 for the nine months ended September 30, 2017 and 2016, respectively. The decrease of approximately \$32,000, or 64%, during the nine months ended September 30, 2017 reflects a decrease in interest on our average cash balances as a result of funding our Phase 2b/3 trial and extension study.

There was no other income during the nine months ended September 30, 2017 as compared to other income of approximately \$1,000 for the nine months ended September 30, 2016.

## Liquidity and Capital Resources

Since our inception, we have incurred net losses and negative cash flows from operations, and, as of September 30, 2017, we had an accumulated deficit of approximately \$51.1 million. Substantially all of 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 September 30, 2017, we had working capital of approximately \$0.9 million, and cash of approximately \$3.6 million. We have not generated any product revenues and have not achieved profitable operations.

### Cash Flows

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

	For the Nine Months Ended September 30,	
	2017	2016
Net cash (used in) provided by:		
Operating activities	\$ (5,176,622)	\$ (7,367,879)
Investing activities	—	(8,063)
Financing activities	1,689,214	8,504
Net decrease in cash	<u>\$ (3,487,408)</u>	<u>\$ (7,367,438)</u>

#### Operating Activities

During the nine months ended September 30, 2017, net cash used in operating activities of approximately \$5.2 million primarily reflects our net loss for the period of approximately \$5.6 million, offset by non-cash charges of approximately \$746,000 for stock-based compensation expense and changes in our working capital accounts, mainly consisting of an approximate \$849,000 increase in accounts payable and an approximate \$1.0 million decrease in accrued expenses.

Net cash used in operating activities of approximately \$7.4 million during the nine months ended September 30, 2016 reflects our net loss of approximately \$10.8 million, partially offset by stock-based compensation of approximately \$1.0 million, an increase in prepaid expenses of approximately \$57,000, and an increase in accounts payable, accrued expenses and other liabilities of approximately \$2.1 million, \$294,000 and \$13,000, respectively.

#### Investing Activities

No cash was used in investing activities for the nine months ended September 30, 2017. Net cash used in investing activities of approximately \$8,000 during the nine months ended September 30, 2016 related to the purchase of office furniture and equipment.

## *Financing Activities*

Net cash provided by financing activities of approximately \$1.7 million during the nine months ended September 30, 2017 resulted from proceeds received from the sale of common shares to Aspire Capital, LLC (“Aspire Capital”) pursuant to the Common Stock Purchase Agreement with Aspire Capital (the “2015 Aspire Purchase Agreement”). Deferred offering costs of approximately \$311,000, related to our October 2017 public offering that was closed on October 3, 2017, slightly offset the proceeds from the sale of common shares to Aspire Capital.

### **Sources of Liquidity**

#### ***2015 Aspire Capital Financing Arrangement***

On December 18, 2015, we entered into the 2015 Aspire Purchase Agreement with Aspire Capital, pursuant to which Aspire Capital was committed to purchase up to an aggregate of \$10.0 million of our shares of common stock over the approximate 30-month term of the 2015 Aspire Purchase Agreement.

On May 4, 2017, we terminated the 2015 Aspire Purchase Agreement and entered into a new common stock purchase agreement with Aspire Capital (the “2017 Aspire Purchase Agreement”), which provides that upon the terms and conditions set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$6.5 million of shares of our common stock over the 30-month term of the 2017 Aspire Purchase Agreement. On any trading day on which the closing sale price of our common stock exceeds \$0.25, we have the right, in our sole discretion, to present Aspire Capital with a purchase notice, directing Aspire Capital to purchase up to 100,000 shares of our common stock per trading day, for up to \$6.5 million of our common stock in the aggregate at a per share price, calculated by reference to the prevailing market price of our common stock (as provided in the 2017 Aspire Purchase Agreement).

As a condition to the 2017 Aspire Purchase Agreement, we issued 137,324 shares of our common stock to Aspire Capital as a commitment fee. As of the date of this Quarterly Report, no shares of common stock have been sold to Aspire Capital under the 2017 Aspire Purchase Agreement. 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.

#### ***October 2016 Public Offering***

On October 31, 2016, we closed a public offering of 2,127,660 shares of our common stock at a price to the public of \$2.35 per share, for net proceeds of approximately \$4.4 million, after deducting underwriting discounts and commissions and offering expenses payable by us in the offering. The offering was made pursuant to a shelf registration statement on Form S-3.

#### ***October 2017 Public Offering***

On October 3, 2017, the Company closed a public offering, selling an aggregate of (i) 34,550,000 Class A Units consisting of 34,550,000 shares of the Company’s common stock and warrants to purchase 34,550,000 shares of the Company’s common stock at a public offering price of \$0.40 per unit, and (ii) 9,180 Class B Units consisting of 9,180 shares of Series A Convertible Preferred Stock, with a stated value of \$1,000, and convertible into an aggregate of 22,950,000 shares of the Company’s common stock, and warrants to purchase an aggregate of 22,950,000 shares of the Company’s common stock. The warrants have an exercise price of \$0.44, are exercisable upon issuance and expire five years from the date of issuance.

The Company granted the underwriters a 45-day option to purchase an additional 8,625,000 shares of the Company’s common stock and/or warrants to purchase an additional 8,625,000 shares of the Company’s common stock. As of the closing of the offering, the underwriters have exercised their over-allotment option for warrants to purchase 2,975,000 shares of the Company’s common stock.

Aggregate gross proceeds to the Company from the public offering were approximately \$23.0 million. The Company paid to the underwriters underwriting discounts and commissions of approximately \$1.6 million in connection with the offering, and approximately \$0.4 million of other expenses in connection with the offering., of which approximately \$0.3 are recorded as deferred offering costs in the Company's financial statements as of, and for the nine months ended September 30, 2017.

The securities described above were offered by the Company pursuant to a registration statement filed with the SEC that was declared effective on September 28, 2017. The final prospectus relating to the offering was filed with the SEC on October 2, 2017.

#### **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 for and commercialize RP-G28. 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 RP-G28. 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 for RP-G28, 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 (including the net proceeds from our October 2017 public offering), together with interest and any proceeds received from our sale of shares of common stock to Aspire Capital pursuant to the 2017 Aspire Purchase Agreement will enable us to fund our operating expenses and capital expenditure requirements through 2018. We will need to raise additional capital to fund operations and complete ongoing and planned clinical trials beyond 2018.

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

- the ability of RP-G28 and any other product candidates that we may develop in the future to progress through clinical development successfully;
- the outcome, costs and timing of seeking and obtaining FDA approval;
- 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;
- our need to expand our research and development activities;
- the costs associated with securing and establishing commercialization and manufacturing capabilities;
- market acceptance of RP-G28 and any other product candidates that we may develop in the future;
- 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 2016 Annual Report.

#### **Off-Balance Sheet Arrangements**

Through September 30, 2017, 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 September 30, 2017, the end of the period covered by this Quarterly Report on Form 10-Q.

Based on their evaluation, we believe that our disclosure controls and procedures as of September 30, 2017 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 third fiscal quarter ended September 30, 2017 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 2016 Annual Report and quarterly reports on Form 10-Q filed with the SEC on May 9, 2017 and August 7, 2017 (the "2017 Quarterly Reports") could materially and adversely affect our business, financial condition and results of operations. The risk factors discussed in our 2016 Annual Report and 2017 Quarterly Reports 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. There have been no material changes in the risk factors discussed in our 2016 Annual Report and 2017 Quarterly Reports.

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

##### *Unregistered Sales of Equity Securities*

None

##### *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
1.1	<a href="#">Underwriting Agreement, dated September 29, 2017, between Ritter Pharmaceuticals, Inc. and Aegis Capital Corp., as representative of the several underwriters named therein</a>	8-K	001-37428	1.1	10/4/2017
3.1	<a href="#">Certificate of Amendment to the Amended and Restated Certificate of Incorporation</a>	8-K	001-37428	3.1	10/4/2017
3.2	<a href="#">Certificate of Designation of Series A Convertible Preferred Stock</a>	8-K	001-37428	3.1	10/4/2017
4.1	<a href="#">Warrant Agency Agreement, dated September 29, 2017 by and between Ritter Pharmaceuticals, Inc. and Corporate Stock Transfer, Inc. (including the form of warrant certificate)</a>	8-K	001-37428	4.1	10/4/2017
10.1	<a href="#">Ritter Pharmaceuticals, Inc. 2015 Equity Incentive Plan, as amended</a>	S-8	333-220907	99.1	10/11/2017
31.1	<a href="#">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.</a>				
31.2	<a href="#">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.</a>				
32.1	<a href="#">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.</a>				
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.

October 31, 2017

**RITTER PHARMACEUTICALS, INC.**

By: /s/ Michael D. Step

Name: Michael D. Step

Title: Chief Executive Officer



**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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

October 31, 2017

By: /s/ Michael D. Step

Name: Michael D. Step

Title: Chief Executive Officer

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**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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

(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.

October 31, 2017

By: /s/ Ellen Mochizuki

Name: Ellen Mochizuki

Title: Consultant (Acting Principal Financial Officer)

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**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 and nine months ended September 30, 2017, 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.

October 31, 2017

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

October 31, 2017

By: /s/ Ellen Mochizuki  
Name: Ellen Mochizuki  
Title: Consultant (Acting 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.*

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