



DIVISION OF
CORPORATION FINANCE

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

June 2, 2015

Via E-mail

Michael D. Step
Chief Executive Officer
Ritter Pharmaceuticals, Inc.
1801 Century Park East #1820
Los Angeles, CA 90067

**Re: Ritter Pharmaceuticals, Inc.
Amendment No. 3 to Registration Statement on Form S-1
Filed May 22, 2015
File No. 333-202924**

Dear Mr. Step:

We have reviewed amendment number 3 to your registration statement and your response letter filed May 22, 2015 and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to our comment, we may have additional comments.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies and Estimates
Significant factors, assumptions and methodologies used in determining the estimated fair value of the Company's common stock, page 56

1. Please refer to your response to our prior comment two. Provide us the calculation (i.e. the numerator and denominator) for the \$1.796 per share and \$.437 per share valuations under the IPO and "other" scenarios, respectively. We assume the numerator for the IPO scenario is the \$70 million value you refer to in your April 24, 2015 letter and that the numerator for the "other" scenario is the \$1.4 million allocated to common stock as of the valuation date disclosed on page 58 of your filing. With respect to the denominators, tell us what you included and why for each scenario. In particular for the IPO scenario, it appears that you used 38,975,501 shares based on the \$70 million valuation. To the extent it assumes exercise of options and warrants, tell us why, and how you considered the effect of the exercise proceeds. Also in this regard, more fully explain to us your

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statement that “Both scenarios included options expected to be issued in December 2014 on 11.3 million common shares.”

You may contact Rolf Sundwall at (202) 551-3105 or Jim Rosenberg at (202) 551- 3679 if you have questions regarding comments on the financial statements and related matters. Please contact Johnny Gharib at (202) 551-3170, Bryan Pitko at (202) 551-3203 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Bryan J. Pitko for

Jeffrey P. Riedler
Assistant Director

cc: Via E-mail
Yvan-Claude Pierre, Esq.
Reed Smith LLP