



DIVISION OF
CORPORATION FINANCE

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

June 13, 2018

Torben Straight Nissen, Ph.D.
President
Rubius Therapeutics, Inc.
325 Vassar Street, Suite 1A
Cambridge, MA 02139

**Re: Rubius Therapeutics, Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted May 24, 2018
CIK No. 0001709401**

Dear Dr. Nissen:

We have reviewed your amended draft registration statement and have the following comment.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to this comment and your amended draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 1 to Draft Registration Statement

14. Related Parties, page F-33

1. Please address the following regarding your response to our comment 16:
 - Of the four promissory notes used to purchase shares of your common stock, two of those promissory notes are from your Chairman, who is a non-employee, and those notes are partial-recourse notes. In your response, you cite the example under ASC 718-10-25-3 that references accounting with an employee for non-recourse notes. In this regard, tell us how you determined that the application of ASC 718 to the stock issued to your chairman is consistent with your response to prior comment 9 in which you explain that you account for stock based compensation to this individual on a

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- nonemployee basis.
- Tell us the difference in your accounting for these instruments under ASC 718-10-25-3 compared to if you had followed the guidance of Staff Accounting Bulletin Topic 4:E. Specifically identify the impact on total equity and compensation expense for the periods presented.
 - Further, you disclose that one of the criteria for the maturity of the promissory notes is "immediately prior to an initial filing of a registration statement." Please tell us in detail and disclose what impact the public filing of your registration statement will have on your accounting for these instruments.

You may contact Sasha Parikh at 202-551-3627 or Kevin Vaughn at 202-551-3494 if you have questions regarding comments on the financial statements and related matters. Please contact Jeffrey Gabor at 202-551-2544 or Mary Beth Breslin at 202-551-3625 with any other questions.

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Arthur R. McGivern, Esq.