

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

**SCHEDULE 14A**

Proxy Statement Pursuant to Section 14(a) of  
the Securities Exchange Act of 1934 (Amendment No.        )

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material under §240.14a-12

**RUBIUS THERAPEUTICS, INC.**

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
  - (1) Title of each class of securities to which transaction applies:  
\_\_\_\_\_
  - (2) Aggregate number of securities to which transaction applies:  
\_\_\_\_\_
  - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):  
\_\_\_\_\_
  - (4) Proposed maximum aggregate value of transaction:  
\_\_\_\_\_
  - (5) Total fee paid:  
\_\_\_\_\_
- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
  - (1) Amount Previously Paid:  
\_\_\_\_\_
  - (2) Form, Schedule or Registration Statement No.:  
\_\_\_\_\_
  - (3) Filing Party:  
\_\_\_\_\_
  - (4) Date Filed:  
\_\_\_\_\_

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL MEETING OF STOCKHOLDERS OF RUBIUS THERAPEUTICS, INC. TO BE HELD ON MAY 12, 2021**

## Your **Vote** Counts! RUBIUS THERAPEUTICS, INC.

**Meeting Type:** Annual Meeting  
**For holders as of:** March 15, 2021  
**Date:** May 12, 2021 **Time:** 9:00 AM EDT  
**Location:** Virtually at  
[www.virtualshareholdermeeting.com/RUBY2021](http://www.virtualshareholdermeeting.com/RUBY2021)  
**Vote by:** May 11, 2021 11:59 PM EDT

RUBIUS THERAPEUTICS, INC.  
ATTN: CORPORATE SECRETARY  
399 BINNEY STREET, SUITE 300  
CAMBRIDGE, MASSACHUSETTS 02139



D47314-P51908

### You invested in RUBIUS THERAPEUTICS, INC. and it's time to vote!

You have the right to vote on proposals being presented at the Annual Meeting. **This is an important notice regarding the availability of proxy materials for the stockholder meeting to be held on May 12, 2021.**

### Get informed before you vote

View the Notice and Proxy Statement and Form 10-K online at [www.ProxyVote.com](http://www.ProxyVote.com) OR you can receive a free paper or email copy of the material(s) by requesting prior to April 28, 2021. If you would like to request a copy of the material(s) for this and/or future stockholder meetings, you may (1) visit [www.ProxyVote.com](http://www.ProxyVote.com), (2) call 1-800-579-1639 or (3) send an email to [sendmaterial@proxyvote.com](mailto:sendmaterial@proxyvote.com). If sending an email, please include your control number (indicated below) in the subject line. Requests, instructions and other inquiries sent to this e-mail address will NOT be forwarded to your investment advisor. Unless requested, you will not otherwise receive a paper or email copy.



For complete information and to vote, visit [www.ProxyVote.com](http://www.ProxyVote.com)

Control #

#### Smartphone users

Point your camera here and vote without entering a control number



#### Vote Virtually at the Meeting\*

May 12, 2021  
9:00 AM EDT

Virtually at:  
[www.virtualshareholdermeeting.com/RUBY2021](http://www.virtualshareholdermeeting.com/RUBY2021)

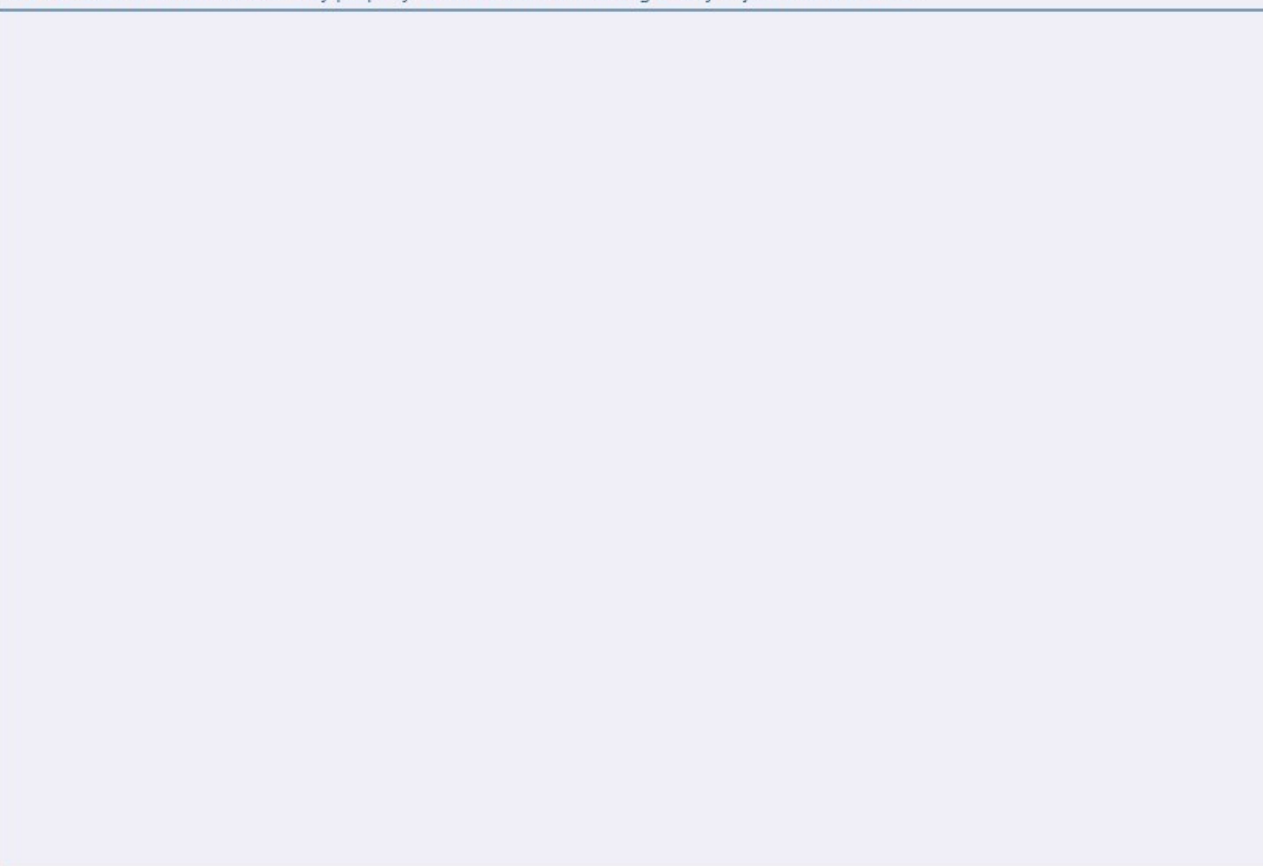
\*Please check the meeting materials for any special requirements for meeting attendance.

## THIS IS NOT A VOTABLE BALLOT

This is an overview of the proposals being presented at the upcoming stockholder meeting. Please follow the instructions on the reverse side to vote these important matters.

Voting Items	Board Recommends
1. Election of Class III Directors <b>Nominees:</b> 01) Pablo J. Cagnoni, M.D. 02) Francis Cuss, M.B., B.Chir., FRCP 03) Sir Jonathan R. Symonds, CBE	✔ For
2. To ratify the appointment of PricewaterhouseCoopers LLP as Rubius Therapeutics, Inc.'s independent registered public accounting firm for the fiscal year ending December 31, 2021.	✔ For

**NOTE:** Such other business as may properly come before the meeting or any adjournment thereof.



Prefer to receive an email instead? While voting on [www.ProxyVote.com](http://www.ProxyVote.com), be sure to click "Sign up for E-delivery".