



DIVISION OF
CORPORATION FINANCE

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

May 4, 2018

Nagesh K. Mahanthappa
President and Chief Executive Officer
Scholar Rock Holding Corp.
620 Memorial Drive, 2nd Floor
Cambridge, MA 02139

Re: Scholar Rock Holding Corp.
Registration Statement on Form S-1
Filed April 27, 2018
File No. 333-224493

Dear Mr. Mahanthappa:

We have reviewed your registration statement 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 this comment, we may have additional comments.

Registration Statement on Form S-1

Prospectus Summary

Our Pipeline Programs, page 2

1. We note your response to comment 5. We continue to believe that it may be premature to include the TGFB1 and BMP6 programs on your pipeline table. You have not identified any anticipated milestones for your BMP6 program and your TGFB1 program's anticipated milestone appears to be too remote for reasonable inclusion on the pipeline table. We also note that three of your targets within the TGFB1 program are only in the discovery stage of development. Additionally, the indications that you have identified appear to be the general therapeutic areas that your targets have applicability within and

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do not necessarily appear to evince the level of specificity that you have described for SRK-015. While it may be appropriate to discuss and describe these programs elsewhere in your filing, we do not believe that it is appropriate to include these programs on your Prospectus Summary pipeline table at this time.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Charles Eastman, Staff Accountant, at (202) 551-3794 or Terry French, Accounting Branch Chief, at (202) 551-3828 if you have questions regarding comments on the financial statements and related matters. Please contact William Mastrianna, Attorney-Adviser, at (202) 551-3778 or Kathleen Krebs, Special Counsel, at (202) 551-3350 with any other questions.

Division of Corporation Finance
Office of Telecommunications