

August 30, 2018

Andrew Allen, M.D., Ph.D.
President and Chief Executive Officer
Gritstone Oncology, Inc.
5858 Horton Street, Suite 210
Emeryville, CA 94608

Re: Gritstone Oncology, Inc.
Registration Statement on Form S-1
Filed August 23, 2018
File No. 333-226976

Dear Dr. Allen:

We have reviewed your registration statement and have the following comments. In some of our comments, 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 comments apply 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 these comments, we may have additional comments.

Registration Statement on Form S-1

Strategic Collaboration with bluebird bio, page 121

1. We note your disclosure that the collaboration term ends on a country-by-country basis and product candidate-by-product candidate basis based on completion of all payments owed to you by bluebird. Please revise your description of this agreement to clarify when all payments owed to you by bluebird will be completed. Please also file this agreement as an exhibit or tell us why you believe that you are not required to do so pursuant to Item 601(b)(10) of Regulation S-K.

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Intellectual Property, page 124

2. We note your disclosure that you have agreements with Sanquin Reagents B.V. and other third parties under which you have rights to certain intellectual property such as patents or patent applications. Please revise your disclosure to specify the products, product groups or technologies to which such patents or patent applications relate, the type of patent protection, the patent expiration dates and the applicable jurisdictions.

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 Rolf Sundwall at 202-551-3105 or Jim B. Rosenberg at 202-551-3679 if you have questions regarding comments on the financial statements and related matters. Please contact Ada D. Sarmiento at 202-551-3798 or Mary Beth Breslin at 202-551-3625

with any other
questions.

FirstName LastNameAndrew Allen, M.D., Ph.D.

Corporation Finance
Comapany NameGritstone Oncology, Inc.

Healthcare & Insurance
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cc: Brian J. Cuneo, Esq.
FirstName LastName

Sincerely,
Division of
Office of