May 22, 2020

Geoff McDonough, M.D. President and Chief Executive Officer Generation Bio Co. 301 Binney Street Cambridge, MA 02142

> Re: Generation Bio Co. Amendment 1 to Draft Registration

Statement on Form S-1

2020

Submitted May 12,

CIK No. 0001733294

Dear Dr. McDonough:

We have reviewed your amended draft 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 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 comments apply 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 these comments and your amended draft registration statement or filed registration statement, we may have additional comments. Amendment 1 to Draft Registration Statement Our portfolio, page 3 We note your response 1. to our prior comment 3 and your revisions. Please further revise your chart here and at page 113 to include separate columns for each of Phase 1 and Phase 2. Please also adjust your chart to make all labels legible. Use of Proceeds, page 85 2. Please further revise your disclosure in response to prior comment 6 to separately allocate the portion of the proceeds to be allocated to each of the two programs identified in the last sentence on page 85. Geoff McDonough, M.D. Generation Bio Co. May 22, 2020 Page 2 You may contact Gary Newberry at (202) 551-3761 or Lynn Dicker at (202) 551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Courtney Lindsay at (202) 551-7237 or Mary Beth Breslin at (202) 551-3625 with any other questions.

FirstName LastNameGeoff McDonough, M.D.

Sincerely,

Corporation Finance Comapany NameGeneration Bio Co.

Sciences May 22, 2020 Page 2 cc: Molly Fox FirstName LastName Office of Life