

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

February 23, 2022

Yishai Zohar Chief Executive Officer Gelesis Holdings, Inc. 501 Boylston Street, Suite 6102 Boston, MA 02116

Re: Gelesis Holdings, Inc.
Registration Statement on Form S-1
Filed February 11, 2022
File No. 333-262672

Dear Mr. Zohar:

We have limited our review of your registration statement to those issues we have addressed in our 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

Selling Securityholders, page 135

- 1. The amount of common stock and warrants being offered by the selling securityholders identified in the selling securityholder table does not match the total number of shares being registered in the registration statement. Please reconcile.
- 2. We note the statement that selling securityholder information for each additional selling securityholder will be set forth by prospectus supplement or a post-effective amendment. Please note that since you are not eligible to rely on Rule 430B of Regulation C, you must file a post-effective amendment to add selling stockholders to the registration statement. Please revise your disclosure as appropriate and include the amount of securities registered on behalf of each selling shareholder. For guidance, please refer to Rule 430B and Regulation S-K C&DI 140.03.

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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 Gary Guttenberg at (202) 551-6477 or Christopher Edwards at (202) 551-6761 with any other questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Jim Barrett