

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

December 7, 2022

Thomas R. Cannell, D.V.M. Chief Executive Officer Sesen Bio, Inc. 245 First Street, Suite 1800 Cambridge, MA 02142

Re: Sesen Bio, Inc.

Amendment No. 1 to Registration Statement on Form S-4

Filed November 22, 2022 File No. 333-267891

Dear Thomas R. Cannell:

We have reviewed your amended 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. Unless we note otherwise, our references to prior comments are to comments in our November 10, 2022 letter.

Amendment No. 1 to Registration Statement on Form S-4

Cover Page

It appears that the shares to be sold in the Carisma pre-closing financing are included in
the shares to be registered in this registration statement. The investors in the Carisma preclosing financing made their investment decision in a private offering and, therefore, the
sale must close privately. Please remove the Carisma pre-closing financing shares from
the registration statement.

Carisma Business, page 234

2. We note your revisions in response to comment 17. Please revise the first chart on page 240 to remove the reference to the "therapeutic efficacy" of Carisma's approach.

Thomas R. Cannell, D.V.M. Sesen Bio, Inc. December 7, 2022 Page 2

Carisma's Pipeline Programs, page 235

3. We note your response to prior comment 19 and re-issue. Please explain why CT-0525 is sufficiently material to Carisma's business to warrant inclusion in the pipeline table.

Carisma's Strategy, page 237

4. We note your response to prior comment 18 and re-issue in part. Please revise your statement on page 237 that you intend to "[r]apidly advance" CT-0508 through clinical development to remove any implication that Carisma will be able to advance its product candidates in a rapid or accelerated manner.

You may contact Vanessa Robertson at 202-551-3649 or Sasha Parikh at 202-551-3627 if you have questions regarding comments on the financial statements and related matters. Please contact Dillon Hagius at 202-551-7967 or Ada D. Sarmento at 202-551-3798 with any other questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Steven J. Abrams, Esq.