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

DIVISION OF
CORPORATION FINANCE

November 10, 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.
Registration Statement on Form S-4
Filed October 14, 2022
File No. 333-267891

Dear Thomas R. Cannell:

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-4

Q: What will Sesen Bio stockholders receive in the merger?, page 2

1. Please disclose here and throughout the prospectus the criteria that the Sesen Bio board of directors will consider when deciding whether to approve the special cash dividend and how the directors will determine the amount of the dividend.

Prospectus Summary
The Companies, page 12

2. Please expand the discussion of Sesen Bio's decision to voluntarily pause further development of Vicineum to also disclose that Sesen Bio no longer plans to pursue regulatory approval of Vicineum for NMIBC in the E.U. and has started to wind down certain of its manufacturing operations and business development partnerships.

Reasons for the Merger , page 13

3. Please clarify here and on page 128 whether the post-merger combined company plans to pursue Sesen Bio's paused Vicineum candidate. We note risk factor disclosure on page 62 that Sesen Bio's only prospective revenue streams currently depend in part upon the ability of Qilu to develop, manufacture, market and/or sell Vicineum, but it is not clear if the combined company intends to pursue development of Vicineum itself. If the combined company does not intend to pursue these plans, please specify what, if anything, it intends to do with the Vicineum asset.

Treatment of Carisma Options and Carisma Plan, page 16

4. Given your disclosure here that Sesen Bio will assume the CARISMA Therapeutics Inc. 2017 Stock Incentive Plan, please file the plan as an exhibit.

Risks Related to the Merger
The exchange ratio will not change or otherwise be adjusted based on the market price of Sesen Bio common stock, page 26

5. Please revise this risk factor to disclose the market price of Sesen Bio's common stock on the date of the Merger Agreement.

The Merger
Background of the Merger, page 122

6. Please revise this section to include discussion of how the special cash dividend was formulated as part of the merger negotiations.

Carisma Reasons for the Merger, page 130

7. We note that one of the factors that the Carisma Board considered in support of the merger was the projected financial position of the combined company, including its ability to support the combined company's current and planned clinical trials and operations. Assuming Sesen Bio meets the minimum requirement of having net cash as of the merger's closing of $125 million, and to the extent that the combined company plans to use a material portion of the $125 million to fund the development of any specific pipeline candidates, please disclose the amounts it expects to allocate to each candidate and specify how far in the clinical development for each of these product candidates it expects to reach.

Opinion of Sesen Bio's Financial Advisor
Summary of Financial Analyses
Valuation Analysis-Discounted Cash Flow, page 135

8. We note that SVB Securities performed a discounted cash flow analysis to calculate the estimated present value of certain cash flows that Carisma was forecasted to generate from

January 1, 2023 through December 31, 2041. Please explain why SVB believed that an analysis of the cash flows over 18 years was reasonable. Please also explain what factors led Sesen Bio management to direct SVB to assume an annual decline ranging from 10% to 30% of Carisma's cash flows in perpetuity and what factors led SVB to use a discount rate ranging from 11% to 13%.

Additional Factors Observed by SVB Securities — Carisma Valuation Analysis — Selected Public Companies, page 135

9. Please disclose whether any companies that met the selection criteria were excluded from the valuation analysis. If so, please identify these companies and explain the reason for excluding them.

Certain Unaudited Financial Projections, page 137

10. Please supplementally provide us with a copy of the forecasted financial information prepared by Carisma that was provided to Sesen Bio.

11. The summary of the Financial Projections on page 139 defines the Total Adjusted Revenue as "[e]qual to total risk-adjusted revenue." Clearly identify the risk adjustments in arriving at risk-adjusted revenue. Please also revise to explain how Sesen Bio determined that the time period of the projections was reasonable.

12. We note disclosure on page 139 that the Financial Projections included two underlying assumptions, "among other things." Please revise to include all material assumptions underlying the Financial Projections. Please explain how you arrived at the probability of regulatory approval for CT-0508 and disclose the date that you assume that CT-0508 will be granted regulatory approval. Additionally, discuss whether the Financial Projections factored in the possibility of FDA approval of new competitive products and ensure that all information that SVB Securities considered in reaching its fairness determination, including any of these assumptions, is disclosed in this filing.

Material U.S. Federal Income Tax Consequences of the Merger, page 150

13. We note your disclosure on page 151 that no opinion of counsel has been obtained or will be obtained regarding the treatment of the merger as a tax-free reorganization. However, you still state in the registration statement that the merger is intended to qualify as a "reorganization" within the meaning of Section 368(a) of the Code. As such, your disclosure makes representations as to probable material tax consequences. Please revise to disclose that this is the opinion of named counsel and file an opinion of counsel as an exhibit to your registration statement. For guidance, refer to Section III of Staff Legal Bulletin No. 19.

Agreements Related to the Merger
Subscription Agreement, page 186

14. Please file the Subscription Agreement that Carisma entered into on September 20, 2022 as an exhibit to the registration statement or, alternatively, provide your analysis supporting your belief that such filing is not required. See Item 601(b)(10) of Regulation S-K.

Intellectual Property, page 221

15. With respect to the patents licensed from Micromet and XOMA, please identify the type of patent protection (e.g., composition of matter, use, or process) for any material patents, the expected expiration date and the jurisdiction.

Sesen Bio Business
Sesen Bio's OUS Business Development Partnering, page 222

16. Please disclose whether, to Sesen Bio's knowledge, its decision to pause further development of Vicineum will impact Qilu's development and commercialization of Vicineum in China.

Carisma Business, page 235

17. This section includes disclosure that states or implies that Carisma's product candidates are safe and/or effective. Please revise these statements, as safety and efficacy determinations are in the exclusive purview of the FDA or other regulators. For example, the following statements improperly state or imply that Carisma's product candidates are safe or effective:
    - Carisma can redirect [CARs'] potent innate immune functions against cancer
    - preliminary clinical results have...provided clinical validation of the CAR-M mechanism of action
    - CT-0508 has exhibited a favorable safety profile
    - "promising" preliminary clinical results from Carisma's Phase 1 clinical trial of CT-0508

    While you may present objective data from Carisma's trials, please refrain from drawing conclusions from the results. Moreover, statements about these trials should be properly balanced with disclosure that: (1) Carisma's cell therapy has yet to be broadly applied to solid tumors; (2) Carisma's CAR-M platform is a novel therapeutic approach, and; (3) Carisma has only preliminary results from its Phase 1 clinical trial of CT-0508. We note risk factor disclosure to this effect on page 62.

Overview, page 235

18. We note the statement that Carisma believes it will "rapidly generate new product candidates suitable for clinical development[.]" We note similar statements on pages 238, 239, and 309 about Carisma's plans to "rapidly advance" CT-0508 through clinical

development and "rapidly pursue" its development. Please revise these statements and any other similar statements to remove any implication that Carisma will be successful in advancing its product candidates in a rapid or accelerated manner, as such statements are speculative.

Carisma's Pipeline Programs, page 236

19. We note that CT-0525 is not reflected in the pipeline table on Carisma's website. Please explain why this program is sufficiently material to Carisma's business to warrant inclusion in the pipeline table in the prospectus.

Novel Modalities, page 266

20. We note your disclosure that you have a sponsored research agreement with Dr. Bruce Blazar, MD. Please file this agreement as an exhibit or tell us why you don't believe it's necessary. Refer to Item 601(b)(10) of Regulation S-K.

Moderna Collaboration Agreement, page 276

21. We note your disclosure that the royalty period for each product developed under the agreement will expire on a country-by-country basis upon the later of (1) the expiration of the last-to-expire valid patent claim of specified patents, (2) the expiration of regulatory-based exclusivity for such product in such country or (3) a specified period after the first commercial sale with respect to such product in such country. Please specify the number of years from first commercial sale that royalties are payable.

University of Pennsylvania License Agreement, page 277

22. Please revise to disclose the royalty term or how it is determined. If the royalty term and the term of the agreement are the same, please make that clear.

Management Following the Merger, page 324

23. Please file the employment agreements for Messrs. Kelly, Morris and Klichinsky as exhibits. See Item 601(b)(10) of Regulation S-K.

Unaudited Pro Forma Condensed Combined Financial Information
1. Description of Transactions, page 358

24. Please disclose how the contingent value rights (CVR) will be accounted for as part of the recapitalization transaction and on a go forward basis. Tell us the accounting guidance on which you relied.

Principal Stockholders of Carisma , page 375

25. Please identify in footnotes to the table all natural persons who have voting and/or investment power over the shares held by:

- AbbVie Biotechnology Ltd;
- HealthCap VII L.P.;
- MRL Ventures Fund, LLC;
- The Trustees of the University of Pennsylvania;
- TPG Biotechnology Partners V, L.P.;
- Wellington Life Sciences V GmbH & Co. KG.

Please make corresponding revisions to the footnotes to the Principal Stockholders of the Combined Company table on page 378 as appropriate.

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 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.