Filed by Sesen Bio, Inc. Pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 14a-6(b) under the Securities Exchange Act of 1934

> Subject Company: Sesen Bio, Inc. Commission File No.: 001-36296



Key questions and answers regarding the pending merger

What will the combined company be focused on?

The combined company will be focused on advancing Carisma Therapeutic Inc.'s (Carisma) current clinical programs and pipeline. Carisma is pioneering the development of chimeric antigen receptor macrophage (CAR-M) therapies and is believed to be the only company developing CAR-M therapies with demonstrated proof of mechanism and safety data in clinical trials. Carisma has several anticipated upcoming catalysts and developmental milestones across its clinical programs over the next 18 months, including multiple clinical data readouts.

What value does this merger provide Sesen Bio stockholders?

The pending merger is expected to maximize value for existing Sesen Bio stockholders by providing an implied total value of \$0.88 per share:

- Expected special cash dividend of \$75 million to be paid shortly after (and contingent upon) closing, or approximately \$0.36 per share¹, which offers Sesen Bio stockholders direct and immediate cash value
- 24.2% ownership interest in the \$352 million² combined company, or \$0.38 per share³. Carisma is a well-funded company developing groundbreaking therapies for a wide range of cancers with potential for significant long-term upside
- Additional potential cash upside via a contingent value right⁴ related to potential proceeds from any sale of Sesen Bio's legacy assets (including Vicineum) and from the potential \$30 million milestone payment under the Roche Asset Purchase Agreement, or \$0.14 per share⁵

Who will lead the combined company?

The combined company will be led by Carisma's Board and management team, which has extensive cell therapy experience and a strong track record in oncology and drug development. This includes Carisma CEO Steven Kelly, who was named Ernst & Young Entrepreneur of the Year 2022 Greater Philadelphia, and Carisma Chief Scientific Officer and co-founder Michael Klichinsky, Pharm.D., Ph.D, who is the co-inventor of the technology at the University of Pennsylvania.

This team has strong investor support, comprising of leaders within biotech, including AbbVie, Moderna, Wellington and TPG.

What is the value of the Contingent Value Right ("CVR") and when will I receive it?

Each Sesen Bio stockholder will receive one CVR for each outstanding share of Sesen Bio common stock they hold on the record date for the CVR. Under the terms of the merger agreement, stockholders will receive payments on the CVR upon:

- Pursuant to the Roche APA, if Roche initiates a Phase 3 clinical trial for Sesen Bio's legacy IL-6 asset for a certain indication prior to December 31, 2026, CVR holders will be entitled to a pro rata portion of the \$30 million milestone payment
- Proceeds from any sale of Sesen Bio's legacy assets, including Vicineum

What are the plans for the Vicineum program?

In July 2022, Sesen Bio voluntarily paused further clinical development of Vicineum in the U.S. and has engaged a financial advisor for the potential sale of Vicineum. If the pending merger is consummated, the combined company does not expect to pursue further development of Vicineum and any value obtained through a potential sale of Vicineum will be distributed to Sesen Bio stockholders through the CVR.

Did Sesen Bio consider any alternatives to this pending merger?

Yes. The Sesen Bio Board of Directors in consultation with its financial and legal advisors undertook a comprehensive and thorough process of reviewing and analyzing potential strategic alternatives and merger partner candidates over the course of four months. The Sesen Bio Board conducted outreach to over 100 companies which resulted in 42 bids. The Sesen Bio Board considered a wide range of options, including a merger, sale of assets, resumption of R&D and liquidation of assets and dissolution. The Sesen Bio Board is confident that the pending merger with Carisma is the best path forward for Sesen Bio and the most value maximizing option for stockholders.

The Sesen Bio Board believes that the pending merger is more favorable to stockholders than the potential value that might have resulted from other strategic alternatives available to Sesen Blo, including the initiation of a new Phase 3 clinical trial for VicineumTM or the dissolution and liquidation of Sesen Bio.

What happens if the merger with Carisma is not completed due to a negative vote at the shareholder meeting?

Without the pending merger with Carisma, the most likely and feasible path for Sesen Bio would be an exchange delisting followed by a dissolution of the Company and a liquidation of assets. We believe there is considerable risk and uncertainty with this path, including inferior distribution of cash, additional risk from needing to satisfy contingent liabilities and a prolonged timeline leading to additional cash burn.

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Key questions and answers regarding the proposed reverse stock split

Why is a reverse stock split being proposed?

We are proposing a reverse stock split to regain compliance with the Nasdaq Capital Market listing rule that requires the stock of a company traded on the exchange to be above \$1.00 per share. If we do not regain compliance by January 23, 2023, shares of Sesen Bio may be subject to delisting. A reverse stock split is commonly used by companies in this situation to regain compliance and remain listed.

Additionally, should the issuance of Sesen Bio shares in the merger (Proposal 1) be approved by stockholders at this Special Meeting, Nasdaq will require the combined company to have, among other things, a \$4.00 per share minimum bid price upon closing of the merger. The reverse stock split will enable the combined company to meet this requirement.

If the reverse stock split passes, will this dilute my existing position?

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The proposed reverse stock split by itself WILL NOT dilute current Sesen Bio stockholders and will not affect any stockholder's percentage ownership in Sesen Bio except for minor adjustments due to the treatment of fractional shares.

Additionally, to limit potential future dilution, upon approval of the merger and the reverse stock split, Sesen Bio will decrease the Company's authorized shares from 400 million to 100 million.

Is the reverse stock split necessary to consummate the merger?

Yes. The pending merger cannot be consummated without Sesen Bio stockholder approval of both the issuance of Sesen Bio shares in the merger (Proposal 1) AND the reverse stock split (Proposal 2). Not voting FOR Proposal 2 will count the same as voting "AGAINST" the consummation of the merger. That is why your vote is important!

Key questions and answers regarding voting

How can I vote my shares?

Our proxy solicitor, MacKenzie Partners, can assist you with voting your shares and any questions you may have. Please see below for their contact information. Alternatively, you may follow the steps below.

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If you are the "record holder" of your shares, you must:

- · Submit a proxy via the Internet or phone by following the instructions on the proxy card included in the proxy materials you received
- Complete, sign and date your proxy card and arrange for delivery of that proxy card by mail by 11:59 pm Eastern Time on March 1, 2023; or
- · Vote during the Special Meeting by registering in advance through www.proxydocs.com/SESN.

If your Sesen Bio shares are held in "street name" by a broker, bank or other nominee, you can vote your shares by following the directions your broker, bank or other nominee provides you.

Can I change my vote?

Yes, you can change your vote at any time prior to or at the Sesen Bio special meeting. The last instruction we receive from you prior to the closing of the polls is what will be counted.

What happens if I don't vote?

Your vote is important! Voting FOR the pending merger with Carisma and all other proposals will ensure that you receive the maximum value for your shares. We believe there is considerable risk and uncertainty by not voting for the pending merger, including inferior distribution of cash, additional risk from needing to satisfy contingent liabilities and a prolonged timeline leading to additional cash burn.

Not voting on Proposal 2 (reverse stock split) will count the same as voting "AGAINST" the consummation of the merger. As a reminder, stockholder approval of BOTH Proposal 1 AND Proposal 2 are required to consummate the merger.

Not voting on Proposals 1, 3, 4 and 5 will not impact the results on those proposals.

What if I have a question?

Should you have any questions, please contact our proxy solicitor, MacKenzie Partners, using the information in the box below.

Our Proxy Solicitor (MacKenzie Partners) Stands Ready To Assist You With This Important Vote

If you have questions about how to vote your shares, please contact our proxy solicitor:

MacKenzie Partners

1407 Broadway, Floor 27 New York, NY 10018 Call toll-free: 1-800-322-2885 Email: proxy@mackenziepartners.com

Vote Today

The Sesen Bio Board of Directors unanimously approved the pending merger with Carisma Therapeutics and recommends stockholders vote "FOR" all agenda items by telephone, internet or mail in advance of the special meeting on March 2, 2023.



More about the transaction

LINKS About the Transaction Resources EAQ D O W N L O A D S Amended Merger Terms Release Stockholder Letter

Sesen Bio

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Carisma Therapeutics

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Questions?

If you need assistance voting your shares, please contact our proxy solicitor:

MacKenzle Partners Call Toll-Free: (800) 322-2885 Email: proxy@mackenziepartners.com

Important Additional Information Incorrection with the proposed transaction between Carisma and Seven Bio. Sean Bio field with the SEC a registration statement on Form 5-4 (as amended, the registration statement) that includes a proxy statement of Seven Bio and also constitutes a properture of Seven Bio with respect to shares of Seven Bio to common stock to be based in the proposed transaction (proxy statement/prospectus). The definitive proxy statement/prospectus is first being mailed to Seven Bio stochholders on or about January 24, 2023. Seven Bio and also Constitutes a proposed transaction with the SEC. InVESTORS AND SECURITY HOLDERS ARE URGED TO READ THESE MATERNALS. INCLUDING THE LEGISTRATION STATEMENT, THE DEFINITIVE PROVY STATEMENT/PROSPECTUS, AND ALL OFHER RELEVANT DOCUMENTS THAT ARE OR WILL BE FLED WITH THE SEC IN CONNECTION WITH THE PROPOSED TRANSACTION, INCLUDING ANY AMENDMENTS OF SUPPLEMENTS TO THESE MATERNALS, BECAUSE THEY CONTAIN OR MILL CONTAIN UNPORTAINT INFORMATION ABOUT THE PROPOSED TRANSACTION. AND THE REATION THE PROPOSED TRANSACTION, WHEN THE SEC IN CONNECTION, WHEN BEN AND SAVE THE MENTION AND SERVICES. TRANSACTION AND THE MENTANT AND SAVE THE MENTION AND SAVE THESE MATERNALS, BECAUSE THEY CONTAIN OR MILL CONTAIN UNPORTAINT INFORMATION ABOUT THE PROPOSED TRANSACTION. AND THE PROPOSED TRANSACTION, WHEN THE SEC INCOMENTS TO THESE MATERNALS. BECAUSE THEY CONTAIN OR MILL CONTAIN WINDORTAINT INFORMATION ABOUT THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION. WHEN THE SEC INCOMENTS TO THE SEC PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION. AND THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION. AND THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION. AND THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION. AND THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION AND THE PROPOSED TRANSACTION AND THE PROPOSED

In the Solicitation of Carison and their respective directors, executive officers and other members of management may be deemed to be participants in the solicitation of prodes in respect of the proposed transaction, about Sesen Bio's directors and executive officers is available in Sesen Bio's Annual Report on Form 10 K for the fiscal year ended December 31, 2021, its definitive proxy statement dated April 28, 2022 for its I Meeting of Stockholders and executive officers is available in Sesen Bio's Annual Report on Form 10 K for the fiscal year ended December 31, 2021, its definitive proxy statement dated April 28, 2022 for its I Meeting of Stockholders and executive officers is available in Sesen Bio's Annual Report on Form 31, 2022. Other information regarding the participants in the proxy solicitation and a description of their interests in a transaction, by security holdings or otherwise, is included in the definitive proxy statement/prospective and other relevant interlation that are now like Biod with the SEC respecting the proposed transaction, could read the definitive proxy statement/prospectus carefully befort making any voting or investment decisions. You may obtain free copies of these documents from Sesen Bio or the SEC's website as