Filed by Sesen Bio, Inc.
Pursuant to Rule 425 under the Securities Act of 1933
and deemed filed pursuant to Rule 14a-12
under the Securities Exchange Act of 1934

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

On November 1, 2022, CARISMA Therapeutics Inc. published the following communications:



Carisma Therapeutics Announces Multiple Abstracts Accepted for Presentation at the Society for Immunotherapy of Cancer 37th Anniversary Annual Meeting

PHILADELPHIA – November 1, 2022 – Carisma Therapeutics Inc. (Carisma Therapeutics), a clinical stage biopharmaceutical company focused on discovering and developing innovative immunotherapies, announced today the acceptance of multiple abstracts to be presented at the upcoming Society for Immunotherapy of Cancer (SITC) 37th Anniversary Annual Meeting in Boston. Massachusetts. which is being held November 8 to November 12, 2022. Accepted abstracts include: two abstracts of clinical trial data, including one for oral presentation; four abstracts of pre-clinical study data; and one abstract overviewing the design of a Phase 1 clinical trial for CT-0508.

"We are excited to participate at the SITC 37th Anniversary Annual Meeting so we can share the latest updates from our landmark CT-0508 trial," said Steven Kelly, Chief Executive Officer of Carisma Therapeutics. "Across the seven abstracts we will be presenting, we are eager to share the promising clinical and pre-clinical updates and the advances within the Carisma Therapeutics pipeline."

Presentation and posters will be available on the <u>SITC 37th Anniversary Annual Meeting portal</u> for registered attendees. Details of the presentations are as follows:

Oral Presentation:

- Title: Characterization of CT-0508, an anti-HER2 chimeric antigen receptor macrophage (CAR-M), manufactured from patients enrolled in the phase 1. first in human, clinical trial of CT-0508
 - Oral Presentation Abstract Number: 315
 - o Date/Time: November 11, 2022,12:18pm EST 12:26pm EST

Poster Presentations:

- Title: Chimeric antigen receptor macrophages (CAR-M) sensitize solid tumors to anti-PD1 immunotherapy
 - Poster/Abstract Number: 371
 - o Date: November 10, 2022
- Title: A Phase 1, First in Human (FIH) study of autologous macrophages containing an anti-HER2 chimeric
 antigen receptor (CAR) in participants with HER2 overexpressing solid tumors.
 - Poster/Abstract Number: 633
 - o Date: November 10, 2022

- Title: A phase 1, first-in-human (FIH) clinical trial of the anti-HER2 CAR macrophage CT-0508 in participants with HER2 overexpressing solid tumors.
 - Poster/Abstract Number: 634Date: November 11, 2022
- Title: Macrophages Engineered to Express Synthetic Cytokine Switch Receptors Act as Living Microenvironment Converters

Poster/Abstract Number: 376Date: November 11, 2022

Title: Pre-clinical development of a CAR Monocyte platform for cancer immunotherapy

Poster/Abstract Number: 318Date: November 11, 2022

• Title: Pre-clinical development of CT-1119, a mesothelin targeting chimeric antigen receptor macrophage (CAR-M), for solid tumor immunotherapy

Poster/Abstract Number: 194Date: November 11, 2022

About Carisma Therapeutics

Carisma Therapeutics Inc. is a biopharmaceutical company dedicated to developing a differentiated and proprietary cell therapy platform focused on engineered macrophages, cells that play a crucial role in both the innate and adaptive immune response. The first applications of the platform, developed in collaboration with the University of Pennsylvania*, are autologous chimeric antigen receptor macrophages (CAR-M) for the treatment of solid tumors. Carisma Therapeutics is headquartered in Philadelphia, PA. For more information, please visit www.carismatx.com

*Carisma has licensed certain Penn-owned intellectual property from the University of Pennsylvania, and Penn's Perelman School of Medicine receives sponsored research and clinical trial funding from the company. Penn may also be entitled to receive additional financial benefits from technologies licensed and optioned to Carisma in the future. In addition, Penn is a cofounder of the company and holds equity interests in Carisma.

Important Additional Information

In connection with the proposed transaction between Carisma Therapeutics and Sesen Bio, Inc. (Sesen Bio), on October 24, 2022, Sesen Bio filed with the Securities and Exchange Commission (SEC) a registration statement on Form S-4, which includes a preliminary proxy statement of Sesen Bio and which also constitutes a prospectus of Sesen Bio with respect to shares of Sesen Bio's common stock to be issued in the proposed transaction (Preliminary Proxy Statement/Prospectus). The Preliminary Proxy Statement/Prospectus is not final and may be amended. The definitive proxy statement/prospectus (if and when available) will be delivered to Sesen Bio's stockholders. Sesen Bio may also file other relevant documents regarding the proposed transaction with the SEC. INVESTORS AND SECURITY HOLDERS ARE URGED TO READ THESE MATERIALS, INCLUDING THE REGISTRATION STATEMENT, THE DEFINITIVE PROXY STATEMENT/PROSPECTUS, AND ALL OTHER RELEVANT DOCUMENTS THAT ARE OR WILL BE FILED WITH THE SEC IN CONNECTION WITH THE PROPOSED TRANSACTION, INCLUDING ANY AMENDMENTS OR SUPPLEMENTS TO THESE MATERIALS, BECAUSE THEY CONTAIN OR WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION AND THE PARTIES TO THE PROPOSED TRANSACTION. Investors and security holders are able to obtain the Preliminary Proxy Statement/Prospectus, the definitive proxy statement/prospectus (when it becomes available) and other documents that are filed or will be filed by Sesen Bio with the SEC free of

charge from the SEC's website at www.sec.gov or from Sesen Bio at the SEC Filings section of www.sesenbio.com.

No Offer or Solicitation

This press release shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offering of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended. Subject to certain exceptions to be approved by the relevant regulators or certain facts to be ascertained, a public offer will not be made directly or indirectly, in or into any jurisdiction where to do so would constitute a violation of the laws of such jurisdiction, or by use of the mails or by any means or instrumentality (including without limitation, facsimile transmission, telephone or internet) of interstate or foreign commerce, or any facility of a national securities exchange, of any such jurisdiction.

Participants in the Solicitation

Sesen Bio and Carisma Therapeutics and their respective directors, executive officers and other members of management may be deemed to be participants in the solicitation of proxies in respect of the proposed transaction. Information 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 2022 Annual Meeting of Stockholders and its Current Report on Form 8-K filed with the SEC on August 31, 2022. Other information regarding the participants in the proxy solicitation and a description of their interests in the proposed transaction, by security holdings or otherwise, is included in the Preliminary Proxy Statement/Prospectus and other relevant materials that are or will be filed with the SEC regarding the proposed transaction. Investors should read the definitive proxy statement/prospectus carefully (when it becomes available) before making any voting or investment decisions. You may obtain free copies of these documents from Sesen Bio or the SEC's website as indicated above.

Media Contact:

Julia Stern (763) 350-5223 jstern@realchemistry.com

CARISMA Therapeutics Inc. published the following post on Twitter on November 1, 2022:

Announced Today: Abstract for oral presentation of clinical data from CT-0508 trial, four pre-clinical study abstracts & one clinical trial design abstract accepted at #SITC22. Register on the SITC website to view our presentation/posters. Impt Info here: https://carismatx.com/carisma-therapeutics-announces-multiple-abstracts-accepted-for-presentation-at-the-society-for-immunotherapy-of-cancer-37th-anniversary-annual-meeting/

CARISMA Therapeutics Inc. published the following post on LinkedIn on November 1, 2022:

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