

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

SESEN BIO AND CARISMA THERAPEUTICS FIRESIDE CHAT

CALL DETAILS

Date: February 21, 2023
Time: 8:00 am ET

PARTICIPANTS

Dr. Thomas R. Cannell, Sesen Bio – President, CEO and Director
Erin Clark, Sesen Bio – VP of Corporate Strategy and Investor Relations
Steven Kelly, Carisma Therapeutics – President, CEO and Director
Dr. Michael Klichinsky, Carisma Therapeutics – Co-Founder and Chief Scientific Officer

REPLAY

An archived replay of the call will be available on the Sesen Bio [Events and Presentations](#) page.

Operator:

Good day and thank you for standing by. Welcome to the Sesen Bio and Carisma Therapeutics Fireside Chat. At this time, all participants are in listen-only mode. Please be advised that today's call is being recorded.

I would now like to hand the conference over to your speaker today, Erin Clark, Vice President of Corporate Strategy and Investor Relations. Please go ahead.

Erin Clark:

Thank you, and good morning everyone.

Joining me on today's call from the Sesen Bio team is Dr. Thomas Cannell, our president and chief executive officer. From Carisma Therapeutics, we have Steven Kelly, chief executive officer, and Dr. Michael Klichinsky, co-founder and chief scientific officer.

I would like to remind you that today's discussion will include forward-looking statements related to the company's current plans and expectations, which are subject to risks and uncertainties. Actual results may differ materially due to various factors, including those described in Sesen Bio's most recent annual report on Form 10-K, quarterly reports on form 10-Q and other SEC filings. These statements represent Sesen Bio's views as of the date of this call and should not be relied upon as of any future date. Sesen Bio undertakes no obligation to publicly update these forward-looking statements.

Today's call will be a question and answer session, including some of the most frequently asked questions that have been submitted to us by our shareholders regarding the pending merger. First we will go over questions for Sesen Bio, before moving to the questions for Carisma.

While we will not be walking through slides today, we recently uploaded an investor presentation concerning the pending merger, which can be found on our merger website at [SesenBioAndCarisma.com](https://www.SesenBioAndCarisma.com).

Before I begin asking questions, I will turn the call over to Tom for a brief introduction. Tom?

Dr. Thomas Cannell:

Thank you, Erin, and good morning everyone. I am looking forward to the opportunity to answer questions from our shareholders on our pending merger with Carisma Therapeutics, and thank you Steve and Mike for joining us today.

Since April 2022, we have carefully reviewed a wide range of potential strategic alternatives, including a strategic transaction, a sale of assets, an additional Phase 3 trial, an acquisition of a new product and corporate dissolution.

Ultimately, after our thorough analysis, we entered into a definitive merger agreement with Carisma. I strongly believe that this pending merger maximizes value for Sesen Bio shareholders through direct and near-term value, in addition to the opportunity for our shareholders to realize significant potential upside through a CVR and a meaningful ownership position in Carisma.

Throughout this process, we have continued to seek ways to further maximize the value of this transaction for our shareholders. Most notably, we have increased the special cash dividend tied to the merger to \$75 million and have enhanced the CVR to include

the potential sale of our legacy assets, including Vicineum, should any sale occur prior to March 31, 2027. We have also agreed that Michael Torok will join the go-forward company's Board of Directors as the sole Sesen Bio representative, joining the six existing Carisma directors. Given his status as a principal in Sesen Bio's largest shareholder group, we believe Mr. Torok is in an appropriate position to represent the interests of Sesen Bio shareholders.

I am delighted that our shareholders will benefit from these enhancements to the transaction, and that they will have the opportunity to participate in the future potential growth of Carisma. You will hear more about Carisma and its growth prospects from Steve and Mike, but from our perspective, we believe Carisma's CAR-M platform has the potential to revolutionize the treatment of cancer and other serious disorders.

So in summary, Sesen Bio remains confident in the process that led to the selection of Carisma as our reverse merger partner, and we are excited about the future of the go-forward company.

With that, I will turn it back to Erin to start the Q&A.

Erin Clark:

Thanks, Tom. For this first question, I would like to start at the beginning. How did the Board determine that Carisma is the best merger candidate for Sesen Bio?

Dr. Thomas Cannell:

Yes, that's a great question. Following our Board's decision to voluntarily pause further development of Vicineum in the U.S. in July 2022, we shifted our focus to continuing to assess potential strategic alternatives with the goal of maximizing shareholder value. As part of this assessment, we pursued a strategic transaction. We executed a thorough, structured process, where we conducted outreach to over 100 companies and received 42 bids, which reflects a rigorous process relative to historical reverse merger precedents. We analyzed the 42 bids across 7 key evaluation criteria to assess each of the potential counterparties to find the opportunity that we believed could provide significant value and potential upside to our shareholders.

Throughout the evaluation process, Carisma stood out for five key reasons.

- First, Carisma is pioneering a potentially revolutionary oncology therapy, and is believed to be the only company with a CAR-M therapy with demonstrated proof of mechanism and safety data in humans.
- Second, Carisma has a strong patent position with broad coverage for macrophage and monocyte targeted therapies.
- Third, Carisma has several upcoming value inflection milestones over the next 18 months.
- Fourth, Carisma has promising partnerships and collaborations with industry leaders including Moderna, Novartis, AbbVie and Merck.
- And fifth, Carisma's management team has extensive experience, and is counseled by world-renowned scientific advisors in cell therapy.

So after careful deliberation, the Board unanimously supported a merger with Carisma and continues to believe that this transaction maximizes value to Sesen Bio shareholders when compared to any other strategic alternative available to Sesen Bio.

Erin Clark:

Thanks Tom, that is very helpful.

As you noted in your introduction, one of the key value drivers for shareholders from this transaction is the special cash dividend. Since the initial merger agreement, this dividend was increased from up to \$25 million to \$75 million. How was that amount determined?

Dr. Thomas Cannell:

Thank you. From the beginning of our process of reviewing strategic alternatives, our primary goal has been to maximize value for our shareholders. Given the uncertain market dynamics and our strong cash balance, one way we thought we could do this was to give our shareholders certainty through the payment of a special cash dividend while still providing them a meaningful ownership position in the go-forward company.

Following our initial merger agreement with Carisma, we included a potential special cash dividend of up to \$25 million, we continued to explore ways to increase value at the same time. We engaged extensively with our shareholders and, based on their feedback, we learned that increasing the special cash dividend was an important value driver.

Using this knowledge, we worked with Carisma to strike a balance between providing our shareholders with as large of a dividend as possible and ensuring Carisma had the cash runway necessary to fund their programs that create the value of the go-forward company.

As a result of these discussions, we collectively determined that a \$75 million dividend was the appropriate amount. In our review of precedent transactions, we have not seen a special cash dividend of this magnitude that coincides with a reverse merger, so we are happy with where we ultimately landed.

One last point is that under the new terms of the agreement and following payment of the special cash dividend, Sesen Bio would be contributing approximately \$70 million to the combined company, while Carisma and its investors would be contributing approximately \$74 million, meaning both companies are contributing roughly 50-50 in capital.

Erin Clark:

Thanks Tom.

For my last question for you, I wanted to pivot to another topic that has been raised frequently by our shareholders. What is the status of the Vicineum process?

Dr. Thomas Cannell:

Yes, I have been getting this question a lot as well, thank you.

In July 2022, we made the strategic decision to voluntarily pause further development of Vicineum in the U.S. after completing a thorough reassessment of the program, which included the incremental developmental timeline and associated costs for an additional Phase 3 clinical trial based on input from the FDA during four key meetings.

As previously disclosed, based on the FDA's feedback, we estimated an additional clinical trial size of approximately 1,000 patients, which would cost over \$200 million and delay a potential launch for Vicineum until at least 2030. Our resulting analysis showed a negative return for the program with dilution to existing shareholders outpacing the estimated growth in company value.

In our assessment of Vicineum, we also contemplated a shift in the NMIBC competitive landscape. Shortly after we made the decision to pause Vicineum, the FDA accepted for review the BLA for N-803 for treatment of patients with NMIBC and announced a target PDUFA date in May 2023. And in December of 2022, the FDA approved Adstiladrin for the same patient population. So as you can see, there is a chance that there could be two newly approved therapies available to the NMIBC patient population by the end of the year. And that does not include any other competitive products that could enter in the next 7 years prior to a potential launch of Vicineum.

We still believe Vicineum could provide benefits to patients and, as such, we initiated a formal process with a bank for the potential sale of Vicineum to a partner with a larger infrastructure to continue its development. Given the escalating size and cost of the trial, as well as the increasingly competitive marketplace, completing a sale of Vicineum may be challenging, but we amended the CVR to ensure any potential proceeds from a sale of Vicineum, or our other legacy assets, through the end of March 2027 would go directly to Sesen Bio shareholders. It is important to note that any proceeds from a potential sale of Vicineum would be additional upside to the current implied value of the merger.

Since engaging the bank last fall, we have contacted nearly 60 companies and have engaged in follow-up discussions where appropriate. We continue to assess other counterparties to realize any potential value for Vicineum and our other legacy assets.

Erin Clark:

Great, thank you Tom for the additional insight on the process, and for answering our shareholders' most frequently asked questions.

Now I'd like to shift over to our questions for Carisma.

With me to answer questions about Carisma and their exciting CAR-M technology are Steve Kelly, CEO, and Dr. Mike Klichinsky, CSO.

Steve joined Carisma as CEO in 2018. He has nearly thirty years of experience in pharma and biotech at all phases of the business across multiple therapeutic categories. Prior to Carisma, Steve held a number of leadership positions in the biotech industry, including most recently as CEO of Pinteon Therapeutics. Steve's strategic vision, coupled with the groundbreaking science being studied at Carisma, is the foundation to realizing their mission to revolutionize the treatment of cancer and other serious disorders.

Mike is one of the founders of Carisma and co-invented the CAR-M technology at the University of Pennsylvania with Saar Gill and Carl June, pioneers of the CAR-T space, prior to the founding of Carisma. As the Chief Scientific Officer, Mike's responsibility is to lead Carisma's R&D initiatives and to advance the company's mission to harness the power of macrophages and create life-changing cell therapies for patients with cancer and other serious diseases.

Welcome, Steve and Mike.

Dr. Michael Klichinsky:

Thank you, Erin.

Steven Kelly:

Thank you, Erin. It's a pleasure to be with you all today. I, along with Mike and the rest of the Carisma team, would like to thank Tom and the entire Sesen Bio team for their collaboration, their confidence in Carisma, and their diligence and commitment to their stockholders as part of this merger process. As Tom mentioned, we think this merger will create significant value for all parties, and we're excited for what the future holds.

Erin Clark:

Of course, we're glad to have you. Steve, my first question is for you – Carisma is attempting to revolutionize the field of immunotherapy with its proprietary CAR-M platform. Could you expand upon that and give us an overview of what you are focusing on at Carisma?

Steven Kelly:

Sure. At Carisma, we have an ambitious and important mission. We are developing first-of-their-kind engineered macrophages, a novel immunotherapy approach that we believe has the potential to revolutionize the way we treat cancer and other serious diseases.

Our approach takes advantage of the natural abilities of macrophages. For a little "Biology 101", macrophages are powerful, unique cells, often seen as the "first responders" of our bodies' immune systems. They actively identify and eliminate foreign pathogens such as bacteria, viruses, and other pathogenic cells that shouldn't be there, like cancer cells, and are even involved in clearing the build-up of fibrotic material that causes neurodegeneration or liver disease.

For those of you following the oncology space, you have no doubt heard of the cell therapy revolution, led by CAR-T, which are genetically engineered T-Cells, that have successfully changed the way cancer is treated. Specifically, CAR-T has become an option for patients with certain forms of advanced blood cancers. Unfortunately, success against solid tumors, such as breast, gastric, lung, and others – has remained elusive for cell therapy.

Carisma's CAR-Macrophage, or CAR-M, approach is to develop engineered macrophages. In essence, using our proprietary platform, we genetically engineer macrophages to respond to tumor cells the same way they would respond to foreign pathogens such as bacteria. While normally macrophages don't recognize cancer cells as foreign and don't attack them, our engineered macrophages do. Additionally, we believe that our CAR-M approach has the potential to overcome key barriers of complex solid tumor biology and enable successful treatment of patients with advanced, metastatic solid tumors.

Our first CAR-M program is now in the clinic. The CT-0508 clinical trial is being evaluated for the treatment of HER2 overexpressing solid tumors – and is actively enrolling patients with advanced metastatic breast, gastric, esophageal, and other HER2 overexpressing cancers. We have presented early data on this program at medical meetings last year, most notably at the Society for Immunotherapy of Cancer, or SITC, meeting in November of 2022. We are encouraged by the Phase 1 data we have seen to date, it supports our overall hypothesis, and we believe CT-0508 is just the beginning of our engineered macrophages platform.

Erin Clark:

Thanks Steve, it certainly is an exciting platform.

To dive into the underlying science a bit more – Mike, can you tell us more about what macrophages are, how they work, and why shareholders should be excited about CAR-M technology?

Dr. Michael Klichinsky:

Absolutely. Thanks Erin, and thanks for the question. To begin, I'm incredibly excited of the technology we've developed at Carisma.

The basis of our proprietary cell therapy platform is the genetically engineered macrophage. Macrophages are a unique cell, they are a member of the innate immune system, and they are quite distinct from the other cell types used in cell therapy. As Steve mentioned, they are generally known as the first responders of the immune system, identifying things that should not be there and eliminating them through a unique and powerful mechanism of action called phagocytosis, which is the process of selectively engulfing, eating, and destroying a target material such as a target cell. Importantly, along with phagocytosis, macrophages initiate a broader immune response against the target cell by inducing inflammation and recruiting and activating other key immune cells that have anti-tumor properties, such as T cells.

While macrophages naturally do not have the ability to recognize and kill tumor cells, Carisma has solved this by arming macrophages with CARs, or chimeric antigen receptors. CARs are essentially sense and respond systems that enable macrophages to identify a cell as cancerous and initiate a program to destroy it. The result is a targeted engineered innate immune cell that not only kills tumor cells but also initiates a broad anti-tumor immune response that not only amplifies clearance of the tumor but leads to immune memory, potentially preventing the tumor from recurring in the future.

As you may know, arming T cells with CARs has led to the approval of several drugs that have revolutionized the treatment of B cell blood cancers. Unfortunately, the successes that have been seen in these cancers such as leukemia, lymphoma, and multiple myeloma have simply not transferred to any solid tumor. Solid tumors pose numerous barriers to adoptive cell therapies and we believe macrophages can directly address each of these challenges.

Firstly, solid tumors pose a significant trafficking barrier. Blood cancers are readily accessible – they are in the blood – but solid tumors are dense, complex tissues that actively exclude most immune cells – except for macrophages. Tumors go out of their way to recruit macrophages and these cells have been known for decades as the most abundant tumor infiltrating immune cell characteristic that we directly take advantage of.

Second, solid tumors are highly immunosuppressive and have a complex network of immune evasion tactics that suppress T cell responses. At Carisma, we have found a way to polarize and lock our macrophages into a pro-inflammatory status that enables anti-tumor responses by T cells and other immune cells.

Lastly, solid tumors are highly heterogenous in their antigen expression, meaning not all of the cells within the tumor express the target antigen that the CAR recognizes, of course posing a challenge because we want to clear the entire tumor. Macrophages, unlike T or NK cells, will process and present tumor specific antigens and elicit a broad, systemic immune response. This amplifies the activity and leads to long term anti-tumor immunity.

Erin Clark:

This is all very interesting. How do you actually manufacture a technology like this?

Dr. Michael Klichinsky:

From a patient's perspective, the process requires giving blood at an apheresis clinic and then waiting for Carisma to prepare the patient's engineered cells. Our manufacturing process takes one week, and it takes approximately two more weeks to return the cells to the patient as there is rigorous quality testing performed on each batch of engineered macrophages. The cells are then administered intravenously, notably without any lymphodepletion, or chemotherapy, which is currently required for all other cell therapies, such as CAR-T and NK cell therapies.

Erin Clark:

Thanks, Mike. Why was this never done before? Could the platform go beyond CAR-M, or even beyond oncology?

Dr. Michael Klichinsky:

Carisma's proprietary technology is based on the ability to engineer macrophages – which are incredibly difficult to genetically manipulate. The tools commonly used to engineer T or NK cell therapies are simply not effective when it comes to macrophages. We developed a proprietary method to engineer human macrophages and because of that, we were the first to develop and evaluate CAR-M.

Carisma's technology is protected by a growing patent estate, including 16 granted and over 40 pending patents. I'm proud to say we not only created but are leading the CAR-M and engineered macrophage space, which has the potential to revolutionize cancer treatment and play a role in the treatment of other chronic diseases, such as liver fibrosis and others.

We've accomplished a great deal in the approximately five years since founding Carisma and we're thrilled to be at the point where we are evaluating CAR-M in the clinic. We're encouraged by what we've seen to date and look forward to sharing more of our research and clinical studies as they progress.

Erin Clark:

Thank you, Mike. Clearly the team has been busy making significant progress.

Now turning to Carisma's near-term future - Steve, there seems to be a lot to look forward to in Carisma's research and upcoming clinical progress. The next 18 months will undoubtedly be busy for your team, with several developmental milestones planned for your pipeline throughout that period. What are the key highlights?

Steven Kelly:

You're absolutely correct, Erin. We have multiple potential value inflection points over the next 18 months that we're excited about, which leads to us having a number of shots on goal.

- First, our lead program, CT-0508, is currently in a phase 1 monotherapy study, which we are expanding to include a combination study with CT-0508 and Keytruda.
- Second, we have a CAR monocyte program, for which we expect to file an IND in the middle of this year.

- Next, we have a next generation mesothelin targeted program incorporating our latest CAR design.
- Fourth, on the in-vivo side we have the 4 programs from Moderna that have been nominated so far out the 12 potential programs, those are moving forward and again we expect proof of concept data this year.
- And last, we have a few programs outside of oncology that are currently in the discovery stage.

It's a really exciting time at Carisma. Our platform and our pipeline continue to grow, and we're looking forward to the milestones anticipated over the next 18 months.

Erin Clark:

That is quite the list. There is certainly a lot to look forward to.

You mentioned the in-vivo work that is being done with Moderna. Moderna is one of your key strategic partners, and they have committed to funding R&D of innovative potential cancer therapies that could come with significant downstream economics for Carisma. What led to this partnership, and where do you see it progressing?

Steven Kelly:

Our strategic partnership with Moderna focuses on the discovery, development and commercialization of in vivo engineered CAR-M therapeutics for the treatment of cancer. Moderna's deep expertise in mRNA and lipid nanoparticle technologies opens up a potentially game-changing opportunity for engineered macrophages. In vivo delivery directly to monocytes and macrophages enables an off-the-shelf therapeutic approach wherein the patient's own cells are engineered directly within the body utilizing targeted LNP and mRNA that seek out monocytes and macrophages selectively, and deliver mRNA encoding Carisma's CARs. These cells are directly converted into tumor killers within the body.

This approach is off-the-shelf, yet still utilizes a patient's own cells to mount an anti-tumor immune response. By combining Carisma's expertise in engineered macrophage biology and Moderna's pioneering in vivo mRNA delivery technologies, we are excited about the potential of this novel therapeutic approach for treating cancer. We are thrilled to be working with Moderna on up to 12 programs and have made significant progress to date.

Erin Clark:

Thanks Steve.

The last question we have for today is regarding another collaboration of sorts. Mike, Steve mentioned you have been working on a combination study with CT-0508 and Keytruda. What can you tell us about the study?

Dr. Michael Klichinsky:

Absolutely, thanks Erin. We're excited to have initiated the combination study of CT-0508 with Merck's anti-PD1 checkpoint inhibitor Keytruda, or pembrolizumab, for the treatment of HER2 overexpressing cancers.

Why this particular combination? As I described, solid tumors are highly immunosuppressive and drive T cell exhaustion or inactivation. Despite checkpoint inhibitors like Keytruda having dozens of approved indications, the majority of patients on a percentage basis do not respond to monotherapy with these checkpoint inhibitors. Generally speaking, the belief is that patients that do not respond have an insufficient ability to mount an immune response within the tumor due to either T cell exclusion, lack

of antigen presentation, lack of inflammatory cytokine support, and active suppression and exhaustion of the T cell population. CT-0508, our lead CAR-Macrophage product, has the potential to infiltrate solid tumors and solve those challenges, converting checkpoint resistant tumors to checkpoint responsive tumors.

Importantly, patients with HER2 overexpressing solid tumors, such as, for example, metastatic breast cancer, do not respond well to checkpoint blockade and have a significant need for combination therapies that convert checkpoint resistant tumors to checkpoint responsive tumors, enabling these patients to access the benefit of immunotherapy.

We presented pre-clinical data at the SITC Annual Meeting in November of last year that demonstrated this concept pre-clinically. Mice bearing solid tumors that failed to respond to anti-PD1 monotherapy were rendered responders when treated with the combination of CAR-Macrophages and PD1 blockade. Importantly, mice bearing tumors resistant to treatment had improved tumor control, improved survival, and increased immune activation against the tumor when treated with the combination of both agents – clearly demonstrating synergistic activity.

The clinical trial sub-study of CT-0508 in combination with Keytruda has recently opened and is currently actively recruiting at four U.S. sites and will enroll patients with different types of recurrent or advanced metastatic cancers with HER2 overexpression. We plan to report additional data in the second half of this year, which could provide a relatively near-term catalyst for increasing shareholder value.

Erin Clark:

Thank you, Mike. Given Keytruda is one of the world's largest oncology products, it's exciting to consider how any synergistic benefits with CT-0508 could be realized to help save and improve the lives of patients.

That ends today's Q&A session. I'd like to thank Tom, Steve and Mike for being here today to provide insights on the pending merger and more information on Carisma's promising technology and go-forward plans.

We remain confident that Sesen Bio's thoughtful and comprehensive strategic alternatives review process led to a value maximizing reverse merger, and we're excited to provide our shareholders the opportunity to realize potential upside in Carisma moving forward.

Thank you, and have a good day. Operator, I will hand it back to you.

Operator:

This concludes today's conference call. Thank you for participating, you may now disconnect.