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

FORM 8-K/A
(Amendment No. 1)

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): April 4, 2023 (March 7, 2023)

Carisma Therapeutics Inc.
(Exact Name of Registrant as Specified in its Charter)

Delaware	**001-36296**	**26-2025616**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**
3675 Market Street, Suite 200 Philadelphia, PA		**19104**
(Address of Principal Executive Offices)		**(Zip Code)**

Registrant's telephone number, including area code: (267) 491-6422

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2 below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading Symbol(s)**	**Name of exchange on which registered**
Common Stock, $0.001 par value	**CARM**	**The Nasdaq Stock Market LLC**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Introductory Note

This Amendment No. 1 (this "**Amendment**") amends the Current Report on Form 8-K filed by Carisma Therapeutics Inc. (f/k/a Sesen Bio, Inc.) (the "**Company**") with the Securities and Exchange Commission on March 8, 2023 ("the **Original Report**"), in which the Company reported, among other events, the closing of the Merger (as defined below) on March 7, 2023 (the "Closing Date"), pursuant to which, among other matters, Seahawk Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of the Company, merged with and into CTx Operations, Inc. (f/k/a CARISMA Therapeutics Inc.), a Delaware corporation ("**Carisma**"), with Carisma continuing as a wholly owned subsidiary of the Company and the surviving corporation of the merger (the "**Merger**").

In connection with the closing of the Merger, the Company changed its name from "Sesen Bio, Inc." to "Carisma Therapeutics Inc." Unless the context otherwise requires, the "Company" refers to the combined company following the Merger, together with its subsidiaries, "Sesen Bio" refers to the registrant prior to the closing of the Merger and "Carisma" refers to CTx Operations, Inc. (f/k/a CARISMA Therapeutics Inc.), together with its subsidiaries, prior to the Merger.

This Amendment includes (i) the audited consolidated financial statements of Carisma as of and for the years ended December 31, 2022 and 2021, (ii) Carisma's Management's Discussion and Analysis of Financial Condition and Results of Operations for the years ended December 31, 2022 and 2021, and (iii) the unaudited pro forma condensed combined financial information of Sesen Bio and Carisma as of and for the year ended December 31, 2022.

This Amendment does not amend any other items of the Original Report or purport to provide an update or a discussion of any developments at the Company or its subsidiaries subsequent to the filing date of the Original Report. The information previously reported in or filed with the Original Report is incorporated herein by reference.

Item 2.02. Results of Operations and Financial Condition.

On April 4, 2023, the Company announced Carisma's financial results for the year ended December 31, 2022. The full text of the press release issued in connection with the announcement is being furnished as Exhibit 99.4 to this Amendment and is incorporated herein by reference.

The information in this Item 2.02 shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing made by the Company under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01. Financial Statements and Exhibits.

(a) Financial Statements of Businesses Acquired.

The audited consolidated financial statements of Carisma as of and for the years ended December 31, 2022 and 2021 and the related notes thereto are filed herewith as Exhibit 99.4 and are incorporated herein by reference. Also filed herewith as Exhibit 99.5 and incorporated herein by reference is Carisma's Management's Discussion and Analysis of Financial Condition and Results of Operations for the years ended December 31, 2022 and 2021.

(b) Pro Forma Financial Information.

The unaudited pro forma condensed combined financial information of Sesen Bio and Carisma as of and for the year ended December 31, 2022 and the related notes thereto are filed herewith as Exhibit 99.6 and are incorporated herein by reference.

(d) Exhibits

Exhibit Number	Description
23.1	Consent of KPMG LLP.
99.4	Audited consolidated financial statements of Carisma as of and for the years ended December 31, 2022 and 2021.
99.5	Carisma's Management's Discussion and Analysis of Financial Condition and Results of Operations for the years ended December 31, 2022 and 2021.
99.6	Unaudited pro forma condensed combined financial information of Sesen Bio and Carisma as of and for the year ended December 31, 2022.
99.7	Press Release issued by Carisma Therapeutics Inc. on April 4, 2023.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

CARISMA THERAPEUTICS INC.

By: /s/ Steven Kelly
Steven Kelly
President and Chief Executive Officer

Date: April 4, 2023

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (Nos. 333-195170, 333-202677, 333-210523, 333-217686, 333-217687, 333-224959, 333-231644, 333-234697, 333-254264, 333-255941, and 333-263070) on Form S-8 and (Nos. 333-224682 and 333-255943) on Form S-3 of our report dated April 4, 2023, with respect to the consolidated financial statements of Carisma Therapeutics Inc.

/s/ KPMG LLP

Philadelphia, Pennsylvania
April 4, 2023

Exhibit 99.4

CARISMA THERAPEUTICS INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
Consolidated Financial Statements	
Report of Independent Registered Public Accounting Firm (KPMG LLP, Philadelphia, PA, Auditor Firm ID: 185)	F-2
Consolidated Balance Sheets, December 31, 2022 and 2021	F-3
Consolidated Statements of Operations and Comprehensive Loss, Years Ended December 31, 2022 and 2021	F-4
Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit, Years ended December 31, 2022 and 2021	F-5
Consolidated Statements of Cash Flows, Years ended December 31, 2022 and 2021	F-6
Notes to Consolidated Financial Statements	F-7

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Carisma Therapeutics Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Carisma Therapeutics Inc. and subsidiary (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit, and cash flows for the years then ended, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

Critical audit matters are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. We determined that there are no critical audit matters.

/s/ KPMG LLP

We have served as the Company's auditor since 2018.

Philadelphia, Pennsylvania
April 4, 2023

CARISMA THERAPEUTICS INC.
Consolidated Balance Sheets
(in thousands, except share and per share data)

	December 31,	
	2022	**2021**
Assets		
Current assets:		
Cash and cash equivalents	$ 24,194	$ 28,551
Marketable securities	27,802	—
Prepaid expenses and other assets	2,596	1,235
Total current assets	54,592	29,786
Property and equipment, net	8,628	3,084
Right of use assets – operating leases	4,822	2,579
Deferred financing costs	4,111	—
Total assets	$ 72,153	$ 35,449
Liabilities, Convertible Preferred Stock and Stockholders' Deficit		
Current liabilities:		
Accounts payable	$ 1,728	$ 2,322
Accrued expenses	10,361	4,471
Deferred revenue	2,459	—
Operating lease liabilities	3,437	898
Finance lease liabilities	1,162	—
Other current liabilities	523	—
Total current liabilities	19,670	7,691
Deferred revenues	45,000	—
Convertible promissory note	33,717	—
Derivative liability	5,739	—
Operating lease liabilities	976	1,734
Finance lease liabilities	872	—
Other long-term liabilities	1,041	—
Total liabilities	107,015	9,425
Commitments and contingencies (Note 7)		
Convertible preferred stock, $0.0001 par value:		
Series A convertible preferred stock $0.0001 par value, 6,138,518 shares authorized; 5,201,017 shares issued and outstanding at December 31, 2022 and 2021 (liquidation value of $54,091 at December 31, 2022)	53,577	53,577
Special voting preferred stock $0.0001 par value, 1 share authorized, issued and outstanding at December 31, 2022 and 2021	—	—
Series B convertible preferred stock $0.0001 par value, 4,807,541 shares authorized, 3,499,866 shares issued and outstanding at December 31, 2022 and 2021 (liquidation value of $54,598 at December 31, 2022)	54,231	54,231
Series B special voting preferred stock $0.0001 par value, 1 share authorized, issued and outstanding at December 31, 2022 and 2021	—	—
Total convertible preferred stock	107,808	107,808
Stockholders' deficit:		
Common stock $0.0001 par value, 14,910,158 shares authorized, 1,167,602 and 1,084,082 shares issued and outstanding at December 31, 2022 and 2021, respectively	—	—
Additional paid-in capital	1,199	818
Accumulated other comprehensive loss	(41)	—
Accumulated deficit	(158,223)	(96,997)
Total Carisma Therapeutics Inc. stockholders' deficit	(157,065)	(96,179)
Noncontrolling interests	14,395	14,395
Total stockholders' deficit	(142,670)	(81,784)
Total liabilities, convertible preferred stock and stockholders' deficit	$ 72,153	$ 35,449

See accompanying notes to consolidated financial statements

CARISMA THERAPEUTICS INC.
Consolidated Statements of Operations and Comprehensive Loss
(in thousands, except share and per share data)

	Year Ended December 31,	
	2022	**2021**
Collaboration revenues	$ 9,834	$ —
Operating expenses:		
Research and development	56,618	34,387
General and administrative	9,378	6,407
Total operating expenses	65,996	40,794
Operating loss	(56,162)	(40,794)
Change in fair value of derivative liability	(1,919)	—
Interest (expense) income, net	(3,145)	10
Net loss	$ (61,226)	$ (40,784)
Share information:		
Net loss per share of common stock, basic and diluted	$ (54.65)	$ (37.62)
Weighted-average shares of common stock outstanding, basic and diluted	1,120,390	1,084,082
Comprehensive loss		
Net loss	$ (61,226)	$ (40,784)
Unrealized loss on marketable securities	(41)	—
Comprehensive loss	$ (61,267)	$ (40,784)

See accompanying notes to consolidated financial statements

CARISMA THERAPEUTICS INC.
Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit
(in thousands, except share and per share data)

	Convertible preferred stock								Stockholders' deficit						
	Series A convertible preferred stock		Special voting preferred stock		Series B convertible preferred stock		Series B special voting preferred stock		Common stock		Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Noncontrolling interests	Total
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount					
Balance, December 31, 2020	5,201,017	$ 53,577	1	$ —	2,453,170	$ 38,054	1	$ —	1,084,082	$ —	$ 339	$ —	$ (56,213)	$ 14,395	$ (41,479)
Issuance of Series B convertible preferred stock at $15.60 per share, net of issuance costs of $151	—	—	—	—	1,046,696	16,177	—	—	—	—	—	—	—	—	—
Exercise of stock options	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	479	—	—	—	479
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	(40,784)	—	(40,784)
Balance, December 31, 2021	5,201,017	53,577	1	—	3,499,866	54,231	1	—	1,084,082	—	818	—	(96,997)	14,395	(81,784)
Exercise of stock options	—	—	—	—	—	—	—	—	83,520	—	106	—	—	—	106
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	275	—	—	—	275
Unrealized loss on marketable securities	—	—	—	—	—	—	—	—	—	—	—	(41)	—	—	(41)
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	(61,226)	—	(61,226)
Balance, December 31, 2022	5,201,017	$ 53,577	1	$ —	3,499,866	$ 54,231	1	$ —	1,167,602	$ —	$ 1,199	$ (41)	$ (158,223)	$ 14,395	$ (142,670)

See accompanying notes to consolidated financial statements

CARISMA THERAPEUTICS INC.
Consolidated Statement of Cash Flows
(in thousands)

	Year Ended December 31,	
	2022	**2021**
Cash flows from operating activities:		
Net loss	$ (61,226)	$ (40,784)
Adjustment to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization expense	1,893	682
Stock-based compensation expense	275	479
Reduction in the operating right of use assets	4,197	834
Amortization of debt discount	2,537	—
Change in fair value of derivative liability	1,919	—
Non-cash interest expense	93	—
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(1,361)	253
Accounts payable	(473)	(974)
Accrued expenses	4,230	2,995
Deferred revenues	47,459	—
Operating lease liabilities	(4,659)	(813)
Net cash used in operating activities	(5,116)	(37,328)
Cash flows from investing activities:		
Purchase of marketable securities	(90,900)	—
Proceeds from the sale of marketable securities	63,000	—
Purchases of property and equipment	(4,660)	(1,871)
Net cash used in investing activities	(32,560)	(1,871)
Cash flows from financing activities:		
Proceeds from the exercise of stock options	106	—
Payment of principal related to the finance lease liabilities	(865)	—
Proceeds from failed sale-leaseback arrangement	1,626	—
Payment of finance liability from failed sale-leaseback arrangement	(98)	—
Payment of deferred financing costs	(2,450)	—
Proceeds from the sale of Series B convertible preferred stock	—	16,328
Payment of Series B issuance costs	—	(366)
Proceeds from issuance of convertible promissory note	35,000	—
Net cash provided by financing activities	33,319	15,962
Net decrease in cash and cash equivalents	(4,357)	(23,237)
Cash and cash equivalents at beginning of the year	28,551	51,788
Cash and cash equivalents at end of the year	$ 24,194	$ 28,551
Supplemental disclosures of cash flow information		
Cash paid for interest	$ 98	$ —
Supplemental disclosures of non-cash financing and investing activities		
Property and equipment in accounts payable	$ —	$ 121
Unrealized loss on marketable securities	$ (41)	$ —
Deferred financing costs in accrued expenses	$ 1,661	$ —
Allocation of debt proceeds to derivative liability	$ 3,820	$ —
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 6,440	$ —
Right-of-use assets obtained in exchange for new finance lease liabilities	$ 2,898	$ —

See accompanying notes to the consolidated financial statements

(1) Background

Carisma Therapeutics Inc., a Delaware Corporation (the Company), is a clinical-stage biopharmaceutical company focused on utilizing the Company's proprietary macrophage and monocyte cell engineering platform to develop transformative therapies to treat cancer and other serious disorders. Cell therapy enables the utilization of reprogrammed living cells to perform complex functions such as clearance of tumor cells or resolution of inflammation. The Company's initial focus is its proprietary Chimeric Antigen Receptor Macrophage (CAR-M) platform, which redirects macrophages against specific tumor associate antigens and enables targeted anti-tumor immunity by utilizing genetically modifying myeloid cells (macrophages and monocytes) to express chimeric antigen receptors, or CARs, enabling the innate immune cells to recognize specific tumor associated antigens on the surface of tumor cells. The Company's clinical lead product candidate CT-0508 is an *ex vivo* gene-modified autologous CAR-M cell therapy product intended to treat solid tumors that overexpress HER2.

The Company has completed enrollment of the first group of patients in a Phase 1 clinical trial of CT-0508, with nine patients having been successfully dosed. In November 2022, the Company presented preliminary clinical results from the first group of patients. CT-0508 was successfully manufactured using macrophages obtained from heavily pre-treated, advanced solid tumor patients and has shown high CAR expression, viability, and purity. In addition, CT-0508 has been generally well-tolerated after infusion with no dose-limiting toxicities reported to date from the nine patients enrolled in the first group. While the results from this early clinical trial data are both preliminary and limited, we believe the results indicate that CT-0508 can be detected within the tumor microenvironment, or TME, lead to remodeling and activation of the TME, and potentially induce anti-tumor adaptive immunity. In the combination setting, the Company has observed the synergistic potential of CT-0508 with a PD1 blocking T-cell checkpoint inhibitor in pre-clinical models, enabling a combination trial with pembrolizumab. The Company submitted a clinical protocol amendment to the Food and Drug Administration (FDA) in September 2022 to allow it to treat patients with the co-administration of CT-0508 and pembrolizumab. The FDA has granted "Fast Track" status to CT-0508 for the treatment of patients with HER2 overexpressing solid tumors and we plan to prioritize development for this indication.

Beyond CT-0508, the Company has a broad pipeline of cell therapy assets in various stages of pre-clinical development. In addition to the development of *ex vivo* CAR-M cell therapies, the Company is also developing *in vivo* CAR-M gene therapies, wherein immune cells are directly engineered with the patient's body. To advance the Company's *in vivo* CAR-M therapeutics, the Company established a strategic collaboration with ModernaTX Inc. (Moderna) (Note 12).

In March 2023, the Company completed an Agreement and Plan of Merger and Reorganization, as amended, (the Merger Agreement) with Seahawk Merger Sub, Inc. (Merger Sub), a Delaware corporation and wholly-owned subsidiary of Sesen Bio, Inc. (Sesen Bio), a publicly traded life science company. The Merger Agreement provided for the merger of the Company with Merger Sub, with the Company as the surviving entity and the Company continuing as a wholly-owned subsidiary of Sesen Bio (the Merger). At the closing of the Merger, (a) each then outstanding share of the Company's common stock and convertible preferred stock (collectively, the Company's capital stock) (including shares of the Company's common stock issued in connection with the pre-closing financing transaction described below) were converted into shares of Sesen Bio common stock, and (b) each then outstanding stock option to purchase the Company's common stock was assumed by Sesen Bio.

Concurrent with the closing of the Merger Agreement, certain parties purchased 1,964,101 shares of the Company's common stock at $15.60 per share for an aggregate purchase price of $30.6 million (Pre-Closing Financing), which converted into shares of Sesen Bio common stock following the Merger. Upon completion of the Merger, the outstanding principal and unpaid interest associated with the $35.0 million convertible promissory note (Note 6) were automatically converted into shares of Sesen Bio common stock.

Following the Merger, the shareholders of the Company held 71.7% of the combined company, and the shareholders of Sesen Bio held 28.3% of the combined company.

The Merger will be accounted for as a reverse capitalization because the primary assets of Sesen Bio were cash, cash equivalents and marketable securities, which will be recorded at fair value in the consolidated financial statements of the Company, and the reported operating results prior to the Merger will be those of the Company. The combined company was renamed Carisma Therapeutics Inc.

(2) Development-Stage Risks and Liquidity

The Company has incurred losses since inception and has an accumulated deficit of $158.2 million as of December 31, 2022. The Company anticipates incurring additional losses until such time, if ever, that it can generate significant sales from its product candidates currently in development. Management believes that cash, cash equivalents and marketable securities of $52.0 million as of December 31, 2022 and net proceeds of $105.3 million from the completion of the Merger and Pre-Closing Financing are sufficient to sustain planned operations through the end of 2024.

The Company is subject to those risks associated with any specialty biotechnology company that has substantial expenditures for research and development. There can be no assurance that the Company's research and development projects will be successful, that products developed will obtain necessary regulatory approval, or that any approved product will be commercially viable. In addition, the Company operates in an environment of rapid technological change and is largely dependent on the services of its employees and consultants.

(3) Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (GAAP). Any references in these notes to applicable guidance is meant to refer to GAAP as found in Accounting Standards Codification (ASC) and Accounting Standards Update (ASU) promulgated by the Financial Accounting Standards Board (FASB). The Company has a majority owned subsidiary in Luxembourg. The functional currency of the majority owned subsidiary is the US dollar. The consolidated financial statements include the accounts of the Company and its majority owned subsidiary. All intercompany transactions have been eliminated in consolidation.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from such estimates. Estimates and assumptions are periodically reviewed, and the effects of revisions are reflected in the consolidated financial statements in the period they are determined to be necessary.

Significant areas that require management's estimates include the fair value of the Company's common stock, the derivative liability, stock-based compensation assumptions, the estimated useful lives of property and equipment and accrued research and development expenses.

Fair Value of Financial Instruments

Management believes that the carrying amounts of the Company's financial instruments, including cash equivalents and accounts payable, approximate fair value due to the short-term nature of those instruments. The Company considers the carrying value of its Convertible Promissory Note (Note 6) to approximate fair value due to its short-term nature. The derivative liability is recorded at its estimated fair value.

Marketable Securities

The Company's marketable securities consist of investments in U.S. Treasuries that are classified as available-for-sale. The securities are carried at fair value with the unrealized gains and losses included in accumulated other comprehensive loss, a component of stockholders' deficit. Realized gains and losses and declines in value determined to be other than temporary are included in the Company's consolidated statements of operations.

Fair Value Measurements

The Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Company determines fair value based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between observable and unobservable inputs, which are categorized in one of the following levels:

· Level 1 Inputs: Unadjusted quoted prices in active markets for identical assets or liabilities accessible to the reporting entity at the measurement date.

· Level 2 Inputs: Other than quoted prices included in Level 1 inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability.

· Level 3 Inputs: Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date.

The following fair value hierarchy table presents information about the Company's assets and liabilities measured at fair value on a recurring basis:

	Fair value measurement at reporting date using		
(in thousands)	**(Level 1)**	**(Level 2)**	**(Level 3)**
December 31, 2022:			
Assets:			
Cash equivalents – money markets accounts	$ 7,794	$ —	$ —
Marketable securities – U.S. Treasuries	$ 27,802	$ —	$ —
Liabilities:			
Derivative liability – redemption feature on convertible promissory note	$ —	$ —	$ 5,739
December 31, 2021:			
Assets:			
Cash equivalents – money markets accounts	$ 5,182	$ —	$ —

The following is a summary of the Company's marketable securities as of December 31, 2022.

	Amortized cost	Gross unrealized loss	Fair value
Available-for-sale marketable securities			
U.S. Treasury securities	$ 27,843	$ (41)	$ 27,802

The Company evaluated a redemption feature within the convertible promissory note issued in January 2022 and determined bifurcation of the redemption feature was required. The redemption feature is classified as a liability on the accompanying consolidated balance sheet and is marked-to-market each reporting period with the changes in fair value recorded in the accompanying statements of operations until it is triggered, terminated, reclassified or otherwise settled. The fair value of the derivative was determined based on an income approach that identified the cash flows using a "with-and-without" valuation methodology. The inputs used to determine the estimated fair value of the derivative instrument were based primarily on the probability of an underlying event triggering the embedded derivative occurring and the timing of such event.

During the year ended December 31, 2022, the discount factor used was 12% and a 90% to 100% probability of completing a qualified financing prior to the maturity date of the convertible promissory note was assumed. The estimated time of conversion ranged from three to twelve months.

The table presented below is a summary of the changes in fair value of the Company's derivative liability (Level 3 measurement):

(in thousands)	Fair value of derivative liability
Balance at January 1, 2022	$ —
Balance at issuance	3,820
Change in fair value	1,919
Balance at December 31, 2022	$ 5,739

During the years ended December 31, 2022 and 2021, there were no transfers between Level 1, Level 2 and Level 3.

Revenue Recognition

The Company recognizes revenue in accordance with ASC Topic 606, *Revenue from Contracts with Customers* (ASC 606). This standard applies to all contracts with customers, except for contracts that are within the scope of other standards. Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services.

The Company enters into collaboration and licensing agreements with strategic partners, which are within the scope of ASC 606, under which it may exclusively license rights to research, develop, manufacture, and commercialize its product candidates to third parties. The terms of these arrangements typically include payment to the Company of one or more of the following: (1) non-refundable, upfront license fees (2) reimbursement of certain costs; (3) customer option fees for additional goods or services; (4) development milestone payments, (5) regulatory and commercial milestone payments; and (6) royalties on net sales of licensed products.

In determining the appropriate amount of revenue to be recognized as it fulfills its obligations under each of its agreements, the Company performs the following steps: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when (or as) the Company satisfies each performance obligation. As part of the accounting for these arrangements, the Company must use its judgment to determine: (a) the number of performance obligations based on the determination under step (i) above; (b) the transaction price under step (iii) above; (c) the stand-alone selling price for each performance obligation identified in the contract for the allocation of transaction price in step (iv) above; and (d) the contract term and pattern of satisfaction of the performance obligations under step (v) above. The Company uses judgment to determine whether milestones or other variable consideration, except for royalties, should be included in the transaction price as described further below. The transaction price is allocated to each performance obligation on a relative stand-alone selling price basis, for which the Company recognizes revenue as or when the performance obligations under the contract are satisfied.

Amounts due to the Company for satisfying the revenue recognition criteria or that are contractually due based upon the terms of the collaboration agreements are recorded as accounts receivable in the Company's consolidated balance sheet. Contract liabilities consist of amounts received prior to satisfying the revenue recognition criteria, which are recorded as deferred revenue in the Company's consolidated balance sheet.

The following table summarizes the changes in deferred revenue (in thousands):

	Year ended December 31, 2022
Balance at the beginning of the period	$ —
Deferral of revenue	57,293
Recognition of unearned revenue	(9,834)
Balance at the end of the period	$ 47,459

There was no deferred revenue as of December 31, 2021.

The current portion of deferred revenue represents advanced payments received from ModernaTX, Inc. for costs expected to be incurred by the Company within the next twelve months. The noncurrent portion of deferred revenue represents the $45.0 million upfront, non-refundable and non-creditable payment allocated to customer option right which is not expected to be recognized within the next 12 months.

Upfront license fees

If the license to the Company's intellectual property is determined to be distinct from the other promises or performance obligations identified in the arrangement, the Company recognizes revenue from non-refundable, upfront fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. In assessing whether a promise or performance obligation is distinct from the other promises, the Company considers factors such as the research, manufacturing, and commercialization capabilities of the customer; the retention of any key rights by the Company; and the availability of the associated expertise in the general marketplace. In addition, the Company considers whether the customer can benefit from a promise for its intended purpose without the receipt of the remaining promises, whether the value of the promise is dependent on the unsatisfied promise, whether there are other vendors that could provide the remaining promise and whether it is separately identifiable from the remaining promise. For licenses that are combined with other promises, the Company exercises judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Customer options

The Company evaluates the customer options for material rights or options to acquire additional goods or services for free or at a discount. If the customer options are determined to represent a material right, the material right is recognized as a separate performance obligation at the outset of the arrangement. The Company allocates the transaction price to material rights based on the relative standalone selling price, which is determined based on the identified discount and the probability that the customer will exercise the option. Amounts allocated to a material right are not recognized as revenue until, at the earliest, the option is exercised. If an option is not exercised and the research and development target is terminated, the Company will accelerate and recognize all remaining revenue related to the material right performance obligation.

Research and development services

The promises under the Company's collaboration agreements may include research and development services to be performed by the Company for or on behalf of the customer. Payments or reimbursements resulting from the Company's research and development efforts are recognized as the services are performed and presented on a gross basis because the Company is the principal for such efforts. Reimbursements from and payments to the customer that are the result of a collaborative relationship with the customer, instead of a customer relationship, such as co-development activities, are recorded as a reduction to research and development expense.

Milestone payments

At the inception of each arrangement that includes development milestone payments, the Company evaluates whether the milestones are considered probable of being achieved and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within the control of the Company or the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. The Company evaluates factors such as the scientific, clinical, regulatory, commercial and other risks that must be overcome to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether it is probable that a significant revenue reversal would not occur. At the end of each subsequent reporting period, the Company reevaluates the probability of achievement of all milestones subject to constraint and, if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment.

Concentration of credit risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts and believes it is not exposed to significant risk on its cash and cash equivalents.

Segment information

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company views its operations and manages its business in one segment.

Cash and Cash Equivalents

The Company considers all highly-liquid investments that have maturities of three months or less when acquired to be cash equivalents. As of December 31, 2022 and 2021, cash equivalents consisted of investments in a money market account.

Property and Equipment

Property and equipment are carried at cost less accumulated depreciation and amortization. Depreciation and amortization are calculated using the straight-line method over the estimated useful lives of the assets ranging from two to five years. Leasehold improvements are amortized over the shorter of the life of the lease or the estimated useful life of the assets. Lab equipment that are classified as finance leases are amortized over the lease term.

Long-lived Assets

Long-lived assets, such as property and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When events indicate a triggering event occurred, the recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, then an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. Considerable management judgment is necessary to estimate discounted future cash flows. Accordingly, actual results could vary significantly from such estimates.

The Company did not recognize any impairment of long-lived assets during the years ended December 31, 2022, or 2021.

Deferred Financing Costs

The Company capitalizes costs that are directly associated with in-process equity financings until such financings are consummated, at which time such costs are recorded against the gross proceeds from the applicable financing. If a financing is abandoned, deferred financing costs are expensed immediately. The Company has incurred $4.1 million in fees associated with the Merger, which have been recognized as deferred financing costs in the accompanying consolidated balance sheet at December 31, 2022.

Leases

The Company determines whether an arrangement is or contains a lease, its classification, and its term at the lease commencement date. Leases with a term greater than one year will be recognized on the balance sheet as right-of-use (ROU) assets, current lease liabilities, and if applicable, long-term lease liabilities. The Company includes renewal options to extend the lease term where it is reasonably certain that it will exercise these options. Lease liabilities and the corresponding ROU assets are recorded based on the present values of lease payments over the lease term. The interest rate implicit in lease contracts is typically not readily determinable. As such, the Company utilizes the appropriate incremental borrowing rates, which are the rates that would be incurred to borrow on a collateralized basis, over similar terms, amounts equal to the lease payments in a similar economic environment. Payments for non-lease components or that are variable in nature that do not depend on a rate or index are not included in the lease liability and are typically expensed as incurred. If significant events, changes in circumstances, or other events indicate that the lease term or other inputs have changed, the Company would reassess lease classification, remeasure the lease liability using revised inputs as of the reassessment date, and adjust the ROU assets. Lease expense is recognized on a straight-line basis over the expected lease term for operating classified leases.

Noncontrolling Interest

To the extent that ownership interests in the Company's subsidiary are held by entities other than the Company, management reports these as noncontrolling interests on the consolidated balance sheet. At December 31, 2022 and 2021, an investor had outstanding Class B and Class B-1 shares in the Company's Luxembourg subsidiary related to the sale of the Company's Series A convertible preferred stock (Series A) and Series B convertible preferred stock (Series B). The shares are nonvoting shares at the subsidiary entity level and presented as noncontrolling interests in the accompanying consolidated balance sheets.

Earnings or losses are attributed to noncontrolling interests under the hypothetical liquidation at book value (HLBV) method. The HLBV method is a point in time calculation that utilizes inputs to determine the amount that the Company and noncontrolling interest holders would receive upon a hypothetical liquidation at each balance sheet date based on the liquidation provisions of the respective articles of incorporation. Holders of the noncontrolling interests do not share in earnings or losses of the Luxembourg subsidiary. In addition, and upon a liquidation event, as described in the Company's articles of incorporation, holders of noncontrolling interests will automatically convert into the Company's preferred securities for purposes of liquidation. As a result, no earnings or losses at the Company's subsidiaries are allocated to noncontrolling interests.

Research and Development Costs

Research and development costs are charged to expense as incurred. Up-front and milestone payments made to third parties who perform research and development services on the Company's behalf are expensed as services are rendered.

Stock-Based Compensation

The Company measures stock-based awards, including stock options, at their grant-date fair value and records compensation expense over the requisite service period, which is the vesting period of the awards. The Company accounts for forfeitures as they occur.

Estimating the fair value of stock options requires the use of subjective assumptions, including the fair value of the Company's common stock, the expected term of the option and expected stock price volatility. The Company uses the Black-Scholes option-pricing model to value its stock option awards. The assumptions used in calculating the fair value of stock options represent management's best estimates and involve inherent uncertainties and the application of management's judgment. As a result, if factors change and management uses different assumptions, stock-based compensation expense could be materially different for future awards.

The fair value of the Company's common stock is estimated by the Company's board of directors, with input from management considering the most recently available third-party valuation of the Company's common stock. The expected term of stock options for employees is estimated using the "simplified method," as the Company has limited historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior for its stock option grants. The simplified method is the midpoint between the vesting date and the contractual term of the option. The contractual term is used as the expected term for stock options granted to nonemployees. For stock price volatility, the Company uses comparable public companies as a basis for the expected volatility to calculate the fair value of option grants. The risk-free rate is based on the U.S. Treasury yield curve commensurate with the expected term of the option. The expected dividend yield is zero given the Company does not expect to pay dividends for the foreseeable future.

Net Loss per Share

Basic net loss per share of common stock is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during each period. Diluted net loss per share of common stock includes the effect, if any, from the potential exercise or conversion of securities, such as convertible preferred stock and stock options, which would result in the issuance of incremental shares of common stock. For diluted net loss per share, the weighted-average number of shares of common stock is the same for basic net loss per share due to the fact that when a net loss exists, potentially dilutive securities are not included in the calculation as their impact is anti-dilutive. The Company's convertible preferred stock entitles the holder to participate in dividends and earnings of the Company, and, if the Company were to recognize net income, it would have to use the two-class method to calculate earnings per share. The two-class method is not applicable during periods with a net loss, as the holders of the convertible preferred stock have no obligation to fund losses.

The following potentially dilutive securities have been excluded from the computation of diluted weighted-average shares of common stock outstanding, as they would be anti-dilutive:

	December 31,	
	2022	**2021**
Series A Convertible Preferred Stock	5,201,017	5,201,017
Series B Convertible Preferred Stock	3,499,866	3,499,866
Class B exchangeable shares	937,501	937,501
Class B-1 exchangeable shares	297,764	297,764
Stock options	1,767,396	1,869,438
Conversion of convertible promissory note	1,715,386	-
	13,418,930	11,805,586

The above table assumes outstanding principal and interest converted into shares of the Company's common stock at $21.06 per share. Conversion of the promissory note and related interest may vary depending on the terms and conditions upon conversion of the promissory note.

Recently Adopted Accounting Pronouncements

In August 2020, the FASB issued ASU No. 2020-06, Debt — *Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity* (ASU 2020-06), which simplifies the accounting for convertible instruments by reducing the number of accounting models available for convertible debt instruments. This guidance also eliminates the treasury stock method to calculate diluted earnings per share for convertible instruments and requires the use of the if converted method. The Company adopted the ASU effective January 1, 2022 using the modified retrospective method of adoption. The Company applied this ASU to the convertible promissory note entered into in January 2022 (see Note 6).

Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU 2016-13 *Financial Instruments — Credit Losses*, which requires financial assets measured at amortized cost basis to be presented at the net amount expected to be collected. This standard is effective for fiscal years beginning after December 15, 2022. Entities must adopt using a modified retrospective approach, with certain exceptions. The Company is currently evaluating the potential impact of the standard on the consolidated financial statements.

(4) Property and Equipment, net

Property and equipment, net consisted of the following (in thousands):

	December 31,	
	2022	2021
Computer software	$ 1,062	$ 214
Lab equipment[1]	10,260	3,694
Office furniture	267	267
Leasehold improvements	340	317
Construction in progress	13	13
	11,942	4,505
Less: accumulated depreciation and amortization[2]	(3,314)	(1,421)
	$ 8,628	$ 3,084

(1) Lab equipment includes finance lease ROU assets and a failed sale lease-back assets (see Note 7) of $2.9 million and $2.6 million, respectively, as of December 31, 2022. There were no financial lease ROU assets or financial lease assets from failed sale-leasebacks as of December 31, 2021.

(2) The accumulated amortization balance includes $0.6 million related to the finance ROU assets and $0.3 million related to the failed sale-leaseback as of December 31, 2022.

Depreciation and amortization expense was $1.9 million and $0.7 million for the years ended December 31, 2022, and 2021, respectively.

(5) Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	December 31,	
	2022	2021
Research and development	$ 4,326	$ 2,352
Professional fees	2,100	530
Compensation and related expenses	2,809	1,589
Interest	1,126	-
	$ 10,361	$ 4,471

(6) Convertible Promissory Note

In January 2022, concurrent with entering into the Moderna Collaboration and License Agreement (Note 12), the Company issued and sold to Moderna a convertible promissory note in the aggregate principal amount of $35.0 million (the Note). If not earlier converted or repaid, the Note was payable on demand in July 2023. The Note accrued interest at an annual rate beginning at 0.33% through March 2022 and then increased by 0.767% each month thereafter capping at an annual rate of 8.0% in January 2023. Upon the closing of the Merger, the outstanding principal and accrued interest under the Note were automatically converted into shares of Sesen Bio common stock at a conversion price equal to 90% of the purchase price paid by other investors.

Since the Note was convertible into either (i) a variable number of shares of stock or (ii) a fixed conversion price, the Company evaluated the conversion provisions as a redemption feature and as a conversion feature, with the redemption feature evaluated as an embedded derivative and bifurcated from the proceeds of the Note due to the substantial premium paid upon redemption. Upon bifurcating the redemption feature, the Company recorded a debt discount of $3.8 million which represents the initial fair value of the derivative liability which was recognized as interest expense over the term of the Note. For the year ended December 31, 2022, the Company recognized a change in fair value related to the redemption feature of $1.9 million, which was included in the change in fair value of derivative liability on the consolidated statement of operations. For the year ended December 31, 2022, the Company recognized interest expense of $3.7 million of which $2.5 million was related to the amortization of the debt discount.

The following table summarizes the carrying value of the Note at December 31, 2022 (in thousands):

Principal amount of the note	$	35,000
Unamortized debt discount		(1,283)
Carrying value of the Note	$	33,717

(7) Commitments and Contingencies

Leases

The Company has operating leases for its lab and office space in Philadelphia, Pennsylvania. The Company's operating leases have term end dates ranging from 2023 to 2029. The Company also has obligations under an arrangement for the use of certain lab equipment that are classified as finance leases that commenced in 2022 and have end dates ranging from 2024 to 2025.

The Company's operating and finance lease ROU assets and the related lease liabilities are initially measured at the present value of future lease payments over the lease term. The Company is responsible for payment of certain real estate taxes, insurance and other expenses on certain of its leases. These amounts are generally considered to be variable and are not included in the measurement of the ROU assets and lease liability. The Company accounts for non-lease components, such as maintenance, separately from lease components.

During the year ended 2022, the Company entered into purchase and sale agreements under which the Company sold lab equipment for $1.6 million. Concurrent with the sale of the equipment, the Company entered into various three-year lease agreements, whereby the Company will lease back the equipment. The Company was considered to have continuing involvement, and thus, accounted for the transactions as failed sale-leasebacks, with the equipment remaining on the balance sheet and the sale proceeds recorded as a finance liability. No gain or loss was recorded on the failed sale-leasebacks. The Company continues to carry the lab equipment as property and equipment, net on the accompanying consolidated balance sheet. The ongoing lease payments are recorded as reductions to the finance liability and interest expense. As of December 31, 2022, the Company had a $1.6 million financing liability recorded in other current liabilities and other long-term liabilities on the consolidated balance sheet.

The elements of the lease costs were as follows (in thousands):

	Year ended December 31,			
		2022		2021
Operating lease cost	$	4,764	$	1,129
Finance lease cost:				
Amortization of lease assets		560		-
Interest on lease liabilities		98		-
Total finance lease cost		658		-
Total lease cost	$	5,422	$	1,129

Lease term and discount rate information related to leases was as follows:

	December 31,	
	2022	2021
Weighted-average remaining lease term (in years)		
Operating leases	2.2	4.4
Finance leases	2.2	-
Weighted-average discount rate		
Operating leases	9.4%	9.8%
Finance leases	9.0%	-

Supplemental cash flow information (in thousands):

	Year Ended December 31,	
	2022	2021
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash used in operating leases	$ 4,750	$ 1,108
Operating cash used in finance leases	$ 98	$ -
Financing cash used in finance leases	$ 865	$ -

Future maturities of lease liabilities were as follows as of December 31, 2022 (in thousands):

	Operating Leases	Finance Leases
Fiscal year ending:		
2023	$ 3,685	$ 1,300
2024	213	600
2025	219	339
2026	226	-
2027	233	-
Thereafter	423	-
Total future minimum payments	4,999	2,239
Less imputed interest	(586)	(205)
Present value of lease liabilities	$ 4,413	$ 2,034

Licensing and Sponsored Research Agreements

Under a license agreement (Penn License Agreement) with The Trustees of the University of Pennsylvania (Penn), the Company is required to make annual payments of $10,000 through 2021 and $25,000 in annual payments thereafter. Penn is eligible to receive up to $10.9 million per product in development upon the achievement of certain clinical, regulatory and commercial milestone events. There are additional milestone payments required to be paid of up to $30.0 million per product in commercial milestones, and up to an additional $1.7 million in development and regulatory milestone payments for the first CAR-M product directed to mesothelin. Additionally, the Company is obligated to pay Penn single-digit royalties based on its net sales.

Contingencies

Liabilities for loss contingencies, arising from claims, assessments, litigation, fines, penalties, and other sources are recorded when it is probable that a liability has been incurred and the amount of the assessment and/or remediation can be reasonably estimated.

(8) Convertible Preferred Stock, Noncontrolling Interests and Common Stock

In February 2021, the Company sold 1,046,696 shares of Series B at an original issuance price of $15.60 per share. No shares of preferred stock were sold during the year ended December 31, 2022.

As of December 31, 2022 and 2021, there were 937,501 and 297,764 Class B and Class B-1 exchangeable shares outstanding, respectively that were issued by the Company's Luxembourg subsidiary. Proceeds received associated with the Company's Luxembourg subsidiary securities are presented as noncontrolling interests in the Company's consolidated financial statements.

The Class B and Class B-1 exchangeable shares (the Exchangeable Shares) are exchangeable into shares of Series A and Series B, respectively, on a one for one basis, at the option of the holder, or automatically upon an initial public offering or liquidation event. The Class B and Class B-1 exchangeable shares participate as Series A and Series B preferred shareholders, respectively, as it pertains to all rights and preferences held by the Company's preferred shareholders. In addition, the Class B and Class B-1 exchangeable share investor holds a share of special voting preferred stock and Series B special voting preferred stock that provides the investor with additional control relating voting matters for the Series A and Series B preferred shareholders, respectively. The following is a summary of the rights, preferences, and terms of the Series A and Series B (collectively, Convertible Preferred Stock):

Dividends

The holders of the Convertible Preferred Stock are entitled to receive dividends payable when, as and if declared by the Board of Directors of the Company, with the holders of common stock, paid out of any assets or on the common stock of the Company, on an as-converted or as exchangeable to common stock basis. No dividends on common stock were declared or paid from inception through December 31, 2022.

Voting

The holders of Convertible Preferred Stock, Special voting preferred stock and Series B special voting preferred stock are entitled to vote on any matter presented to the stockholders of the Company. Each holder of outstanding shares of Convertible Preferred Stock is entitled to the number of votes equal to the number of shares of common stock into which the shares of Convertible Preferred Stock are convertible or exchangeable. Holders of Series A and the holder of Special voting preferred stock, exclusively and together as a single class, are entitled to elect three directors of the corporation and Series B holders and the holder of Series B special voting preferred stock, exclusively and as a separate class, are entitled to elect one director of the corporation. The holders of record of common stock and Convertible Preferred Stock, together as a separate class, are entitled to elect the balance of the total directors of the corporation and on an as converted or exchangeable basis. As of December 31, 2022, the Company had 7 directors.

Liquidation Preference

In the event of any voluntary or involuntary liquidations, dissolution or winding up of the Company, the holders of Series B shall be entitled to be paid out of the consideration payable to stockholders before any payment shall be made to the holders of Series A or common stock, an amount equal to the greater of (i) Series B original issue price, plus any dividend declared but unpaid, or (ii) such amount per share as would have been payable had all shares of Series B been converted into common stock immediately prior to liquidation, dissolution or winding up. The holders of Series A shall be entitled to be paid out of the consideration payable to stockholders after any payment to the Series B but before any payment shall be made to the holders common stock, an amount equal to the greater of (i) Series A original issue price, plus any dividend declared but unpaid, or (ii) such amount per share as would have been payable had all shares of Series A been converted into common stock immediately prior to liquidation, dissolution or winding up. If exchanged as of December 31, 2022, the Class B and Class B-1 exchangeable shares have a liquidation value of $4.6 million and $9.8 million, respectively.

Conversion

The Convertible Preferred Stock is convertible into common stock based on the original issuance price of the security. The Convertible Preferred Stock automatically converts to common stock upon (1) an initial public offering totaling at least $50.0 million in proceeds, or (2) the date and time, or the occurrence of an event, specified by vote or written consent of (i) the holders of a majority of the voting power represented by the outstanding shares of Series A, voting together as a single class and (ii) the holders of at least two-thirds (2/3) of the voting power represented by the outstanding shares of Series B, voting together as a single class (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent). Upon the closing of the Merger, all shares of Convertible Preferred Stock and Exchangeable Shares were converted into shares of common stock.

Redemption

The Convertible Preferred Stock is subject to redemption under certain deemed liquidation events not solely within the control of the Company, as defined, and as such is considered contingently redeemable for accounting purposes. Accordingly, the Convertible Preferred Stock is classified outside of permanent stockholders' deficit. An adjustment of the carrying amount of the Convertible Preferred Stock is not necessary until it is probable that the securities will become redeemable. At December 31, 2022, the Company has determined that redemption of the Convertible Preferred Stock was not probable.

Common Stock

The holders of the common stock are entitled to one vote for each share of common stock held at all meetings of stockholders. Unless required by law, there shall be no cumulative voting. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, after the payment of all preferential amounts required to be paid to the holders of shares of Convertible Preferred Stock, the remaining funds and assets available for distribution to the stockholders of the Company will be distributed among the holders of shares of common stock, pro rata based on the number of shares of common stock held by each such holder.

(9) Stock-based Compensation

In August 2017, the Company adopted the 2017 Stock Incentive Plan (the Plan) as amended that authorized the Company to grant up to 1,739,936 shares of common stock. In 2022, the Company amended the Plan and increased the total number of shares authorized under the Plan to 2,664,018. As of December 31, 2022, there were 639,244 shares available to be granted. The Company's stock options vest based on the terms in the awards agreements and generally vest over four years. The Company recorded stock-based compensation expense in the following expense categories in its accompanying consolidated statements of operations:

	Year ended December 31,	
	2022	**2021**
Research and development	$ 143	$ 185
General and administrative	132	294
	$ 275	$ 479

The following is a summary of stock options activity under the Plan:

	Options	Weighted average exercise price	Weighted average remaining contractual term (years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of January 1, 2021	965,912	$ 1.11		
Granted	903,526	2.63		
Outstanding as of December 31, 2021	1,869,438	1.85		
Granted	107,000	2.67		
Exercised	(83,520)	1.28		$ 234
Forfeited	(117,224)	1.79		
Expired	(8,298)	2.46		
Outstanding as of December 31, 2022	1,767,396	$ 1.92	7.3	$ 15,546
Exercisable as of December 31, 2022	1,119,980	$ 1.58	6.7	$ 10,235
Vested and expected to vest at December 31, 2022	1,767,396	$ 1.92	7.3	$ 15,546

The weighted-average grant-date per share fair values of options granted in 2022 and 2021 were $1.46 and $1.43, respectively. The fair values in 2022 and 2021 were estimated using the Black-Scholes option-pricing model based on the following assumptions:

	Year Ended December 31,	
	2022	2021
Risk-free interest rate	2.40% - 3.05%	0.89% - 1.26%
Expected term	6 years	6 years
Expected volatility	54.5% - 56.5%	53.3% - 54.2%
Expected dividend yield	-	-
Estimated fair value of the Company's common stock per share	$ 2.68	$ 2.77

Future compensation cost for awards not vested as of December 31, 2022, was $0.3 million and will be expensed over a weighted-average period of 2.3 years.

(10) Income Taxes

The Company has incurred losses since inception and has not recorded current or deferred income taxes.

A reconciliation of income tax benefit at the statutory federal income tax rate and income taxes as reflected in the consolidated financial statements is as follows:

	Year Ended December 31,	
	2022	2021
Federal tax benefit at statutory rate	(21.0)%	(21.0)%
State and local tax, net of federal benefit	(7.8)	(12.6)
State and local tax rate change	6.2	—
Permanent differences	2.0	0.2
Research and development	(2.9)	(4.3)
Change in valuation allowance	22.4	37.1
Return to provision	1.1	0.6
Total provision	—%	—%

Deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of assets and liabilities using enacted tax rates in effect for years in which differences are expected to reverse.

Significant components of the Company's deferred tax assets for federal income taxes consisted of the following (in thousands):

	December 31,	
	2022	**2021**
Deferred tax assets		
Net operating losses	$ 27,021	$ 25,507
Capitalized research and development costs, net of amortization	11,907	—
Research and development credits	5,643	3,862
Start-up costs	4,744	6,133
Lease liability	1,451	—
Amortizable assets and other	59	—
Equity compensation	74	65
Gross deferred tax assets	50,899	35,567
Valuation allowance	(49,105)	(35,374)
Deferred tax assets, net of valuation allowance	1,794	193
Deferred tax liabilities		
Right of use asset	(1,430)	—
Depreciation	(364)	(193)
Deferred tax liabilities	(1,794)	(193)
Net deferred tax assets and liabilities	$ —	$ —

As of December 31, 2022, the Company has net operating loss (NOL) carryforwards for federal income tax purposes of $94.2 million, which are available to offset future federal taxable income. The pre-2018 federal NOL carryforwards of $1.1 million will begin to expire in 2037, if not utilized. The post-2017 federal NOL carryforwards of $93.1 million carry forward indefinitely. The Company also has NOLs for state and local income tax purposes of $94.2 million and $74.3 million, respectively that are available to offset future taxable income. The state NOL carryforwards will begin to expire in 2037 while the local NOLs expire after three years with $14.7 million expiring in 2022. As of December 31, 2022, the Company also had federal research and development tax credit carryforwards of $5.6 million that will begin to expire in 2038, unless previously utilized.

In assessing the need for a valuation allowance, management must determine that there will be sufficient taxable income to allow for the realization of deferred tax assets. Based upon the historical and anticipated future losses, management has determined that the deferred tax assets do not meet the more-likely-than-not threshold for realizability. Accordingly, a full valuation allowance has been recorded against the Company's net deferred tax assets as of December 31, 2022. The valuation allowance increased by $13.7 million and $15.1 million during the years ended December 31, 2022 and 2021, respectively.

The NOL and tax credit carryforwards are subject to review and possible adjustment by the Internal Revenue Service and state tax authorities. NOL and tax credit carryforwards may become subject to an annual limitation in the event of certain cumulative changes in the ownership interest of significant stockholders over a three-year period in excess of 50 percent, as defined under Sections 382 and 383 of the Internal Revenue Code, respectively, as well as similar state provisions. This could limit the amount of tax attributes that can be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on the value of the Company immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation in future years. The Company has not done an analysis to determine whether or not ownership changes have occurred since inception. Certain state NOLs may also be limited, including Pennsylvania, which limits NOL utilization as a percentage of apportioned taxable income.

The Company will recognize interest and penalties related to uncertain tax positions as a component of income tax expense/(benefit). As of December 31, 2022, the Company had no accrued interest or penalties related to uncertain tax positions and no amounts have been recognized in the Company's financial statements. Tax years from 2019 and after remain subject to examination by all of the taxing jurisdictions. The NOL and research credit carryforwards remain subject to review until utilized.

(11) Related Party Transactions

The Company has outstanding licensing and scientific research agreements with Penn, a significant shareholder (Note 7). The Company recognized $1.5 million and $0.8 million of research and development expense for the years ended December 31, 2022 and 2021, respectively, related to the Penn License Agreement.

(12) Moderna Collaboration and License Agreement

In January 2022, the Company entered into a Collaboration and License Agreement with Moderna (Moderna License Agreement), to develop and commercialize *in vivo* engineered chimeric antigen receptor monocyte (CAR-M) therapeutics for different forms of cancer. The Moderna License Agreement allows Moderna to develop and commercialize product candidates for up to twelve research targets. The Company is responsible for discovering and optimizing development candidates, and Moderna is responsible for the clinical development thereafter. Pursuant to the Moderna License Agreement, the Company and Moderna formed a joint steering committee, or JSC, that is responsible for the coordination and oversight of all research activities to which the Company is responsible for providing. The JSC is comprised of three representatives each from the Company and Moderna and with Moderna having final decision-making authority, subject to customary exclusions.

During the research term of the Moderna License Agreement, the Company has granted Moderna an exclusive worldwide royalty free license to the Company's intellectual property associated with the product candidates that permits Moderna to conduct its research and development activities. Upon Moderna's election of a development target (and payment of a related development target designation milestone) for commencement of pre-clinical development of a product candidate, the Company will grant Moderna an exclusive worldwide, sublicensable royalty bearing license to develop, manufacture and commercialize the product candidate.

Upon execution of the Moderna License Agreement, Moderna made an upfront non-refundable payment of $45.0 million to the Company. Moderna also will reimburse the Company for all costs incurred by the Company in connection with its research and development activities under the Moderna License Agreement plus a reasonable margin for the respective services performed (with a minimum commitment to reimburse $10.0 million in research and development costs over the first three years from execution of the Moderna License Agreement). In addition, assuming Moderna develops and commercializes 12 products, each directed to a different development target, the Company is eligible to receive up to between $247.0 million and $253.0 million per product in development target designation, development, regulatory and commercial milestone payments. The Company is also eligible to receive tiered mid-to-high single digit royalties of net product sales, subject to adjustment. In addition, Moderna will repay the Company for certain development, regulatory and commercial milestone payments and certain royalty payments pursuant to the Company's license agreement with the University of Pennsylvania. The Moderna License Agreement terminates on a product-by-product basis upon the latest of expiration of the applicable product patents, expiration of regulatory exclusivity and the tenth anniversary of first commercial sale, unless terminated earlier by the Company or Moderna.

At commencement, the Company identified several potential performance obligations within the Moderna License Agreement, including research and development services on research targets, option rights held by Moderna, a non-exclusive royalty-free license to use the Company's intellectual property to conduct research and development activities and participation on the JSC. The Company determined that there were two performance obligations comprised of (1) research and development services and (2) option rights.

For the research and development services, the stand-alone selling price was determined considering the expected passthrough costs and cost of the research and development services and a reasonable margin for the respective services. The material rights from the option rights were valued based on the estimated discount at which the option is priced and the Company's estimated probability of the options' exercise as of the time of the agreement. The transaction price allocated to research and development services is recognized as collaboration revenues as the research and development services are provided to satisfy the underlying obligation related to the research and development target. The transfer of control occurs over this period and, in management's judgment, is the best measure of progress towards satisfying the performance obligation.

The transaction price allocated to the options rights, which are considered material rights, will be recognized in the period that Moderna elects to exercise or elects to not exercise its option right to license and commercialize the underlying research and development target.

The Company included the $45.0 million upfront payment and $73.9 million of variable consideration for expected research and development services to be performed during the five year contract term, inclusive of passthrough costs, in the transaction price as of the outset of the arrangement. During the year ended December 31, 2022, the Company recognized $9.8 million of research and development services as collaboration revenues as the Company is the principal in providing such services. The following table includes estimated revenue expected to be recognized in the future related to performance obligations that are unsatisfied as of December 31, 2022 (in thousands).

	Transaction price unsatisfied
Performance obligations:	
Research and development	$ 64,619
Option rights	45,000
Total performance obligations	$ 109,619

(13) Subsequent Events

The Company has evaluated subsequent events from the balance sheet date through April 4, 2023, the issuance date of these consolidated financial statements and has not identified any requiring disclosure except as noted below.

On March 7, 2023, the Company completed the Merger with Sesen Bio (Note 1).

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes which are filed as Exhibit 99.4 to our Current Report on Form 8-K/A. Some of the information contained in this discussion and analysis or set forth elsewhere in this Form 8-K/A, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in "Risk Factors" filed as Exhibit 99.3 to our Current Report on Form 8-K dated March 7, 2023, Our actual results could differ materially from the results described in or implied by these forward-looking statements.

Overview

We are a clinical stage cell therapy company focused on utilizing our proprietary macrophage and monocyte cell engineering platform to develop transformative immunotherapies to treat cancer and other serious diseases. We have created a comprehensive cell therapy platform to enable the therapeutic use of engineered macrophages and monocytes, which belong to a subgroup of white blood cells called myeloid cells. Macrophages and monocytes are part of the innate immune system and can detect and degrade harmful substances through a process referred to as phagocytosis, in which the harmful substance is engulfed and destroyed and in turn leads to the activation of a broad immune response.

To harness the powerful immunologic functions of macrophages against cancer, we have developed a proprietary Chimeric Antigen Receptor Macrophage, or CAR-M, platform technology. Chimeric antigen receptors, or CARs, are synthetically engineered receptors that are designed to bestow immune cells with the ability to target specific antigens on the surface of cancer cells. By introducing CARs into macrophage and monocyte cells, we aim to redirect their potent innate immune functions against cancer. Our CAR-M platform technology incorporates proprietary tumor targeting constructs, vectors to deliver CARs to macrophages and monocytes and novel manufacturing processes. Our CAR-M therapeutics are designed to infiltrate the solid tumor microenvironment, kill cancer cells via targeted phagocytosis, and activate other immune cells, such as T-cells, to initiate a robust anti-tumor immune response.

Our lead product candidate CT-0508, the first CAR-M to be evaluated in a human clinical trial, is an *ex vivo* autologous cell therapy product candidate, wherein immune cells from blood drawn from a patient are engineered outside of the body and reinfused into the same patient. CT-0508 is intended to treat solid tumors that overexpress HER2, a protein that is overexpressed on the surface of a variety of solid tumors, including breast cancer, gastric cancer, esophageal cancer, salivary gland cancer, and numerous others. We have completed enrollment of the first group of patients in a Phase 1 clinical trial of CT-0508, with nine patients having been successfully dosed. In November 2022, we presented preliminary clinical results from the first group of patients. CT-0508 was successfully manufactured using macrophages obtained from heavily pre-treated, advanced solid tumor patients and has shown high CAR expression, viability, and purity. In addition, CT-0508 has been generally well-tolerated after infusion with no dose-limiting toxicities reported to date from the nine patients enrolled in the first group. While the results from this early clinical trial data are both preliminary and limited, we believe the results indicate that CT-0508 can be detected within the tumor microenvironment, or TME, lead to remodeling and activation of the TME, and potentially induce anti-tumor adaptive immunity. We anticipate providing multiple clinical data updates over the next 18 months. In the combination setting, we have observed the synergistic potential of CT-0508 with a PD1 blocking T-cell checkpoint inhibitor in pre-clinical models, enabling a combination trial with pembrolizumab. We submitted a clinical protocol amendment to the FDA in September 2022 to allow us to treat patients with the co-administration of CT-0508 and pembrolizumab. The FDA has granted "Fast Track" status to CT-0508 for the treatment of patients with HER2 overexpressing solid tumors and we plan to prioritize development for this indication.

Beyond CT-0508, we have a broad pipeline of cell therapy assets in various stages of pre-clinical development. In addition to the development of *ex vivo* CAR-M cell therapies, we are also developing *in vivo* CAR-M gene therapies, wherein immune cells are directly engineered within the patient's body. To advance our *in vivo* CAR-M therapeutics, we established a strategic collaboration with Moderna TX Inc., or Moderna, focused on the development and potential commercialization of up to 12 product candidates, of which four have already been nominated. In collaboration with Moderna, we have established an approach that uses Moderna's LNP/mRNA technology, together with our CAR-M platform technology, to create novel *in vivo* oncology gene therapies. We believe this approach has the potential to enable a series of off-the-shelf product candidates to target a patient's own myeloid cells against cancer cells directly within their body. As part of the agreement with Moderna, we received a $45.0 million up-front cash payment and an investment by Moderna in the form of a $35.0 million convertible note, in addition to future research funding and the opportunity for milestone payments and royalties.

Through our robust internal discovery engine, we are building upon our platform to enhance and expand the utility of macrophage cell and gene therapies, leading to the creation of multiple product candidates with the potential to treat cancer and other serious diseases. By replacing the targeting domain of the CAR, we can reprogram the target antigen specificity of the CAR-M cell product and develop candidates against a range of cancer indications and therapeutic areas beyond oncology. As a result, we believe the flexibility of our macrophage and monocyte cell engineering platform will allow us to generate new product candidates suitable for clinical development in a cost-efficient manner to expand our pipeline. In addition to acting as a first line of defense in the innate immune system, macrophages are found in all tissues in the body where they serve key regulatory functions such as wound healing, termination of immune responses and tissue regeneration. Using our macrophage and monocyte *ex vivo* and *in vivo* engineering platform, we are pursuing early research and development of multiple assets for the potential treatment of diseases beyond oncology, including liver fibrosis, neurodegeneration, and other immunologic and inflammatory diseases.

By investing in early platform research and accessing key enabling technologies, we are enhancing and expanding our platform capabilities and reinforcing our leadership position in the engineered macrophage field. We have developed proprietary CAR-M platform enhancements directed toward key product parameters that are important for efficacy, safety and patient access to our CAR-M therapies. We plan to apply these technology enhancements to future CAR-M product candidates.

We were formed as Carma Therapeutics LLC, a Pennsylvania limited liability company, in April 2016 and converted to a Delaware corporation in May 2017. To date, we have not yet commercialized any products or generated any revenue from product sales and have financed our operations primarily with proceeds from sales of our preferred stock, proceeds from our collaboration with Moderna, research tax credits, convertible debt financing, closing of pre-closing financing, and completion of the merger. Our operations to date have been limited to organizing and staffing the company, business planning, capital raising, establishing and maintaining our intellectual property portfolio, building our pipeline of product candidates, conducting drug discovery activities, undertaking pre-clinical studies, manufacturing process development studies, conducting early-stage clinical trials, and providing general and administrative support for these operations. We have devoted substantially all of our financial resources and efforts to pursuing discovery, research and development of our product candidates. We only recently initiated clinical development of our lead product candidate, CT-0508, and are in the pre-clinical testing stages for our other product candidates.

Our net losses were $61.2 million for the year ended December 31, 2022 and $40.8 million for the year ended December 31, 2021. As of December 31, 2022, we had $52.0 million in cash, cash equivalents and marketable securities and an accumulated deficit of $158.2 million. We expect to devote substantial financial resources to our ongoing and planned activities, particularly as we conduct our ongoing clinical trial of CT-0508 and pursue related combination strategies, prepare for, initiate and conduct our planned clinical trials of CT-1119 and CT-0525 and advance our discovery programs and continues our product development efforts. In addition, if we obtain marketing approval for CT-0508 or any other product candidate we are developing or develops in the future, we expect to incur significant commercialization expenses related to product manufacturing, sales, marketing and distribution. Furthermore, upon the closing of the merger, we expect to incur additional costs associated with operating as a public company.

On March 7, 2023, immediately prior to the consummation of the merger with Sesen Bio, Inc. (Sesen Bio), a publicly traded life science company, we sold 1,964,101 shares of our common stock at $15.60 per share and received gross proceeds of $30.6 million. At the closing of the merger, after taking into account shares of our common stock purchased in connection with the pre-closing financing and the conversion of our $35.0 million outstanding convertible note, Sesen Bio issued an aggregate of approximately 29,880,394 shares of our common stock to our stockholders (including 5,059,338 shares issued to the holder of the convertible note in accordance with the Convertible Note Conversion Agreement, dated as of September 20, 2022), based on an exchange ratio set forth in the Agreement and Plan of Merger and Reorganization, dated as of September 20, 2022 and as subsequently amended, resulting in approximately 40,254,666 shares of common stock being issued and outstanding immediately following the effective time of the merger. Sesen Bio had $74.7 million in cash, cash equivalents and marketable securities at the time of the merger. As a result of the merger, our cash, cash equivalents and marketable securities increased by $105.3 million.

We will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital or obtain adequate funds when needed or on acceptable terms, we may be required to delay, limit, reduce or terminate our discovery and product development programs or any future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. In addition, attempting to secure additional financing may divert the time and attention of our management from day-to-day activities and distract from our discovery and product development efforts.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve or maintain profitability. We may never succeed in these activities and, even if we do, may never generate revenues that are significant enough to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand business, maintain discovery and product development efforts, diversify our pipeline of product candidates or even continue operations.

Moderna Collaboration and License Agreement

In January 2022, we entered into the Moderna Collaboration Agreement, which provides for a broad strategic partnership with Moderna to discover, develop and commercialize *in vivo* engineered CAR-M therapeutics for up to 12 oncology programs. Under the Moderna Collaboration Agreement, the parties initiate research programs during a research term, focused on the discovery and research of products directed to biological targets. Either party may nominate a target for inclusion in a research program, subject to certain exclusions. We refer to a target included in a research program pursuant to designated procedures as a research target. Moderna may replace research targets pursuant to designated procedures. Moderna's mRNA platform builds on continuous advances in basic and applied mRNA science, delivery technology and manufacturing, and has allowed the development of therapeutics and vaccines for infectious diseases, immuno-oncology, rare diseases, cardiovascular diseases and auto-immune diseases. The first four research targets have been nominated and all programs are currently in the discovery phase at Carisma.

In collaboration with Moderna, we have established an approach that uses Moderna's LNP/mRNA technology, together with our CAR-M platform technology, to create novel *in vivo* oncology gene therapies. We believe this approach has the potential to enable a series of off-the-shelf product candidates to target a patient's own myeloid cells against cancer cells directly within their body.

The collaboration is managed by a joint steering committee, or JSC, which is comprised of representatives from us and Moderna. Decisions of the JSC are made by consensus, with each party having one vote. If the JSC is unable to agree, and the parties' executives are not able to resolve the dispute, then Moderna has final decision-making authority, subject to specified limitations.

Under the terms of the Moderna Collaboration Agreement, we received a $45.0 million up-front cash payment. Assuming Moderna develops and commercializes 12 products, each directed to a different development target, we are also eligible to receive up to between $247.0 million and $253.0 million per product in development target designation, development, regulatory and commercial milestone payments. In addition, we are eligible to receive mid to high single digit tiered royalties on net sales of any products that are commercialized under the agreement, which may be subject to reductions. Moderna has also agreed to cover the cost of certain milestone payments and royalties we owe to a licensor under one of our intellectual property in-license agreements that we are sublicensing to Moderna under the Moderna Collaboration Agreement, which royalties Moderna may deduct in part from any royalties owed to us.

Impact of the COVID-19 Pandemic

We are carefully monitoring the COVID-19 pandemic which continues to evolve worldwide. The continued spread of COVID-19 and the measures taken by governmental authorities, and any future epidemic disease outbreaks, could cause difficulties recruiting or retaining patients for our clinical trials, disrupt the supply chain and the manufacture or shipment of pre-clinical materials, delay, limit or prevent our employees and third parties from continuing research and development activities which could delay our pre-clinical studies, and increase our development costs and/or have a material adverse effect on our business, financial condition and results of operations. The effect of the COVID-19 pandemic on our development timelines is difficult to assess or predict. The future impact of the COVID-19 pandemic on our industry, the healthcare system and our current and future operations and financial condition will depend on future developments, which are highly uncertain and cannot be predicted with confidence.

Financial Operations Overview

Revenues

To date, we have not generated any revenue from product sales and does not expect to generate any revenue from the sale of products for the foreseeable future. Our revenues to date have been generated from the Moderna Collaboration Agreement. Moderna reimburses us for all costs incurred by it in connection with its research and development activities under the Moderna Collaboration Agreement plus a reasonable margin for the respective services performed. We expect that our revenue for at least the next several years will be derived primarily from Moderna Collaboration Agreement, other current collaboration agreements and any additional collaborations that we may enter into in the future. To date, we have not received any royalties under the Moderna Collaboration Agreement.

Research and development expense

Research and development expenses consist primarily of costs incurred for our research activities, including discovery efforts and the development of product candidates, and include:

- expenses incurred to conduct the necessary pre-clinical studies and clinical trials required to obtain regulatory approval;
- salaries, benefits and other related costs, including stock-based compensation expense, for personnel engaged in research and development functions;
- costs of funding research performed by third parties, including pursuant to agreements with CROs, as well as investigative sites and consultants that conduct our pre-clinical studies and clinical trials;
- expenses incurred under agreements with CMOs, including manufacturing scale-up expenses and the cost of acquiring and manufacturing pre-clinical study and clinical trial materials;
- costs of outside consultants, including their fees, stock-based compensation and related travel expenses;
- the costs of laboratory supplies and acquiring materials for pre-clinical studies;
- facility-related expenses, which include direct depreciation costs of equipment and expenses for rent and maintenance of facilities and other operating costs; and
- third-party licensing fees.

Research and development activities are central to our business model. Product candidates in later stages of clinical development will generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect our research and development expenses to increase significantly over the next several years as we increase personnel costs, including stock-based compensation, conduct ongoing and planned clinical trials for CT-0508, conduct research and development activities under the Moderna Collaboration Agreement and conduct other clinical and pre-clinical activities for other product candidates and prepare regulatory filings for any of our product candidates.

The successful development of our current or future product candidates is highly uncertain. At this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the development of any product candidates. The success of CT-0508 and our other product candidates will depend on several factors, including the following:

- successfully completing pre-clinical studies;
- successfully initiating future clinical trials;
- successfully enrolling patients in and completing clinical trials;
- scaling up manufacturing processes and capabilities to support clinical trials of CT-0508 and any other product candidate;
- applying for and receiving marketing approvals from applicable regulatory authorities;
- obtaining and maintaining intellectual property protection and regulatory exclusivity for CT-0508 and any other product candidates it is developing or may develop in the future;
- making arrangements with third-party manufacturers, or establishing commercial manufacturing capabilities, for both clinical and commercial supplies of our product candidates;
- establishing sales, marketing and distribution capabilities and launching commercial sales of our products, if and when approved, whether alone or in collaboration with others;
- acceptance of CT-0508 and any other product candidates, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining coverage, adequate pricing and adequate reimbursement from third-party payors, including government payors;
- maintaining, enforcing, defending and protecting our rights in our intellectual property portfolio;
- not infringing, misappropriating or otherwise violating others' intellectual property or proprietary rights; and
- maintaining a continued acceptable safety profile of our products following receipt of any marketing approvals.

A change in the outcome of any of these variables with respect to the development, manufacture or commercialization activities of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive, if there are safety concerns or if we determine that the observed safety or efficacy profile would not be competitive in the marketplace, we could be required to expend significant additional financial resources and time on the completion of clinical development. Product commercialization will take several years, and we expect to spend a significant amount in development costs.

General and administrative expense

General and administrative expense consists primarily of personnel expenses, including salaries, benefits and stock-based compensation expense for employees in executive, finance, accounting, business development and human resource functions. General and administrative expense also includes corporate facility costs, including rent, utilities, depreciation and maintenance, and costs not otherwise included in research and development expense, legal fees related to intellectual property and corporate matters as well as fees for accounting and consulting services.

We expect that our general and administrative expense will increase in the future to support our continued research and development activities, potential commercialization efforts and increased costs of operating as a public company. These increases will likely include increased costs related to the hiring of additional personnel and fees to outside consultants, lawyers and accountants, among other expenses. Increased costs associated with being a public company will also include expenses related to services associated with maintaining compliance with the requirements of Nasdaq and the SEC, insurance and investor relations costs. If any of our current or future product candidates obtains marketing approval, we expect that we would incur significantly increased expenses associated with sales and marketing efforts.

Interest expense

Interest expense consists of interest on our convertible note that was entered into concurrently with the Moderna Collaboration Agreement including non-cash interest expense associated with the amortization of the debt discount.

Change in fair value of derivative liability

Change in fair value of the derivative liability for the redemption feature of our convertible note reflects the non-cash charge for changes in the fair value of the derivative liability that is subject to re-measurement at each balance sheet date until our obligations under the convertible note are satisfied. As the convertible note converted into shares of Sesen Bio common stock upon closing of the merger, the redemption feature will be derecognized in the subsequent period.

Income tax provision

Since inception, we have incurred significant net losses. As of December 31, 2022, we had net operating loss carryforwards, or NOLs, for federal income tax purposes of $94.2 million. We have provided a valuation allowance against the full amount of our deferred tax assets since, in our opinion, based upon our historical and anticipated future losses, it is more likely than not that the benefits will not be realized. As of December 31, 2022, we remained in a full valuation allowance position.

The utilization of our NOLs may be subject to a substantial annual limitation in the event of certain cumulative changes in the ownership interest of significant stockholders over a three-year period in excess of 50 percent, as defined under Sections 382 and 383 of the Code, respectively, as well as similar state provisions. We have recorded a valuation allowance on all of our deferred tax assets, including deferred tax assets related to NOLs.

Results of Operations

Comparison of the Years Ended December 31, 2022 and 2021

	Year Ended December 31,	
	2022	**2021**
Collaboration revenues	$ 9,834	$ —
Operating expenses:		
Research and development	56,618	34,387
General and administrative	9,378	6,407
Total operating expenses	65,996	40,794
Operating loss	(56,162)	(40,794)
Change in fair value of derivative liability	(1,919)	—
Interest (expense) income, net	(3,145)	10
Net loss	$ (61,226)	$ (40,784)

Collaboration Revenues

Collaboration revenues were $9.8 million for the year ended December 31, 2022, which related to the research and development activities completed under the Moderna Collaboration Agreement that we executed in January 2022.

Research and Development Expenses

We track outsourced development, outsourced personnel costs and other external research and development costs of our CT-0508 program. We do not track internal research and development costs on a program-by-program basis. The following table summarizes our research and development expenses for the years ended December 31, 2022 and 2021 (in thousands):

	Year Ended December 31,	
	2022	**2021**
CT-0508	$ 12,654	$ 10,570
Personnel costs, including stock-based compensation	16,233	8,490
Other clinical and pre-clinical development expenses	4,913	5,035
Facilities and other expenses	22,818	10,292
Total research and development expense	$ 56,618	$ 34,387

Research and development expenses for the year ended December 31, 2022 were $56.6 million, compared to $34.4 million for the year ended December 31, 2021. The increase of $22.2 million was primarily due to an increase in our personnel costs of $7.7 million resulting from growth in research and development employee headcount and a $12.5 million increase of facilities and other expenses from increased lab spaces and lab supplies from expanded clinical and pre-clinical work. We also had a $2.1 million increase in direct costs associated with CT-0508.

General and Administrative Expense

The following table summarizes our general and administrative expenses for the years ended December 31, 2022 and 2021 (in thousands):

	Year Ended December 31,	
	2022	2021
Personnel costs, including stock-based compensation	$ 2,938	$ 2,446
Legal and professional fees	4,349	2,321
Facilities and supplies	601	869
Other expenses	1,490	771
Total general and administrative expense	$ 9,378	$ 6,407

General and administrative expenses for the year ended December 31, 2022 were $9.4 million, compared to $6.4 million for the year ended December 31, 2021. The increase of $3.0 million was primarily attributable to a $2.0 million increase in legal and professional fees in support of our patent portfolio and expanding infrastructure in preparation to operate as a public company as well as a $0.7 million increase in other expenses due to an increase in public relation expenditures, and a $0.5 million increase in personnel costs as a result of an increase in hiring personnel.

Interest (Expense) Income, net

We recognized $3.1 million in interest (expense) income, net for the year ended December 31, 2022, which was attributable primarily to interest expense on the outstanding principal balance associated with the convertible note issued to Moderna in January 2022 including non-cash interest expense associated with the amortization of the debt discount partially offset by interest income of $0.7 million.

Change in Fair Value of Derivative Liability

We recognized a $1.9 million non-cash charge for the increase in fair value of the derivative liability associated with the redemption feature of the convertible note with Moderna. The increase was attributable to the timing in which we estimate a settlement event for the derivative to occur and interest accrued during the year which is also subject to conversion.

Liquidity and Capital Resources

Sources of Liquidity

As of December 31, 2022, we had $52.0 million in cash, cash equivalents and marketable securities and an accumulated deficit of $158.2 million. In March 2023, we received $105.3 million from the closing of the merger and pre-closing financing. To date, we have not yet commercialized any products or generated any revenue from product sales and have financed operations primarily with proceeds from sales of preferred stock, proceeds from our collaboration with Moderna, research tax credits and convertible debt financing. Between June 2018 and December 2021, we have sold convertible preferred stock, raising aggregate gross proceeds of $122.2 million. In January 2022, we received $80.0 million from Moderna comprised of an upfront non-refundable payment of $45.0 million in connection with the Moderna Collaboration Agreement and $35.0 million in connection with the convertible note. Upon the closing of the merger, the convertible note and accrued interest were automatically converted into Sesen Bio common stock.

Cash Flows

The following table shows a summary of our cash flows for the years ended December 31, 2022 and 2021 (in thousands):

	Year Ended December 31,	
	2022	2021
Cash provided by (used in)		
Operating activities	$ (5,116)	$ (37,328)
Investing activities	(32,560)	(1,871)
Financing activities	33,319	15,962
Net change in cash and cash equivalents	$ (4,357)	$ (23,237)

Cash Flows from Operating Activities

During the year ended December 31, 2022, we used $5.1 million of net cash in operating activities. Cash used in operating activities reflected our net loss of $61.2 million that was offset by $10.9 million of non-cash charges related to depreciation and amortization expense, stock-based compensation, reductions in the operating right of use, or ROU, assets, amortization of the debt discount on the convertible note, change in fair value of the derivative liability, and non-cash interest on the finance liability from the failed sale-leaseback and the accretion on marketable securities and a $45.2 million net change in our operating assets and liabilities, which was primarily attributable to the upfront non-refundable payment received from Moderna pursuant to the Moderna Collaboration Agreement.

During the year ended December 31, 2021, we used $37.3 million of net cash in operating activities. Cash used in operating activities reflected our net loss of $40.8 million that was offset by $2.0 million of non-cash charges related to depreciation and amortization expense, stock-based compensation and reductions in the operating ROU assets and a $1.5 million net change in our operating assets and liabilities attributable to the timing in which we pay our vendors for research and development activities.

Cash Flows from Investing Activities

During the year ended December 31, 2022, we used $32.6 million of net cash in investing activities. Cash used in investing activities reflected purchases of marketable securities of $90.9 million and the purchase of property and equipment of $4.7 million, offset by $63.0 million of proceeds from the sale of marketable securities.

During the year ended December 31, 2021, we used $1.9 million for the purchase of property and equipment.

Cash Flows from Financing Activities

During the year ended December 31, 2022, we received $33.3 million of net cash from financing activities, primarily attributable to the $35.0 million in proceeds from the convertible note and $1.6 million in proceeds from the failed sale-leaseback arrangement, partially offset by $2.5 million in payments made on deferred financing costs and $0.9 million in payments made on financing leases.

During the year ended December 31, 2021, we received $16.0 million of net cash from financing activities, primarily attributable to the net proceeds from the sale of our Series B convertible preferred stock.

Funding Requirements

We expect to devote substantial financial resources to our ongoing and planned activities, particularly as we conduct our ongoing clinical trial of CT-0508 and pursue related combination strategies, prepares for, initiate and conduct our planned clinical trials of CT-1119 and CT-0729 and advance our discovery programs and continue our product development efforts.

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we advance our pre-clinical activities and clinical trials. In addition, if we obtain marketing approval for CT-0508 or any other product candidate we are developing or develop in the future, we expect to incur significant commercialization expenses related to product manufacturing, sales, marketing and distribution. In addition, we expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital or obtain adequate funds when needed or on acceptable terms, we may be required to delay, limit, reduce or terminate our discovery and product development programs or any future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourself. In addition, attempting to secure additional financing may divert the time and attention of our management from day-to-day activities and distract us from discovery and product development efforts.

Our future capital requirements will depend on many factors, including:

- the progress, costs and results of our ongoing clinical trial of CT-0508 and other planned and future clinical trials;
- the scope, progress, costs and results of pre-clinical testing and clinical trials of CT-0508 for additional combinations, targets and indications;
- the number of and development requirements for additional indications for CT-0508 or for any other product candidates;
- the success of our collaborations with Moderna or others;
- our ability to scale up our manufacturing processes and capabilities to support clinical trials of CT-0508 and other product candidates we are developing and develops in the future;
- the costs, timing and outcome of regulatory review of CT-0508 and other product candidates we re developing and may develop in the future;
- potential changes in the regulatory environment and enforcement rules;
- our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of such arrangements;
- the payment of license fees and other costs of our technology license arrangements;
- the costs and timing of future commercialization activities, including product manufacturing, sales, marketing and distribution, for CT-0508 and other product candidates we are developing and may develop in the future for which we may receive marketing approval;
- our ability to obtain and maintain acceptance of any approved products by patients, the medical community and third-party payors;
- the amount and timing of revenue, if any, received from commercial sales of CT-0508 and any other product candidates we are developing or develop in the future for which we receive marketing approval;
- potential changes in pharmaceutical pricing and reimbursement infrastructure;
- the availability of raw materials for use in production of our product candidates;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property and proprietary rights and defending any intellectual property-related claims; and
- the extent to which we in-license or acquire additional technologies or product candidates.

We believe that our cash, cash equivalents and marketable securities of $52.0 million as of December 31, 2022 and net cash of $105.3 million from completion of the merger and pre-closing financing will be sufficient to sustain our operating expenses and capital expenditure requirements at least through the end of 2024. However, we have based this estimate on assumptions that may prove to be wrong, and our operating plan may change as a result of many factors currently unknown to us. In addition, changing circumstances could cause us to consume capital significantly faster than we currently anticipate, and we may need to spend more than currently expected because of circumstances beyond our control. As a result, we could deplete our capital resources sooner than we currently expect. In addition, because the successful development of CT-0508, CT-1119, CT-0525 and any combination studies or other product candidates that we pursue is highly uncertain, at this time we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the development of any product candidate.

We currently anticipate that we will use the expected cash balances of the company as of the closing of the merger resulting from the net cash expected to be provided by Sesen Bio upon completion of the merger, together with our existing cash resources and the expected gross proceeds from our pre-closing financing, as follows:

- approximately $44.0 million to $55.0 million for the advancement of CT-0508 for treatment of solid tumors that overexpress HER2, including completion of our ongoing Phase 1 clinical trial and related combination studies, which we expect to report clinical data for in the second half of 2023;
- approximately $28.0 million to $35.0 million for the advancement of CT-0525 for treatment of solid tumors that overexpress HER2, including submission of an IND to the FDA in the second half of 2023 and the initiation of clinical development shortly thereafter; and
- the remainder for preclinical studies for research stage programs, working capital and other general corporate purposes.

This expected use of anticipated funds represents our intentions based upon our current plans and business conditions. The amounts and timing of the actual expenditures may vary significantly depending on numerous factors, including the progress of our development efforts, the status of and results from clinical trials and preclinical studies, the timing of regulatory submissions, as well as any collaborations that we may enter into with third parties for our product candidates, and any unforeseen cash needs. As a result, we will retain broad discretion over the allocation of the funds available to us.

We estimate that such funds will be sufficient to enable us to complete our ongoing Phase 1 clinical trial of CT-0508 and the related sub study evaluating the combination of CT-0508 and pembrolizumab, and initiate a Phase 1 clinical trial of CT-0525 following submission of an IND to the FDA. We have based these estimates on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect.

Identifying potential product candidates and conducting pre-clinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. We will not generate commercial revenues unless and until we can achieve sales of products, which we do not anticipate for a number of years, if at all. Accordingly, we will need to obtain substantial additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all, and may be impacted by the economic climate and market conditions. For example, market volatility resulting from the COVID-19 pandemic, any other future infectious diseases, epidemics or pandemics or general U.S. or global economic or market conditions could also adversely impact our ability to access capital as and when needed. Alternatively, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans.

Until such time, if ever, we can generate substantial revenues from product sales, we expect to finance our cash needs through a combination of public and private equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of those securities may include liquidation or other preferences that adversely affect your rights as a holder of our common stock. Debt financing and preferred equity financing, if available, would increase our fixed payment obligations and may involve agreements that include covenants limiting or restricting our operations and ability to take specific actions, such as incurring additional debt, making acquisitions, engaging in acquisition, merger or collaboration transactions, selling or licensing our assets, making capital expenditures, redeeming our stock, making certain investments, declaring dividends or other operating restrictions that could adversely impact our ability to conduct business.

If we raise funds through additional collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our intellectual property, future revenue streams, discovery programs or product candidates, grant licenses on terms that may not be favorable to us or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourself, any of which may have a material adverse effect on our business, operating results and prospects. If we are unable to raise capital or obtain adequate funds when needed or on acceptable terms, we may be required to delay, limit, reduce or terminate our discovery and product development programs or any future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourself.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations and commitments at December 31, 2022 (in thousands):

	Total	Less than 1 Year	1 to 3 Years	4 to 5 Years	More than 5 Years
Contractual obligations:					
Operating lease commitments[1]	$ 4,999	$ 3,685	$ 658	$ 473	$ 183
Finance lease commitments	2,239	1,300	939	-	-
Convertible promissory note[2]	37,568	37,568	-	-	-
Total contractual obligations	$ 44,806	$ 42,553	$ 1,597	$ 473	$ 183

(1) Reflects obligations pursuant to our office and laboratory leases in Philadelphia, Pennsylvania.

(2) Reflects principal and interest payments pursuant to the convertible note issued to Moderna in January 2022. The convertible note and accrued interest was automatically converted into shares of Sesen Bio common stock upon the closing of the merger.

The commitment amounts in the table above are associated with contracts that are enforceable and legally binding and that specify all significant terms, including fixed or minimum services to be used, fixed, minimum or variable price provisions, and the approximate timing of the actions under the contracts. Our contracts with CMOs, CROs and other third parties for the manufacture of our product candidates and to support pre-clinical research studies and clinical testing are generally cancelable by us upon prior notice and do not contain any minimum purchase commitments. Payments due upon cancellation consisting only of payments for services provided or expenses incurred, including noncancelable obligations of our service providers, up to the date of cancellation are not included in the table above as the amount and timing of such payments are not known.

The table above does not include any potential milestone or royalty payments that we may be required to make under license agreement with Penn and under licensing agreements with other third parties not considered material. We excluded these milestone and royalty payments given that the timing and likelihood of any such payments cannot be reasonably estimated at this time.

University of Pennsylvania License

In November 2017, we entered into a license agreement with Penn for certain intellectual property licenses, which was amended in February 2018, January 2019, March 2020 and June 2021. We are responsible for paying Penn an annual license maintenance fee in the low tens of thousands of dollars, payable until our first payment of a royalty. We are required to pay Penn up to $10.9 million per product in development and regulatory milestone payments, up to $30.0 million per product in commercial milestone payments, and up to an additional $1.7 million in development and regulatory milestone payments for the first CAR-M product directed to mesothelin. While the agreement remains in effect, we are required to pay Penn low to mid-single digit percentage tiered royalties on annual net sales of licensed products, which may be subject to reductions. Penn is guaranteed a minimum royalty payment amount in the low hundreds of thousands of dollars for each year after the first commercial sale of a licensed product. We must also pay Penn a percentage in the mid-single digits to low double digits of certain types of income we receive from sublicensees. In addition, we are required to pay Penn an annual alliance management fee in the low tens of thousands of dollars, ending after several years, unless we provide funding to Penn for research and development activities that extend beyond a specified date, in which case we will continue to owe the alliance management fee for each year in which we continue to fund such activities. We also paid Penn an upfront fee in the low hundreds of thousands of dollars for the license to the patents related to the mesothelin binder that is incorporated into the CAR design for our mesothelin product candidate. We are responsible for a pro rata share of costs relating to the prosecution and maintenance of the licensed patents.

Critical Accounting Policies

Our management's discussion and analysis of financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of the consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in our consolidated financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to the fair value of common stock, the derivative liability, stock-based compensation assumptions, the estimated useful lives of property and equipment and accrued research and development expenses. We base our estimates on historical experience, known trends and events, and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 3 of our consolidated financial statements which is filed as Exhibit 99.4 to our Current Report on this Form 8-K/A, we believe the following accounting policies are the most critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Revenues from Contracts

We account for our revenue in accordance with Accounting Standards Codification, or ASC, 606, *Revenue from Contracts with Customers*, or ASC 606. Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps at inception of the agreement or upon material modification of the agreement: (i) identifies the contract(s) with a customer; (ii) identifies the performance obligations in the contract; (iii) determines the transaction price, including variable consideration, if any; (iv) allocates the transaction price to the performance obligations in the contract; and (v) recognizes revenue when (or as) the entity satisfies a performance obligation.

We consider the pattern of satisfaction of the performance obligations under step (v) above to be a critical accounting estimate. More specifically, the determination of the level of achievement of research and development service performance obligations, whose pattern of satisfaction is measured using costs incurred to date as compared to total costs incurred and expected to be incurred in the future is driven by a critical accounting estimate.

In estimating the costs expected to be incurred in the future, we use our most recent budget and long-range plan, adjusted for any pertinent information. While this is our best estimate as of the reporting period, costs expected to be incurred in the future require management's judgment as the scope and timing of research and development activities may change significantly over time. We may adjust the scope of our research and development activities based on several factors, such as additional work needed to support advancement of product candidate or change in the number of patients in trials. Further, research and development services may no longer be within the scope of a collaboration agreement, as has been the case with certain of our programs. The timing of when research and development costs are expected to be incurred may change as a result of external factors, such as delays caused by manufacturing or supply chain, or difficulty in enrolling patients; or internal factors, such as prioritization of programs. Our estimate of the scope and timing of research and development services performed relative to the actual scope and timing may have a significant impact on revenue recognition.

Research and Development Accruals

Research and development expenses consist primarily of costs incurred in connection with the development of our product candidates. We expense research and development costs as incurred.

We accrue expenses for pre-clinical studies and activities performed by third parties based upon estimates of the proportion of work completed over the term of the individual trial and patient enrollment rates in accordance with agreements with third parties. We determine the estimates by reviewing contracts, vendor agreements and purchase orders, and through discussions with our internal clinical personnel and external service providers as to the progress or stage of completion of activities or services and the agreed-upon fee to be paid for such services. However, actual costs and timing of clinical trials are highly uncertain, subject to risks and may change depending upon a number of factors, including our clinical development plan.

We make estimates of our accrued expenses as of each balance sheet date in our consolidated financial statements based on facts and circumstances known at that time. If the actual timing of the performance of services or the level of effort varies from the estimate, we will adjust the accrual accordingly. Non-refundable advance payments for goods and services, including fees for process development or manufacturing and distribution of pre-clinical supplies that will be used in future research and development activities, are deferred and recognized as expense in the period that the related goods are consumed or services are performed.

Milestone payments within our licensing and collaboration arrangements are recognized when achievement of the milestone is deemed probable to occur. To the extent products are commercialized and future economic benefit has been established, commercial milestones that become probable are capitalized and amortized over the estimated remaining useful life of the intellectual property. In addition, we accrue royalty expense and sublicense non-royalty payments, as applicable, for the amount we are obligated to pay, with adjustments as sales are made.

Stock-Based Compensation

We measure compensation expense for all stock-based awards based on the estimated fair value of the award on the grant date. We use the Black-Scholes option pricing model to value our stock option awards. We recognize compensation expense on a straight-line basis over the requisite service period, which is generally the vesting period of the award. We have not issued awards where vesting is subject to a market or performance condition.

The Black-Scholes option pricing model requires the use of subjective assumptions that include the expected stock price volatility and the fair value of the underlying common stock on the date of grant. See Note 9 to our audited consolidated financial statements which is filed as Exhibit 99.4 to our Current Report on this Form 8-K/A for information concerning certain of the specific assumptions we used in applying the Black-Scholes option pricing model to determine the estimated fair value of our stock options granted during the years ended December 31, 2022 and 2021.

Estimating the fair value of common stock

We are required to estimate the fair value of our common stock underlying our stock-based awards. Because our common stock is not currently publicly traded, the fair value of our common stock has been estimated on each grant date by our board of directors, with input from management, considering our most recently available third-party valuation of our common stock.

Our board of directors considered various objective and subjective factors to estimate the estimated fair value of our common stock, including:

- the estimated value of all classes of securities outstanding;
- the anticipated capital structure that will directly impact the value of the currently outstanding securities;
- Our results of operations and financial position;
- the status of our research and development efforts;
- the composition of, and changes to, our management team and the board of directors;
- the lack of liquidity of our common stock as a private company;
- Our stage of development and business strategy and the material risks related to our business and industry;
- external market conditions affecting the life sciences and biotechnology industry sectors;
- the likelihood of achieving a liquidity event for the holders of our common stock, such as an initial public offering, or a sale of the company, given the prevailing market conditions; and
- the market value and volatility of comparable companies.

In estimating the fair value of our common stock, the board of directors considered the subjective factors discussed above in conjunction with the most recent valuations of our common stock that were prepared by an independent third party. The independent valuation prepared as of February 28, 2022 was utilized by the board of directors when estimating the fair value of our common stock for the awards granted in 2022. The independent valuation prepared as of April 1, 2021 was utilized by the board of directors when estimating the fair value of our common stock for the awards granted after such date and through December 31, 2021. These third-party valuations resulted in an estimated fair value of our common stock of $2.68 and $2.77 per share as of February 28, 2022 and April 1, 2021, respectively.

Redemption feature

The redemption feature of the convertible note with Moderna is marked-to-market each reporting period with the changes in fair value recorded to other expense in the consolidated statements of operations until the obligations under the convertible note are satisfied. The fair value of the redemption feature of the convertible note is estimated by using a discounted cash flow method in conjunction with assuming the probability of completing a qualified financing. During the year ended December 31, 2022, the discount factor used was 12% and a 90% to 100% probability of completing a qualified financing prior to the maturity date of the convertible note was assumed. At December 31, 2022, the estimated time of conversion was three months.

Recent Accounting Pronouncements

See Note 3 to our consolidated financial statements which is filed as Exhibit 99.4 to our Current Report on this Form 8-K/A for a description of recent accounting pronouncements applicable to our consolidated financial statements.

Off-Balance Sheet Arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, including entities sometimes referred to as structured finance or special purpose entities that were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. We do not engage in off-balance sheet financing arrangements. In addition, we do not engage in trading activities involving non-exchange traded contracts. We therefore believe that we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these relationships.

Qualitative and Quantitative Disclosures About Market Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities. Our interest-earning assets consist of cash, cash equivalents and marketable securities. Interest income earned on these assets was $0.7 million and $9,653 for the years ended December 31, 2022 and 2021.

Exhibit 99.6

UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

On March 7, 2023, Sesen Bio consummated the merger with Carisma in accordance with the terms of the Agreement and Plan of Merger Reorganization, dated as of September 20, 2022, as amended by the First Amendment thereto dated as of December 29, 2022 and the Second Amendment thereto dated as of February 13, 2023 (as amended, the Merger Agreement) by and among Carisma and Seahawk Merger Sub, Inc. (Merger Sub) (the Merger), pursuant to which, among other matters, Merger Sub merged with and into Carisma, with Carisma continuing as a wholly-owned subsidiary of Sesen Bio and the surviving corporation of the Merger. At which time, Sesen Bio changed its name to "Carisma Therapeutics Inc" (the Company).

Immediately prior to the execution and delivery of the Merger Agreement, Carisma entered into a subscription agreement in connection with the Carisma pre-closing financing, pursuant to which certain investors agreed to purchase shares of Carisma common stock at an aggregate purchase price of $30.6 million. The shares of Carisma common stock issued in the Carisma pre-closing financing were converted into shares of Sesen Bio common stock in the Merger in accordance with the exchange ratio. The Carisma convertible note converted into 5,059,338 shares of Sesen Bio common stock calculated in accordance with the terms of the Carisma convertible note and based on the exchange ratio for the conversion of Carisma capital stock into Sesen Bio common stock.

On March 7, 2023, the Company entered into the CVR Agreement with a rights agent pursuant to which Sesen Bio's pre-Merger stockholders of record as of March 7, 2023 received one contingent value right in the form of a dividend (a CVR) for each outstanding share of Sesen Bio common stock held by such stockholders on such date. Each CVR represents the contractual right to receive contingent cash payments upon the receipt by the Company of (i) certain proceeds payable by Roche, if any, pursuant to the Roche Asset Purchase Agreement, upon the achievement by Roche of a specified milestone set forth in the Roche Asset Purchase Agreement and (ii) the proceeds from any sale of the Company's pre-Merger non-cash assets, including Vicineum, subject to certain customary deductions, including for expenses and taxes. The CVRs do not have any voting or dividend rights and do not represent any equity or ownership interest in the Company or its subsidiaries, and interest will not accrue on any amounts payable on the CVRs. Sesen Bio paid a pre-closing dividend to its common stockholders of record consisting of (a) one CVR for each outstanding share of pre-Merger common stock held by such stockholder as of such date, representing the right to receive contingent payments upon the occurrence of certain events set forth in, and subject to and in accordance with the terms and conditions of, the CVR Agreement and (b) a special cash dividend in the aggregate of $75.0 million.

Each outstanding share of Carisma capital stock, including shares of Carisma common stock issued in connection with the Carisma pre-closing financing, was converted shares of Sesen Bio common stock equal to the exchange ratio. The exchange ratio was 1.8994 shares of Sesen Bio common stock for each share of Carisma capital stock.

The following selected unaudited pro forma condensed combined financial data gives effect to the (i) Merger, (ii) the Carisma pre-closing financing, (iii) the automatic conversion of the Carisma convertible note, and (iv) the pre-closing dividend.

The Merger is accounted for as a reverse recapitalization under U.S. GAAP because the primary assets of Sesen Bio were cash, cash equivalents, and marketable securities. For financial reporting purposes, Carisma has been determined to be the accounting acquirer based upon the terms of the Merger and other factors including: (i) Carisma stockholders own approximately 71.7% of the fully diluted closing Company common stock immediately following the effective time of the Merger, (ii) Carisma holds the majority (six of seven) of board seats of the combined company, and (iii) Carisma's management holds all key positions in the management of the combined company. The "fully diluted closing Sesen Bio common stock" as used herein means (x) the number of outstanding shares of Sesen Bio common stock, which amount excludes the shares of Sesen Bio common stock available for issuance under the 2014 Incentive Plan and the 2009 Incentive Plan, as well as inducement grants made outside of the Sesen Bio stockholder-approved plans and out-of-the-money Sesen Bio options, plus (y) the number of outstanding shares of Carisma common stock, which amount includes the shares of Carisma common stock available for issuance under the Carisma Plan.

The unaudited pro forma condensed combined financial information was prepared in accordance with Article 11 of Regulation S-X. The Sesen Bio and Carisma unaudited pro forma condensed combined balance sheet data assume that the Merger took place on December 31, 2022, and combines the Sesen Bio and Carisma historical balance sheets at December 31, 2022. The Sesen Bio and Carisma unaudited pro forma condensed combined statements of operations data assume that the Merger took place as of January 1, 2022 and combines the historical results of Sesen Bio and Carisma for the year ended December 31, 2022. The historical financial statements of Sesen Bio and Carisma, which are filed as Exhibit 99.4 to the Current Report on this Form 8-K/A, have been adjusted to give pro forma effect to events that are (i) directly attributable to the Merger, (ii) factually supportable, and (iii) with respect to the statements of operations, expected to have a continuing impact on the combined results.

The unaudited pro forma condensed combined financial statements are based on the assumptions and adjustments that are described in the accompanying notes. The unaudited pro forma condensed combined financial statements and pro forma adjustments have been prepared based on preliminary estimates of fair value of assets acquired and liabilities assumed. The final determination of these estimated fair values will be based on the actual net tangible assets of Sesen Bio that existed as of the date of completion of the Merger.

The unaudited pro forma condensed combined financial statements do not give effect to the potential impact of current financial conditions, regulatory matters, operating efficiencies or other savings or expenses that may be associated with the Merger. The unaudited pro forma condensed combined financial statements have been prepared for illustrative purposes only and are not necessarily indicative of the financial position or results of operations in future periods or the results that actually would have been realized had Sesen Bio and Carisma been a combined company during the specified period. The unaudited pro forma condensed combined financial statements, including the notes thereto, should be read in conjunction with the separate historical audited financial statements of Sesen Bio for the years ended December 31, 2022 which is filled in Sesen Bio's Form 10-K and Carisma for the year ended December 31, 2022 which is filed as Exhibit 99.4 to the Current Report on this Form 8-K/A.

Unaudited Pro Forma Condensed Combined Balance Sheet
As of December 31, 2022
(in thousands, except per share amounts)

	Carisma Therapeutics Inc.	Sesen Bio, Inc.	Transactions Adjustments	Notes	Pro Forma Combined
ASSETS					
Current assets:					
Cash and cash equivalents	$ 24,194	$ 112,553	$ (68,572)	A	$ 68,175
Short-term marketable securities	27,802	54,366	-		82,168
Restricted cash	-	21,000	-		21,000
Other receivables	-	825	-		825
Prepaid expenses and other current assets	2,596	400	-		2,996
Total current assets	**54,592**	**189,144**	**(68,572)**		**175,164**
Restricted cash	-	30	-		30
Property and equipment, net	8,628	-	-		8,628
Right of use assets – operating leases	4,822	-	-		4,822
Deferred financing costs	4,111	-	(4,111)	B	-
Total assets	**$ 72,153**	**$ 189,174**	**$ (72,683)**		**$ 188,644**
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLERS' EQUITY (DEFICIT)					
Current liabilities:					
Accounts payable	$ 1,728	$ 1,233	$ (1,040)	B	$ 1,921
Accrued expenses	10,361	29,636	(3,772)	B	36,225
Deferred revenues	2,459	-	-		2,459
Operating lease liabilities	3,437	-	-		3,437
Finance lease liabilities	1,162	-	-		1,162
Other current liabilities	523	115	-		638
Total current liabilities	**19,670**	**30,984**	**(4,812)**		**45,842**
Deferred revenues	45,000	-	-		45,000
Convertible promissory notes	33,717	-	(33,717)	C	-
Derivative liability	5,739	-	(5,739)	C	-
Operating lease liabilities	976	-	-		976
Finance lease liabilities	872	-	-		872
Other long-term liabilities	1,041	-	-		1,041
Total liabilities	**107,015**	**30,984**	**(44,268)**		**93,731**
Convertible preferred stock	107,808	-	(107,808)	D	-
Stockholders' equity (deficit):					
Common stock	-	202	(162)	E	40
Additional paid-in capital	1,199	494,675	(240,446)	E	255,428
Accumulated other comprehensive income (loss)	(41)	(546)	546	E	(41)
Accumulated deficit	(158,223)	(336,141)	333,850	E	(160,514)
Total stockholders' equity (deficit) attributable to Carisma and Sesen Bio	(157,065)	158,190	93,788		94,913
Equity attributable to noncontrolling interests	14,395	-	(14,395)	F	-
Total stockholders' equity (deficit)	**(142,670)**	**158,190**	**79,393**		**94,913**
Total liabilities and stockholders' equity (deficit)	**$ 72,153**	**$ 189,174**	**$ (72,683)**		**$ 188,644**

See accompanying notes to the unaudited pro forma condensed combined financial statements

Unaudited Pro Forma Condensed Combined Statements of Operations
For the Year Ended December 31, 2022
(in thousands, except per share amounts)

	Carisma Therapeutics Inc.	Sesen Bio, Inc.	Transaction Adjustments	Notes	Other Transaction Adjustment	Notes	Pro Forma Combined
Collaboration revenues	$ 9,834	$ 40,000	$ -		$ (40,000)	I	$ 9,834
Operating expenses:							
Research and development	56,618	38,594	-		-		95,212
General administrative	9,378	39,787	-		-		49,165
Restructuring charge	-	11,764	-		-		11,764
Intangibles impairment charge	-	27,764	-		-		27,764
Change in fair value contingent consideration	-	(52,000)	-		-		(52,000)
Total operating expenses	65,996	65,909	-		-		131,905
Loss from operations	(56,162)	(25,909)	-		(40,000)		(122,071)
Non-operating income (expense):							
Change in fair value of derivative liability	(1,919)	-	1,919	G	-		-
Interest income (expense), net	(3,145)	1,854	3,664	G	-		2,373
Other income	-	296	-		-		296
Loss before income taxes	(61,226)	(23,759)	5,583		(40,000)		(119,402)
Income tax benefit	-	3,875	-		-		3,875
Net Loss	$ (61,226)	$ (19,884)	$ 5,583		$ (40,000)		$ (115,527)
Net loss per share, basic and diluted	$ (54.65)	$ (0.10)	$				$ (2.88)
Weighted-average common shares outstanding, basic and diluted	1,120	200,546	(161,584)	H			40,082

See accompanying notes to the unaudited pro forma condensed combined financial statements

NOTES TO UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

1. Description of Transactions

Merger Transaction

On March 7, 2023, Sesen Bio and Carisma completed an Agreement and Plan of Merger Reorganization, dated as of September 20, 2022, as amended by the First Amendment thereto dated as of December 29, 2022 and the Second Amendment thereto dated as of February 13, 2023 (as amended, the Merger Agreement), pursuant to which a wholly-owned subsidiary of Sesen Bio merged with and into Carisma, with Carisma surviving as a wholly-owned subsidiary of Sesen Bio. Sesen Bio was renamed "Carisma Therapeutics Inc." and is trading under the symbol "CARM" on the Nasdaq Global Market.

On March 7, 2023, the Company effected a 1-for-20 reverse stock split of its common stock and implemented a reduction in the number of authorized shares of common stock to 100,000,000. At closing, after taking into account shares of Carisma common stock purchased in connection with the pre-closing financing and the conversion of the $35.0 million convertible note, the Company issued an aggregate of 29,880,394 shares of its common stock to Carisma shareholders based on the exchange ratio of 1.8994, resulting in 40,254,666 shares of the Company's common stock being issued and outstanding immediately following the effective time of the Merger. The exchange ratio was determined in accordance with the Merger Agreement and was calculated using a formula intended to allocate the Company's pre-Merger stockholders and Carisma stockholders a percentage of the combined company. The Company also assumed all of the outstanding and unexercised stock options to purchase shares of Carisma common stock. The assumed options continue to be governed by the terms of the Carisma Therapeutics Inc. 2017 Stock Incentive Plan.

At the time of the Merger, (i) Sesen Bio had $74.7 million in net cash, (ii) the Carisma pre-closing financing was $30.6 million, (iii) the outstanding shares of Sesen Bio common stock, Sesen Bio RSUs, Sesen Bio options and Sesen Bio warrants as of the closing were 222,944,963 and (iv) the outstanding shares of Carisma capital stock as of the closing on a fully diluted and as-converted basis were 14,855,514. Accordingly, the exchange ratio was 1.8994 and, based solely on such exchange ratio, at closing: (a) Carisma stockholders as of immediately prior to the Merger (not including the shares of Carisma common stock issued in the Carisma pre-closing financing) owned 71.7% of the fully diluted closing common stock, (b) the shares of Carisma common stock issued in the Carisma pre-closing financing to Carisma stockholders as of immediately prior to the Merger represented 9.5% of the fully diluted closing common stock, (c) the Sesen Bio stockholders as of immediately prior to the Merger (excluding for this purpose certain out-of-the-money Sesen Bio options) owned 28.3% of the fully diluted closing common stock, (d) the shares of common stock issued upon the conversion of the Carisma convertible note represented 12.3% of the fully diluted closing common stock, and (e) the shares of Carisma capital stock available for issuance under the Carisma Plan as of immediately prior to the Merger represented 8.5% of the fully diluted closing common stock.

As of the effective time of the Merger, each Carisma option that was outstanding and unexercised immediately prior to the effective time granted under the Carisma Plan, or otherwise, whether or not vested, was, along with the Carisma Plan, assumed by Sesen Bio and has become an option to purchase solely that number of shares of Sesen Bio common stock equal to the product obtained by multiplying (i) the number of shares of Carisma common stock by (ii) the exchange ratio, and rounding the resulting number down to the nearest whole number of shares of Sesen Bio common stock. The per share exercise price for Sesen Bio common stock issuable upon exercise of each Carisma option assumed shall be determined by dividing (a) the per share exercise price of Carisma common stock by (b) the exchange ratio and rounding the resulting exercise price up to the nearest whole cent. Any restriction on the exercise of any Carisma option assumed will continue in full force and effect and the term, exercisability, vesting schedule and other provisions of such Carisma option shall otherwise remain unchanged.

Pre-Closing Financing

At the time of the Merger Agreement, certain investors entered into the subscription agreement with Carisma pursuant to which such investors purchased shares of Carisma common stock for an aggregate purchase price of $30.6 million.

Pre-Closing Dividend

Prior to the effective time of the Merger, Sesen Bio declared and paid a pre-closing dividend to its stockholders and a special cash dividend in the aggregate of $75.0 million.

Conversion of Carisma Convertible Note

Carisma's $35.0 million convertible note and accrued interest converted into shares of Sesen Bio common stock.

Contingent Value Rights Agreement

On March 7, 2023, the Company entered into the CVR Agreement with a rights agent pursuant to which the Company's pre-Merger stockholders of record as of March 7, 2023, received one CVR for each outstanding share of the Company common stock held by such stockholders on such date. Each CVR represents the contractual right to receive contingent cash payments upon the receipt by the Company of (i) certain proceeds payable by Roche, if any, pursuant to the Roche Asset Purchase Agreement, upon the achievement by Roche of a specified milestone set forth in the Roche Asset Purchase Agreement and (ii) the proceeds from any sale of the Company's pre-Merger non-cash assets, including Vicineum, subject to certain customary deductions, including for expenses and taxes. The CVR will be recognized when the achievement of the milestone payment becomes probable. The CVRs do not have any voting or dividend rights and do not represent any equity or ownership interest in the Company.

Other Transaction

Sesen Bio Sale of Legacy Technology to Roche

On July 15, 2022, Sesen Bio executed the Roche Asset Purchase Agreement pursuant to which Roche purchased all patent rights and know-how related to the monoclonal antibody EBI-031 and all other IL-6 antagonist monoclonal antibody technology owned by Sesen Bio. Sesen Bio received an upfront payment from Roche of $40.0 million upon execution of the Roche Asset Purchase Agreement. In addition, the Company is eligible to receive an additional $30.0 million payment from Roche upon Roche's initiation of a Phase 3 clinical trial with EBI-031 for a defined indication if initiated prior to December 31, 2026 which will be paid to the Company's stockholders through the CVR Agreement.

2. Basis of Presentation

The unaudited pro forma condensed combined financial statements were prepared in accordance with the regulations of the SEC. The unaudited pro forma condensed combined balance sheet as of December 31, 2022 is presented as if the Merger had been completed on December 31, 2022. The unaudited pro forma condensed combined statements of operations for the years ended December 31, 2022 assumes that the Merger occurred on January 1, 2022, and combines the historical results of Carisma and Sesen Bio.

Additionally, the unaudited pro forma condensed combined balance sheet and statements of operation data reflect the other transactions that have occurred at or prior to the completion of the Merger.

For accounting purposes, Carisma is considered to be the acquiring company and the Merger will be accounted for as a reverse recapitalization of Sesen Bio by Carisma because at the closing of the Merger, the primary pre-combination assets of Sesen Bio were cash, cash equivalents and marketable securities. The final exchange ratio was 1.8994. The pro forma financial statements reflect Carisma management's estimates of the fair value of Sesen Bio's net assets that have been contributed to Carisma as part of the Merger.

Under reverse recapitalization accounting, the assets and liabilities of Sesen Bio are recorded, as of the completion of the Merger, at their fair values which are expected to approximate book values because of the short-term nature of the instruments. No goodwill or intangible assets are expected to be recognized. The historical financial statements of Sesen Bio and Carisma, which is filed as Exhibit 99.4 to the Current Report on this Form 8-K/A, have been adjusted to give pro forma effect to events that are (i) directly attributable to the Merger, (ii) factually supportable, and (iii) with respect to the statements of operations, expected to have a continuing impact on the combined results.

Pro forma adjustments related to the Carisma pre-closing financing for aggregate cash proceeds of $30.6 million and reflect the conversion of the Carisma convertible note into shares of Sesen Bio common stock.

The unaudited pro forma condensed combined financial statements also give effect to the other transactions that are not directly attributable to the Merger but are deemed relevant to the pro forma financial position and operations of the combined companies.

To the extent there are significant changes to the business following completion of the Merger, the assumptions and estimates set forth in the unaudited pro forma condensed combined financial statements could change significantly. Accordingly, the pro forma adjustments are subject to further adjustments as additional information becomes available and as additional analyses are conducted following the completion of the Merger. There can be no assurances that these additional analyses will not result in material changes to the estimates of fair value.

3. Pro Forma Adjustments

The pro forma adjustments were based on the preliminary information available at the time of the preparation of the unaudited pro forma condensed combined financial information. The unaudited pro forma condensed combined financial information, including the notes thereto, are qualified in their entirety by reference to, and should be read in conjunction with, the separate historical audited financial statements of Sesen Bio and Carisma for the years ended December 31, 2022 and 2021which are filed as Exhibit 99.4 to the Current Report on this Form 8-K/A.

Merger Transaction Adjustments

A Reflects (i) $30.6 million in proceeds from the Carisma pre-closing financing, (ii) payment of a $75.0 million special cash dividend (iii) payment of total estimated unpaid transaction costs and (iv) payment of severance costs.

(Amounts In Thousands)	**Carisma Therapeutics Inc.**	**Sesen Bio, Inc.**	**Total**
Proceeds from Carisma pre-closing financing, net of issuance costs	$ 30,640	$ -	$ 30,640
Special cash dividend payment to Sesen Bio stockholders	-	(75,000)	(75,000)
Payment of transaction costs	(7,834)	(7,978)	(15,812)
Payment of severance costs	-	(8,400)	(8,400)
Pro forma adjustment	$ 22,806	$ (91,378)	$ (68,572)

B Reflects payment of total estimated unpaid transaction costs as of December 31, 2022 in connection with the Merger and settlement of accrued interest upon conversion of the Carisma convertible note:

(amounts in thousands)	Carisma Therapeutics Inc.	Sesen Bio, Inc.	Total
Unpaid transaction costs in accrued expenses as of December 31, 2022	$ (621)	$ (2,025)	$ (2,646)
Unpaid transactions costs in accounts payable as of December 31, 2022	(1,040)	-	(1,040)
Transaction costs in deferred financing costs as of December 31, 2022	4,111	-	4,111
Accrued interest for Carisma convertible note	(1,126)	-	(1,126)
Total	$ 1,324	$ (2,025)	$ (701)

C Settlement of the Carisma convertible note and related derivative liability through the issuance of Sesen Bio common stock.

D Conversion of Carisma convertible preferred stock into common stock of the combined company.

E To record the (i) exchange ratio adjustment to Carisma's common stock outstanding, (ii) conversion of Carisma convertible preferred stock into common stock, (iii) the elimination of Carisma's noncontrolling interest upon conversion of Carisma convertible preferred stock, (iv) sale of Carisma common stock, net of issuance costs, in connection with Carisma pre-closing financing, (v) automatic conversion of the Carisma convertible note, (vi) elimination of Sesen Bio's historical equity carrying value, (vii) issuance of common stock upon the acceleration of unvested Sesen Bio RSUs and PSUs upon closing of the Merger, (viii) special cash dividend payment to Sesen Bio stockholders, (ix) post-combination stock-based compensation expense for Sesen Bio options and Sesen Bio RSUs and (x) payment of transaction and severance costs:

(amounts in thousands)	Common stock shares	Common stock amount	Additional paid-in capital	Accumulated other comprehensive income	Accumulated deficit	Noncontrolling interests	Total
Adjustment to Carisma common stock outstanding in connection with the exchange ratio	1,050	$ 2	$ (2)	$ -	$ -	$ -	$ -
Issuance of common stock upon conversion of Carisma convertible preferred shares and noncontrolling interests	18,873	19	122,184	-	-	(14,395)	107,808
Issuance of common stock upon completion of Carisma pre-closing financing	3,731	5	30,635	-	-	-	30,640
Issuance of common stock upon settlement of Carisma convertible note, accrued interest and related derivative liability	5,059	5	41,860	-	(1,283)	-	40,582
Elimination of Sesen Bio's historical carrying values	(200,546)	(203)	(336,484)	546	336,141	-	-
Issuance of common stock upon acceleration of Sesen Bio RSUs and PSUs	10,374	10	(10)	-	-	-	-
Special cash dividend payment to Sesen Bio stockholders	-	-	(75,000)	-	-	-	(75,000)
Elimination of Carisma deferred financing costs	-	-	(4,111)	-	-	-	(4,111)
Post-combination stock-based compensation costs	-	-	1,008	-	(1,008)	-	-
Payment of transaction costs and severance expenses	-	-	(20,526)	-	-	-	(20,526)
Pro forma adjustment	(161,459)	$ (162)	$ (240,446)	$ 546	$ 333,850	$ (14,395)	$ 79,393

F Issuance of common stock upon conversion of Carisma noncontrolling interests.

G Elimination of interest expense and change in fair value of derivative liability associated with the Carisma convertible note and related derivative, respectively, that were settled.

H The pro forma combined basic and diluted earnings per share have been adjusted to reflect the pro forma net loss for the year ended December 31, 2022. In addition, the number of shares used in calculating the pro forma combined basic and diluted net income per share has been adjusted to reflect the estimated total number of shares of common stock of the combined company. The following table sets forth the calculation of the pro forma weighted-average number of common shares outstanding — basic and diluted.

	Year ended December 31, 2022
Effect of applying estimated exchange ratio to Carisma common stock	$ 1,008
Conversion of Carisma preferred stock and noncontrolling interest	18,873
Issuance of common stock in connection with Carisma pre-closing financing	3,731
Issuance of common stock upon settlement of Carisma convertible note, accrued interest and related derivative liability	4,976
Issuance of shares of common stock of the combined company to Sesen Bio stockholders	10,374
Elimination of historical Sesen Bio weighted-average shares outstanding	(200,546)
	$ (161,584)

Other Transaction Adjustments

I Elimination of one time payments received in connection with the Roche Asset Purchase Agreement in July 2022 of $40.0 million.

Exhibit 99.7

Carisma Therapeutics Reports Fiscal 2022 Financial Results and Recent Business Highlights

Closed merger with Sesen Bio and commenced trading on Nasdaq under ticker symbol "CARM"

Cash position as of the closing of the merger with Sesen Bio provides anticipated operating runway through 2024

PHILADELPHIA – April 4, 2023 – Carisma Therapeutics Inc. (Nasdaq: CARM), a clinical-stage biopharmaceutical company focused on discovering and developing innovative immunotherapies, today reported financial results for the year ended December 31, 2022 and highlighted recent business updates.

"2022 was a transformational year for Carisma as we made meaningful progress across all areas of our business, including entering a development collaboration with Moderna, advancing our lead program CT-0508 in HER2+ solid tumors, and announcing our merger with Sesen Bio," said Steven Kelly, President and Chief Executive Officer of Carisma. "The successful close of the merger and concurrent financing has further strengthened our foundation, enabling us to continue to advance our pipeline of important therapies. We look forward to the multiple potential value inflection points over the next 18 months, including the completion of our Phase 1 study of CT-0508, as well as data from clinical trial sub-study of CT-0508 in combination with pembrolizumab."

Recent Business Highlights

- **Completed merger transaction with Sesen Bio in March 2023.** Carisma Therapeutics and Sesen Bio closed the previously announced merger, pursuant to which the combined company changed its name to "Carisma Therapeutics Inc." and commenced trading on The Nasdaq Global Market under the symbol "CARM." The combined company will focus on the development of Carisma's chimeric antigen receptor macrophage (CAR-M) therapies, which are believed to be the only therapies of their kind with demonstrated proof of mechanism and safety data in clinical trials. At the closing of the merger, taking into account the reverse stock split of shares of common stock of Sesen Bio prior to the closing, the combined company had approximately 40.3 million outstanding shares of common stock.

- **Received $105.3 million of proceeds as a result of completing the merger transaction, which includes $74.7 million from Sesen Bio and $30.6 million from a concurrent financing.** The $30.6 million financing was from a syndicate of investors, including HealthCap, AbbVie, Wellington Partners, SymBiosis, Penn Medicine, TPG Biotech, MRL Ventures Fund, the therapeutics-focused corporate venture arm of Merck & Co., Agent Capital, Solasta, Livzon, Pictet Alternative Advisors and 4Bio.

- **Expanded Scientific Advisory Board (SAB) with additional expertise in solid tumor immunotherapy development capabilities.** The Company appointed leading solid tumor immunotherapy expert Padmanee Sharma, MD, PhD to Carisma's SAB in January 2023. Dr. Sharma is a nationally regarded cancer immunologist and professor in the departments of Genitourinary Medical Oncology and Immunology, Associate VP of Immunobiology and the T.C. and Jeanette D. Hsu Endowed Chair in Cell Biology at The University of Texas MD Anderson Cancer Center. Additionally, the Company appointed Moderna CSO of External Research Ventures, Lin Guey, PhD to Carisma's SAB in February 2023. Dr. Guey is a leading expert in mRNA therapeutics and oversees Moderna's partnership with Carisma to develop in vivo CAR-M therapies.

- **Presented new data from Phase 1 clinical trial of CT-0508 at the Society for Immunotherapy of Cancer (SITC) Annual Meeting in November 2022.** Additional findings from the CT-0508 CAR-M clinical trial for patients with advanced metastatic human epidermal growth factor receptor 2 (HER2) overexpressing solid tumors, supported a favorable safety profile and demonstrate that CT-0508 has been successfully manufactured using macrophages obtained from heavily pre-treated, advanced solid tumor patients and has shown high CAR expression, viability, and purity.

Anticipated Upcoming Milestones

- Additional data from Group 2 of Carisma's Phase 1 CT-0508 study expected in the second half of 2023
- Initial data from clinical trial sub-study of CT-0508 in combination with KEYTRUDA® (pembrolizumab) expected in the second half of 2023
- Submission of IND application to the FDA for CT-0525, Carisma's first anti-HER2 CAR-Mono product candidate, expected in the second half of 2023
- Nomination of additional targets(s) under the Moderna development collaboration expected in 2023

Fiscal 2022 Financial Results

- Cash, cash equivalents and marketable securities as of December 31, 2022 were $52.0 million, compared to $28.6 million as of December 31, 2021, and is not inclusive of proceeds from the merger transaction with Sesen Bio and concurrent financing, which were completed in March of 2023.
- Moderna collaboration revenues were $9.8 million for the year ended December 31, 2022. The Company began its collaboration with Moderna in January 2022 and deferred $47.5 million in revenue from the Moderna collaboration agreement, which will be recognized in future periods.
- Research & development expenses were $56.6 million for the year ended December 31, 2022, compared to $34.4 million in 2021. The increase was primarily due to costs associated with growth and expansion of Carisma's clinical and pre-clinical activities to support advancing CT-0508 in clinical development and expand research for the Company's Moderna in vivo research.
- General & administrative expenses were $9.4 million for the year ended December 31, 2022, compared to $6.4 million in 2021, primarily due to costs associated with the expanded patent portfolio and preparing to operate as a public company.
- Net loss was $61.2 million for the year ended December 31, 2022, compared to net loss of $40.8 million in 2021, primarily due to increased research and development expenses, which was partially offset by Moderna collaboration revenue.

Outlook

Carisma believes that its cash, cash equivalents and marketable securities of $52.0 million as of December 31, 2022, in combination with the net proceeds of $105.3 million from the completion of the merger with Sesen Bio and concurrent financing, are sufficient to sustain Carisma's planned operations through the end of 2024.

About CT-0508

CT-0508 is a human epidermal growth factor receptor 2 (HER2) targeted chimeric antigen receptor macrophage (CAR-M). It is being evaluated in a landmark Phase 1 multi-center clinical trial that focuses on patients with recurrent or metastatic HER2-overexpressing solid tumors whose cancers do not have approved HER2-targeted therapies or who do not respond to treatment. We are selecting participants who have tumors of any anatomical origin, but with the commonality of overexpressing the HER2 receptor on the cell surface, which is the target for our CAR-M. The Phase 1 clinical trial is first-of-its-kind, marking the first time that engineered macrophages are being studied in humans. The trial continues to enroll patients at seven clinical sites in the U.S., including (i) the University of Pennsylvania Abramson Cancer Center, (ii) the University of North Carolina Lineberger Comprehensive Cancer Center, (iii) the City of Hope National Medical Center, (iv) the MD Anderson Cancer Center, (v) the Sarah Cannon Cancer Research Institute, (vi) Oregon Health & Science University and (vii) Fred Hutchinson Cancer Center.

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 (CAR)-macrophages for the treatment of solid tumors. Carisma is headquartered in Philadelphia, PA. For more information, please visit www.carismatx.com.

Cautionary Note on Forward-Looking Statements

Statements in this press release about future expectations, plans and prospects, as well as any other statements regarding matters that are not historical facts, may constitute "forward-looking statements" within the meaning of The Private Securities Litigation Reform Act of 1995. These statements include, but are not limited to, statements relating to Carisma's business, strategy and future operations, the sufficiency of its cash resources, the advancement of Carisma's product candidates and product pipeline, and clinical development of Carisma's product candidates, including expectations regarding timing of initiation and results of clinical trials. The words ""anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "goals," "intend," "may," "might," "outlook," "plan," "project," "potential," "predict," "target," "possible," "will," "would," "could," "should," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Any forward-looking statements are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in, or implied by, such forward-looking statements. These risks and uncertainties include, but are not limited to, (i) risks associated with the possible failure to realize certain anticipated benefits of the merger, including with respect to future financial and operating results; (ii) the effect of the completion of the merger on Carisma's business relationships, operating results and business generally; (iii) the outcome of any legal proceedings related to the merger agreement or the transactions contemplated thereby; (iv) Carisma's ability to obtain, maintain and protect its intellectual property rights related to its product candidates; (v) Carisma's ability to advance the development of its product candidates under the timelines it anticipates in planned and future clinical trials; (vi) Carisma's ability to replicate in later clinical trials positive results found in preclinical studies and early-stage clinical trials of its product candidates; (vii) Carisma's ability to realize the anticipated benefits of its research and development programs, strategic partnerships, research and licensing programs and academic and other collaborations; (viii) regulatory requirements or developments and Carisma's ability to obtain and maintain necessary approvals from the U.S. Food and Drug Administration and other regulatory authorities; (ix) changes to clinical trial designs and regulatory pathways; (x) risks associated with Carisma's ability to manage expenses; (xii) changes in capital resource requirements; (xii) risks related to the inability of Carisma to obtain sufficient additional capital to continue to advance its product candidates and its preclinical programs; and (xiii) legislative, regulatory, political and economic developments. For a discussion of other risks and uncertainties, and other important factors, any of which could cause the Company's actual results to differ from those contained in the forward-looking statements, see the "Risk Factors" set forth in Exhibit 99.3 to Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 8, 2023, as well as discussions of potential risks, uncertainties, and other important factors in the Company's most recent filings with the Securities and Exchange Commission. Any forward-looking statements that are made in this press release speak as of the date of this press release. Carisma undertakes no obligation to revise the forward-looking statements or to update them to reflect events or circumstances occurring after the date of this press release, whether as a result of new information, future developments or otherwise, except as required by the federal securities laws.

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CARISMA THERAPEUTICS INC.
Consolidated Balance Sheets
(in thousands, except share data)

	December 31,	
	2022	**2021**
Assets		
Current assets:		
Cash and cash equivalents	$ 24,194	$ 28,551
Marketable securities	27,802	—
Prepaid expenses and other assets	2,596	1,235
Total current assets	54,592	29,786
Property and equipment, net	8,628	3,084
Right of use assets – operating leases	4,822	2,579
Deferred financing costs	4,111	—
Total assets	$ 72,153	$ 35,449
Liabilities, Convertible Preferred Stock and Stockholders' Deficit		
Current liabilities:		
Accounts payable	$ 1,728	$ 2,322
Accrued expenses	10,361	4,471
Deferred revenue	2,459	—
Operating lease liabilities	3,437	898
Finance lease liabilities	1,162	—
Other current liabilities	523	—
Total current liabilities	19,670	7,691
Deferred revenues	45,000	—
Convertible promissory note	33,717	—
Derivative liability	5,739	—
Operating lease liabilities	976	1,734
Finance lease liabilities	872	—
Other long-term liabilities	1,041	—
Total liabilities	107,015	9,425
Total convertible preferred stock	107,808	107,808
Stockholders' deficit:		
Common stock $0.0001 par value, 14,910,158 shares authorized, 1,167,602 and 1,084,082 shares issued and outstanding at December 31, 2022 and 2021, respectively	—	—
Additional paid-in capital	1,199	818
Accumulated other comprehensive loss	(41)	—
Accumulated deficit	(158,223)	(96,997)
Total Carisma Therapeutics Inc. stockholders' deficit	(157,065)	(96,179)
Noncontrolling interests	14,395	14,395
Total stockholders' deficit	(142,670)	(81,784)
Total liabilities, convertible preferred stock and stockholders' deficit	$ 72,153	$ 35,449

CARISMA THERAPEUTICS INC.
Consolidated Statements of Operations
(in thousands, except share and per share data)

	Year Ended December 31,	
	2022	**2021**
Collaboration revenues	$ 9,834	$ —
Operating expenses:		
Research and development	56,618	34,387
General and administrative	9,378	6,407
Total operating expenses	65,996	40,794
Operating loss	(56,162)	(40,794)
Change in fair value of derivative liability	(1,919)	—
Interest (expense) income, net	(3,145)	10
Net loss	$ (61,226)	$ (40,784)
Share information:		
Net loss per share of common stock, basic and diluted	$ (54.65)	$ (37.62)
Weighted-average shares of common stock outstanding, basic and diluted	1,120,390	1,084,082