UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2024

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number: 001-37798

Cartesian Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**26-1622110**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
704 Quince Orchard Road, Gaithersburg, MD	**20878**
(Address of principal executive offices)	(Zip Code)

(617) 923-1400

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	RNAC	The Nasdaq Stock Market LLC

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

Title of each class
Contingent Value Rights

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☑
Non-accelerated filer ☐	Smaller reporting company ☑
	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. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑
As of May 3, 2024, the registrant had 17,796,053 shares of common stock, par value $0.0001 per share, outstanding.

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FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q, or the Quarterly Report, contains forward-looking statements. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements other than statements of historical facts contained in this Quarterly Report, including statements regarding our future results of operations and financial position, business strategy, prospective products, product approvals, research and development costs, timing and likelihood of success, the plans and objectives of management for future operations and future results of anticipated products, the impact of the resurgence of the COVID-19 pandemic or emergence of another pandemic on our business and operations and our future financial results, and the period over which we estimate our existing cash and cash equivalents will be sufficient to fund our future operating expenses and capital expenditure requirements are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential", or "continue" or the negative of these terms or other similar expressions. The forward-looking statements in this Quarterly Report are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this Quarterly Report and are subject to a number of important factors that could cause actual results to differ materially from those in the forward-looking statements, including the factors described under the sections in this Quarterly Report titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" as well as the following:

- any future payouts under the contingent value right, or CVR, issued to our holders of record as of the close of business on December 4, 2023;
- our ability to achieve the expected benefits or opportunities and related timing with respect to the Merger (as defined below) or to monetize any of our legacy assets;
- our future results of operations and financial position, business strategy, and the length of time that we believe our existing cash resources will fund our operations;
- our market size and our potential growth opportunities;
- our preclinical and future clinical development activities;
- the efficacy and safety profile of our product candidates;
- the potential therapeutic benefits and economic value of our product candidates;
- the timing and results of preclinical studies and clinical trials;
- the expected impact of macroeconomic conditions, including inflation, increasing interest rates and volatile market conditions, current or potential bank failures;
- global events, including the ongoing conflicts between Russia and Ukraine and between Hamas and Israel and geopolitical tensions in China on our operations;
- the receipt and timing of potential regulatory designations, approvals and commercialization of product candidates;
- potential litigation related to the Merger (as defined below) instituted against us or our directors;
- our ability to prevent or minimize the effects of litigation and other contingencies;
- our status as a preclinical and development-stage company and our expectation to incur losses in the future, and the possibility that we never achieve or maintain profitability;
- uncertainties with respect to our ability to access future capital;
- our ability to maximize the value of our pipeline of product candidates;
- our unproven approach to therapeutic intervention;
- our ability to enroll patients in clinical trials, timely and successfully complete those trials and receive necessary regulatory approvals;
- our ability to continue to grow our manufacturing capabilities and resources;
- our ability to manufacture our product candidates, which in some cases are manufactured on a patient-by-patient basis;

- our ability to access manufacturing facilities and to receive or manufacture sufficient quantities of our product candidates;
- our ability to maintain our existing or future collaborations or licenses and to seek new collaborations, licenses or partnerships;
- the impact of resurgence of the COVID-19 pandemic on our operations, the continuity of our business, including our preclinical studies and clinical trials, and general economic conditions;
- our ability to protect and enforce our intellectual property rights;
- federal, state, and foreign regulatory requirements, including U.S. Food and Drug Administration, or FDA, regulation of our product candidates;
- our ability to obtain and retain key executives and retain qualified personnel; and
- developments relating to our competitors and our industry, including the impact of government regulation.

Moreover, we operate in an evolving environment. New risks and uncertainties may emerge from time to time, and it is not possible for management to predict all risk and uncertainties.

You should read this Quarterly Report and the documents that we reference in this Quarterly Report completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (unaudited)

Cartesian Therapeutics, Inc. and Subsidiaries
Consolidated Balance Sheets
(Amounts in thousands, except share data and par value)

	March 31, 2024	December 31, 2023
Assets		
Current assets:		
Cash and cash equivalents	$ 103,418	$ 76,911
Accounts receivable	2,006	5,870
Unbilled receivables	2,370	2,981
Prepaid expenses and other current assets	3,315	4,967
Total current assets	111,109	90,729
Non-current assets:		
Property and equipment, net	2,402	2,113
Right-of-use asset, net	9,556	10,068
In-process research and development assets	150,600	150,600
Goodwill	48,163	48,163
Long-term restricted cash	1,377	1,377
Investments	2,000	2,000
Total assets	$ 325,207	$ 305,050
Liabilities, convertible preferred stock, and stockholders' deficit		
Current liabilities:		
Accounts payable	$ 2,517	$ 3,150
Accrued expenses and other current liabilities	9,516	15,572
Lease liability	2,229	2,166
Deferred revenue	412	2,311
Warrant liabilities	597	720
Contingent value right liability	21,383	15,983
Forward contract liabilities	—	28,307
Total current liabilities	36,654	68,209
Non-current liabilities:		
Lease liability, net of current portion	8,228	8,789
Deferred revenue, net of current portion	—	3,538
Warrant liabilities, net of current portion	4,755	5,674
Contingent value right liability, net of current portion	376,517	342,617
Deferred tax liabilities, net	15,853	15,853
Total liabilities	442,007	444,680
Commitments and contingencies (Note 18)		
Series A Preferred Stock, $0.0001 par value; no and 548,375 shares authorized as of March 31, 2024 and December 31, 2023, respectively; no and 435,120.513 shares issued and outstanding as of March 31, 2024 and December 31, 2023, respectively	—	296,851
Options for Series A Preferred Stock	—	3,703
Stockholders' deficit:		
Series A Preferred Stock, $0.0001 par value; 548,375 and no shares authorized as of March 31, 2024 and December 31, 2023, respectively; 534,260.839 and no shares issued and outstanding as of March 31, 2024 and December 31, 2023, respectively	—	—
Preferred stock, $0.0001 par value; 9,451,625 shares authorized as of March 31, 2024 and December 31, 2023, respectively; no shares issued and outstanding as of March 31, 2024 and December 31, 2023	—	—
Common stock, $0.0001 par value; 350,000,000 shares authorized as of March 31, 2024 and December 31, 2023; 5,515,836 and 5,397,597 shares issued and outstanding as of March 31, 2024 and December 31, 2023, respectively	1	1
Additional paid-in capital	559,275	179,062
Accumulated deficit	(671,471)	(614,647)
Accumulated other comprehensive loss	(4,605)	(4,600)
Total stockholders' deficit	(116,800)	(440,184)
Total liabilities, convertible preferred stock, and stockholders' deficit	$ 325,207	$ 305,050

The accompanying notes are an integral part of these unaudited consolidated financial statements.

Cartesian Therapeutics, Inc. and Subsidiaries
Consolidated Statements of Operations and Comprehensive Income (Loss)
(Amounts in thousands, except share and per share data)

	Three Months Ended March 31,	
	2024	**2023**
Collaboration and license revenue	$ 5,840	$ 5,938
Operating expenses:		
Research and development	9,738	18,624
General and administrative	9,450	5,695
Total operating expenses	19,188	24,319
Operating loss	(13,348)	(18,381)
Investment income	1,164	1,331
Foreign currency transaction, net	—	19
Interest expense	—	(808)
Change in fair value of warrant liabilities	1,042	(4,079)
Change in fair value of contingent value right liability	(39,300)	—
Change in fair value of forward contract liabilities	(6,890)	—
Other income, net	508	255
Net loss	$ (56,824)	$ (21,663)
Other comprehensive (loss) income:		
Foreign currency translation adjustment	(5)	(22)
Unrealized gain (loss) on marketable securities	—	11
Total comprehensive loss	$ (56,829)	$ (21,674)
Net loss per share:		
Basic and Diluted	$ (10.50)	$ (4.24)
Weighted-average common shares outstanding:		
Basic and Diluted	5,414,020	5,111,518

The accompanying notes are an integral part of these unaudited consolidated financial statements.

Cartesian Therapeutics, Inc. and Subsidiaries

Consolidated Statements of Changes in Convertible Preferred Stock and Stockholders' Equity (Deficit)

(Amounts in thousands, except share data)

	Series A Preferred Stock		Options for Series A Preferred Stock	Series A Preferred Stock		Common stock		Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive loss	Stockholders' equity
	Shares	Amount	Amount	Shares	Amount	Shares	Amount				
Balance at December 31, 2023	435,120.513	$ 296,851	$ 3,703	—	$ —	5,397,597	$ 1	$ 179,062	$ (614,647)	$ (4,600)	$ (440,184)
Issuance of Series A Preferred Stock in connection with private placement and settlement of related forward contract	99,140.326	75,197	—	—	—	—	—	—	—	—	—
Transfer of Series A Preferred Stock and options for series A Preferred Stock to permanent equity	(534,260.839)	(372,048)	(3,703)	534,260.839	—	—	—	375,751	—	—	375,751
Issuance of common stock upon exercise of options	—	—	—	—	—	52,558	—	154	—	—	154
Issuance of common stock upon exercise of warrants	—	—	—	—	—	65,681	—	2,877	—	—	2,877
Stock-based compensation expense	—	—	—	—	—	—	—	1,431	—	—	1,431
Currency translation adjustment	—	—	—	—	—	—	—	—	—	(5)	(5)
Net loss	—	—	—	—	—	—	—	—	(56,824)	—	(56,824)
Balance at March 31, 2024	—	$ —	$ —	534,260.839	$ —	5,515,836	$ 1	$ 559,275	$ (671,471)	$ (4,605)	$ (116,800)

On April 4, 2024, the Company effected a 1-for-30 reverse split of its issued and outstanding shares of common stock, or the Reverse Stock Split. As a result of the Reverse Stock Split, all figures in this Quarterly Report on Form 10-Q relating to shares of the Company's common stock (such as share amounts, per share amounts, and conversion rates and prices), including but not limited to, the consolidated financial statements and footnotes included herein, have been adjusted to reflect the Reverse Stock Split for all periods presented.

The accompanying notes are an integral part of these unaudited consolidated financial statements.

Cartesian Therapeutics, Inc. and Subsidiaries
Consolidated Statements of Changes in Convertible Preferred Stock and Stockholders' Equity (Deficit)
(Amounts in thousands, except share data)

	Common stock		Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive loss	Stockholders' equity
	Shares	Amount				
Balance at December 31, 2022	5,101,459	$ 1	$ 493,322	$ (394,937)	$ (4,558)	$ 93,828
Issuance of common stock under Employee Stock Purchase Plan	3,584	—	149	—	—	149
Issuance of vested restricted stock units	9,226	—	—	—	—	—
Stock-based compensation expense	—	—	2,276	—	—	2,276
Currency translation adjustment	—	—	—	—	(22)	(22)
Unrealized gain on marketable securities	—	—	—	—	11	11
Net loss	—	—	—	(21,663)	—	(21,663)
Balance at March 31, 2023	5,114,269	$ 1	$ 495,747	$ (416,600)	$ (4,569)	$ 74,579

The accompanying notes are an integral part of these unaudited consolidated financial statements.

Cartesian Therapeutics, Inc. and Subsidiaries
Consolidated Statements of Cash Flows
(Amounts in thousands)

	Three Months Ended March 31,	
	2024	**2023**
Cash flows from operating activities		
Net loss	$ (56,824)	$ (21,663)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	183	206
Amortization of premiums and discounts on marketable securities	—	(79)
Non-cash lease expense	512	416
Loss on disposal of property and equipment	2	—
Stock-based compensation expense	1,431	2,276
Non-cash interest expense	—	398
Warrant liabilities revaluation	(1,042)	4,079
Contingent value right liability revaluation	39,300	—
Forward contract liabilities revaluation	6,890	—
Changes in operating assets and liabilities:		
Accounts receivable	3,864	(243)
Unbilled receivable	611	1,319
Prepaid expenses, deposits and other assets	1,652	(20)
Accounts payable	(633)	747
Deferred revenue	(5,437)	9,158
Accrued expenses and other liabilities	(6,426)	(5,359)
Net cash used in operating activities	(15,917)	(8,765)
Cash flows from investing activities		
Proceeds from maturities of marketable securities	—	28,254
Purchases of property and equipment	(602)	(130)
Net cash (used in) provided by investing activities	(602)	28,124
Cash flows from financing activities		
Proceeds from exercise of common warrants	2,877	—
Proceeds from issuance of Series A Preferred Stock, gross in private placement	40,000	—
Proceeds from exercise of stock options	154	—
Proceeds from issuance of common stock under Employee Stock Purchase Plan	—	149
Net cash provided by financing activities	43,031	149
Effect of exchange rate changes on cash	(5)	(21)
Net change in cash, cash equivalents, and restricted cash	26,507	19,487
Cash, cash equivalents, and restricted cash at beginning of period	78,288	108,038
Cash, cash equivalents, and restricted cash at end of period	$ 104,795	$ 127,525
Supplemental cash flow information		
Cash paid for interest	$ —	$ 625
Noncash investing and financing activities		
Purchase of property and equipment not yet paid	$ —	$ 48

The accompanying notes are an integral part of these unaudited consolidated financial statements.

Cartesian Therapeutics, Inc. and Subsidiaries

Notes to Consolidated Financial Statements

1. Description of the Business

Cartesian Therapeutics, Inc., or the Company, (formerly known as Selecta Biosciences, Inc., or Selecta) was incorporated in Delaware on December 10, 2007, and is headquartered in Gaithersburg, Maryland. The Company is a clinical-stage biotechnology company developing mRNA cell therapies for the treatment of autoimmune diseases leveraging its proprietary technology and manufacturing platform to introduce one or more mRNA molecules into cells to enhance their function. The Company believes its mRNA cell therapies have the potential to deliver deep, durable clinical benefit to a broad group of patients with autoimmune diseases because they can be administered over a short period of time, in an outpatient setting, and without pre-treatment chemotherapy.

On November 13, 2023, the Company acquired, in accordance with the terms of the Agreement and Plan of Merger, or the Merger Agreement, the assets of the Delaware corporation which, immediately prior to the Merger (as defined below), was known as Cartesian Therapeutics, Inc., or Old Cartesian, as disclosed in Note 3. The transaction was structured as a stock-for-stock transaction pursuant to which all of Old Cartesian's outstanding shares of capital stock were exchanged based on a fixed exchange ratio for consideration of 224,099 shares of the common stock, par value $0.0001 per share, of the Company and 384,930.724 shares of the newly designated Series A Non-Voting Convertible Preferred Stock, par value $0.0001 per share, or the Series A Preferred Stock. The Series A Preferred Stock is intended to have economic rights similar to the common stock, but with only limited voting rights. Additionally, the Company assumed all outstanding stock options of Old Cartesian. The common stock and Series A Preferred Stock related to the Merger were issued on December 5, 2023. For additional information, see Note 3.

In connection with the Merger, the Company entered into a definitive agreement, or the Securities Purchase Agreement, for a private investment in public equity transaction, or the November 2023 Private Placement, with the Investors (as defined below). The Securities Purchase Agreement provides for the issuance to the Investors of an aggregate of 149,330.115 shares of Series A Preferred Stock for an aggregate purchase price of approximately $60.25 million. For additional information, see Note 10.

In connection with the Merger, a contractual contingent value right, or CVR, was distributed to the holders of record of the Company's common stock and 2022 Warrants (as defined below) as of the close of business on December 4, 2023, but was not distributed to holders of shares of common stock or Series A Preferred Stock issued to stockholders of Old Cartesian or the Investors in the transactions. Holders of the CVRs will be entitled to receive certain payments from proceeds received by the Company, if any, related to the disposition or monetization of the Company's legacy assets following the issuance of the CVRs. For additional information, see Note 5.

On March 27, 2024, the Company's stockholders approved the Conversion Proposal (as defined below). For additional information, see Note 10.

Additionally, on March 27, 2024, the Company's stockholders approved an amendment to the Company's restated certificate of incorporation, as amended, or the Charter, to effect a reverse stock split of the Company's issued and outstanding common stock, at a ratio in the range of 1-for-20 and 1-for-30, with such ratio to be determined at the discretion of the Company's board of directors, or the Board of Directors. The Board of Directors subsequently approved a final reverse stock split ratio of 1-for-30, and the Company effected the Reverse Stock Split on April 4, 2024. As a result of the Reverse Stock Split, all figures in this Quarterly Report on Form 10-Q relating to shares of the Company's common stock (such as share amounts, per share amounts, and conversion rates and prices), have been adjusted to reflect the Reverse Stock Split for all periods presented, including reclassifying an amount equal to the reduction in par value of common stock to additional paid-in capital. Shares of common stock underlying outstanding stock options, restricted stock units and warrants were proportionately reduced and the respective exercise prices, if applicable, were proportionately increased in accordance with their terms. Additionally, the conversion ratio of the Company's Series A Preferred Stock was proportionally adjusted. Stockholders entitled to fractional shares as a result of the Reverse Stock Split received a cash payment in lieu of receiving fractional shares.

The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, new technological innovations, protection of proprietary technology, dependence on key personnel, compliance with government regulations and the need to obtain additional financing. Product candidates currently under development will require significant additional research and development efforts, including extensive preclinical and clinical testing and regulatory approval, prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel infrastructure and extensive compliance-reporting capabilities.

The Company's product candidates are in pre-clinical and clinical development. There can be no assurance that the Company's research and development will be successfully completed, that adequate protection for the Company's intellectual property will be obtained, or maintained, that any products developed will obtain necessary government regulatory approval or that any approved products will be commercially viable. Even if the Company's product development efforts are successful, it

is uncertain when, if ever, the Company will generate significant revenue from product sales. The Company operates in an environment of rapid change in technology and substantial competition from pharmaceutical and biotechnology companies. In addition, the Company is dependent upon the services of its employees and consultants.

Unaudited Interim Financial Information

The accompanying unaudited consolidated financial statements for the three months ended March 31, 2024 and 2023 have been prepared by the Company, pursuant to the rules and regulations of the Securities and Exchange Commission, or the SEC, for interim financial statements. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP, have been condensed or omitted pursuant to such rules and regulations. These consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements and the notes thereto for the year ended December 31, 2023 included in the Company's Annual Report on Form 10-K that was filed with the SEC on March 7, 2024. The unaudited interim financial statements have been prepared on the same basis as the audited consolidated financial statements. In the opinion of management, the accompanying unaudited interim consolidated financial statements contain all adjustments that are necessary for a fair statement of the Company's financial position as of March 31, 2024, the consolidated results of operations for the three months ended March 31, 2024, and cash flows for the three months ended March 31, 2024. Such adjustments are of a normal and recurring nature. The results of operations for the three months ended March 31, 2024 are not necessarily indicative of the results of operations that may be expected for the year ending December 31, 2024.

Liquidity and Management's Plan

The future success of the Company is dependent on its ability to develop its product candidates and ultimately upon its ability to attain and sustain profitable operations. The Company is subject to a number of risks similar to other early-stage life science companies, including, but not limited to, successful development of its product candidates, raising additional capital with favorable terms, protection of proprietary technology and market acceptance of any approved future products. The successful development of product candidates requires substantial working capital, which may not be available to the Company on favorable terms or at all.

To date, the Company has financed its operations primarily through public offerings and private placements of its securities, funding received from research grants, collaboration and license arrangements and a credit facility. The Company currently has no source of product revenue, and it does not expect to generate product revenue for the foreseeable future. To date, the Company's revenue has primarily been from collaboration agreements. The Company has devoted substantially all of its financial resources and efforts to developing its existing product candidates, identifying potential product candidates and conducting preclinical studies and clinical trials. The Company is in the early stages of development of its product candidates, and it has not completed development of any product candidates.

As of March 31, 2024, the Company's cash, cash equivalents, and restricted cash were $104.8 million, of which $1.4 million was restricted cash related to lease commitments and $0.2 million was held by its Russian subsidiary designated solely for use in its operations. The Company believes the cash, cash equivalents and restricted cash as of March 31, 2024 will enable it to fund its current planned operations for at least the next twelve months from the date of issuance of these financial statements, though it may pursue additional cash resources through public or private equity or debt financings or by establishing collaborations with other companies. Management's expectations with respect to its ability to fund current and long term planned operations are based on estimates that are subject to risks and uncertainties. If actual results are different from management's estimates, the Company may need to seek additional strategic or financing opportunities sooner than would otherwise be expected. However, there is no guarantee that any collaboration milestones will be achieved or that any of these strategic or financing opportunities will be executed on favorable terms, and some could be dilutive to existing stockholders. Further, the liability associated with the CVR Agreement (as defined below) will be settled solely through cash flow received under the Company's License and Development Agreement, or as so amended, the Sobi License, with Swedish Orphan Biovitrum AB (publ.), or Sobi, and any other Gross Proceeds (as defined in the CVR Agreement) net of certain agreed deductions. Under the CVR Agreement, 100% of all milestone payments, royalties and other amounts paid to the Company or controlled entities under the Sobi License, and any other Gross Proceeds will be distributed, net of specified deductions, to holders of the CVRs. There is no obligation to the Company to fund any amount related to the CVR liability. See Note 5.

If the Company is unable to obtain additional funding on a timely basis, it may be forced to significantly curtail, delay, or discontinue one or more of its planned research or development programs or be unable to expand its operations or otherwise capitalize on its commercialization of its product candidates. As of March 31, 2024, the Company had an accumulated deficit of $671.5 million. The Company anticipates operating losses to continue for the foreseeable future due to, among other things, costs related to research and development of its product candidates and its administrative organization.

Guarantees and Indemnifications

As permitted under Delaware law, the Company indemnifies its officers, directors, consultants and employees for certain events or occurrences that happen by reason of the relationship with, or position held at the Company. Through March 31,

2024, the Company had not experienced any losses related to these indemnification obligations, and no claims were outstanding. The Company does not expect significant claims related to these indemnification obligations and, consequently, concluded that the fair value of these obligations is negligible, and no related reserves were established.

2. Summary of Significant Accounting Policies

The Company disclosed its significant accounting policies in Note 2 – Summary of Significant Accounting Policies included in the Company's Annual Report on Form 10-K for the year ended December 31, 2023. There have been no material changes to the Company's significant accounting policies during the three months ended March 31, 2024.

Recent Accounting Pronouncements

Not Yet Adopted

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures* (ASU 2023-07), which requires an enhanced disclosure of significant segment expenses on an annual and interim basis. This guidance will be effective for the annual periods beginning the year ended December 31, 2024, and for interim periods beginning January 1, 2025. Early adoption is permitted. Upon adoption, the guidance should be applied retrospectively to all prior periods presented in the financial statements. The Company does not expect the adoption of this guidance to have a material impact on its consolidated financial statements.

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures* (ASU 2023-09), which improves the transparency of income tax disclosures by requiring consistent categories and greater disaggregation of information in the effective tax rate reconciliation and income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. This guidance will be effective for the annual periods beginning the year ended December 31, 2025. Early adoption is permitted. Upon adoption, the guidance can be applied prospectively or retrospectively. The Company does not expect the adoption of this guidance to have a material impact on its consolidated financial statements.

3. Merger

On November 13, 2023, the Company merged with Old Cartesian in accordance with the terms of the Merger Agreement, by and among Selecta, Sakura Merger Sub I, Inc., a wholly owned subsidiary of Selecta, or First Merger Sub, Sakura Merger Sub II, LLC, a wholly owned subsidiary of Selecta, or Second Merger Sub, and Old Cartesian. Pursuant to the Merger Agreement, First Merger Sub merged with and into Old Cartesian, pursuant to which Old Cartesian was the surviving corporation and became a wholly owned subsidiary of Selecta, or the First Merger. Immediately following the First Merger, Old Cartesian merged with and into Second Merger Sub, pursuant to which Second Merger Sub was the surviving entity, or the Second Merger and, together with the First Merger, the Merger. In connection with the Second Merger, Old Cartesian changed its name to Cartesian Bio, LLC.

The Merger was intended to qualify as a tax-free reorganization for U.S. federal income tax purposes. As a result of the Merger, Selecta changed its corporate name to Cartesian Therapeutics, Inc. and its common stock began trading on the Nasdaq Global Market under the new trading symbol "RNAC" beginning on November 14, 2023.

The Merger Agreement was unanimously approved by the board of directors of Selecta and the board of directors of Old Cartesian. The Merger was consummated substantially concurrently with the entry into the Merger Agreement and was not subject to approval of the Company's stockholders.

Under the terms of the Merger Agreement, following the consummation of the Merger on November 13, 2023, or the Closing Date, in exchange for 100% of the outstanding shares of capital stock of Old Cartesian immediately prior to the effective time of the First Merger, the Company agreed to issue to the stockholders of Old Cartesian (i) 224,099 shares of the Company's common stock and (ii) 384,930.724 shares of Series A Preferred Stock. The issuance of the shares of common stock and Series A Preferred Stock occurred on December 5, 2023 which was after the December 4, 2023 record date for the distribution of the CVRs (see Note 5); as such, the Old Cartesian stockholders did not have rights as holders of common stock or holders of Series A Preferred Stock until such issuance on December 5, 2023. In addition, all outstanding stock options to purchase Old Cartesian common stock were assumed by the Company and converted into stock options to purchase (i) shares of the Company's common stock or (ii) shares of the Company's Series A Preferred Stock on terms substantially identical to those in effect prior to Merger Agreement, except for adjustments to the underlying number of shares and the exercise price based on the Merger Agreement exchange ratio.

Pursuant to the Merger Agreement, the Company agreed to hold a stockholders' meeting, or the Special Meeting, to submit the following proposals to a vote of its stockholders: (i) the approval of the conversion of shares of Series A Preferred Stock into shares of common stock, or the Conversion Proposal, and (ii) either or both of (A) the approval of an amendment to the Company's Charter to increase the number of shares of common stock authorized under the Charter and (B) the approval of an

amendment to the Charter to effect a reverse stock split of all outstanding shares of common stock, in either case (A) or (B) by a number of authorized shares or at a stock split ratio, as the case may be, sufficient to allow the conversion of all shares of Series A Preferred Stock issued in the Merger. The Special Meeting was held on March 27, 2024 in which the Company's stockholders approved the Conversion Proposal, among other matters (see Note 10).

The Company concluded the acquisition resulted in the Company obtaining a controlling financial interest in a variable interest entity, or VIE, in accordance with ASC 810, *Consolidation*, or ASC 810. The Company determined that Old Cartesian was considered to be a VIE as it did not have sufficient equity to finance its activities without additional subordinated financial support. Prior to the Closing Date, the primary source of funding for Old Cartesian had been preferred stock financings. The Company acquired all of the outstanding shares of Old Cartesian and, therefore, is the sole equity holder and primary beneficiary. The Company has the obligation to the absorb the losses and right to receive the benefits of Old Cartesian, and the power to direct the activities that most significantly affect the economic performance of Old Cartesian which the Company considers to be its development activities. Therefore, the Company is the primary beneficiary. Further, the Company concluded the VIE qualified as a business and accounted for the transaction as the acquisition of a business in accordance with ASC 805, *Business Combinations*, or ASC 805. As the primary beneficiary, the Company was the acquirer in the transaction.

The Company exchanged the right to receive shares of common stock and Series A Preferred Stock for all of the outstanding equity of Old Cartesian. The Company determined the rights to receive shares exchanged in the Merger represent a forward contract. The fair value of the forward contracts was determined based on the fair value of shares of common stock and Series A Preferred Stock underlying the forward contracts as of the acquisition date. The total purchase price consists of the fair value of the forward contracts in addition to a portion of the fair value of options exchanged in the transaction related to prior service. Under the acquisition method, the total purchase price of the acquisition was allocated to the net tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values as of the date of the acquisition.

The total fair value of the consideration of $168.5 million as of the Closing Date is summarized as follows (in thousands):

Forward contract to issue common stock	$	2,713
Forward contract to issue Series A Preferred Stock		155,308
Stock options allocated to consideration paid		10,444
Total consideration	$	168,465

The Company recorded the assets acquired and liabilities assumed as of the Closing Date based on the information available at that date. The following table presents the allocation of the purchase price to the estimated fair values of the assets acquired and liabilities assumed as of the Closing Date (in thousands):

Assets acquired:		**As of November 13, 2023**
Cash and cash equivalents	$	6,561
Prepaid expenses and other current assets		309
Property and equipment, net		215
Right-of-use asset, net		915
In-process research and development assets		150,600
Goodwill		48,163
	$	206,763
Liabilities assumed		
Accrued expenses and other current liabilities	$	2,530
Lease liability	$	292
Lease liability, net of current portion	$	623
Deferred tax liability	$	34,853
	$	38,298
Net assets acquired	$	168,465

The fair value of the in-process research and development, or IPR&D, assets were capitalized as of the Closing Date and will be accounted for as indefinite-lived intangible assets until completion or disposition of the assets or abandonment of the associated research and development efforts. Upon successful completion of the development efforts, the carrying value of each respective IPR&D asset will be amortized over its estimated useful life. Until that time, the IPR&D assets will be subject to impairment testing and will not be amortized. The goodwill recorded related to the Merger is the excess of the fair value of the consideration transferred by the acquirer over the fair value of tangible assets, identifiable intangible assets and assumed liabilities as of the Closing Date and is not deductible for tax purposes. The goodwill balance is primarily attributable to the value of the assembled workforce and deferred tax liabilities associated with the transaction.

The following summarizes the Company's intangible assets acquired in the Merger (in thousands):

	Acquisition Date Fair Value
Descartes-08 for MG	$ 93,900
Descartes-08 for SLE	56,700
Total in-process research and development assets	$ 150,600

The fair value of the intangible assets was estimated using the income approach in which the after-tax cash flows were discounted to present value. The cash flows are based on estimates used to price the transaction, and the discount rates applied were benchmarked with reference to the implied rate of return from the transaction model as well as the weighted average cost of capital.

The forward contract related to the common stock was recorded as additional paid-in capital as the instrument is indexed to the Company's common stock. The forward contract related to the Series A Preferred Stock was recorded as a liability as the underlying Series A Preferred Stock has a redemption feature that may require the Company to settle the instrument by transferring an asset. The forward contract was measured at fair value through the date of settlement through the issuance of the shares of Series A Preferred Stock on December 5, 2023.

4. Net Loss Per Share

The following table sets forth the computation of basic and diluted net loss per share for the three months ended March 31, 2024 and 2023 (in thousands, except share and per-share data):

	Three Months Ended March 31,	
	2024	2023
Numerator:		
Net loss allocable to shares of common stock - basic and diluted	$ (56,824)	$ (21,663)
Denominator:		
Weighted-average common shares outstanding - basic and diluted	5,414,020	5,111,518
Net loss per share:		
Basic and Diluted	$ (10.50)	$ (4.24)

The following table represents the potential dilutive shares of common stock excluded from the computation of the diluted net loss per share for all periods presented, as the effect would have been anti-dilutive:

	Three Months Ended March 31,	
	2024	2023
Common stock options, restricted stock units and ESPP shares	1,811,636	773,488
Warrants to purchase common stock	975,132	1,040,942
Series A Preferred Stock	17,808,670	—
Series A Preferred Stock options	470,403	—
Total	21,065,841	1,814,430

5. Fair Value Measurements

The following tables present the Company's assets and liabilities that are measured at fair value on a recurring basis as of March 31, 2024 and December 31, 2023 (in thousands):

	March 31, 2024			
	Total	Level 1	Level 2	Level 3
Assets:				
Money market funds (included in cash equivalents)	$ 38,672	$ 38,672	$ —	$ —
Total assets	$ 38,672	$ 38,672	$ —	$ —
Liabilities:				
Warrant liabilities	$ 5,352	$ —	$ —	$ 5,352
Contingent value right liability	$ 397,900	$ —	$ —	$ 397,900
Total liabilities	$ 403,252	$ —	$ —	$ 403,252

	December 31, 2023			
	Total	Level 1	Level 2	Level 3
Assets:				
Money market funds (included in cash equivalents)	$ 41,161	$ 41,161	$ —	$ —
Total assets	$ 41,161	$ 41,161	$ —	$ —
Liabilities:				
Warrant liabilities	$ 6,394	$ —	$ —	$ 6,394
Contingent value right liability	$ 358,600	$ —	$ —	$ 358,600
Forward contract liabilities	$ 28,307	$ —	$ 28,307	$ —
Total liabilities	$ 393,301	$ —	$ 28,307	$ 364,994

There were no transfers within the fair value hierarchy during the three months ended March 31, 2024 or year ended December 31, 2023.

Cash, Cash Equivalents, and Restricted Cash

As of March 31, 2024 and December 31, 2023, money market funds were classified as cash and cash equivalents on the accompanying consolidated balance sheets as they mature within 90 days from the date of purchase.

As of March 31, 2024, the Company had a restricted cash balance relating to a secured letter of credit in connection with its lease for the Company's prior headquarters. Short-term restricted cash is included within prepaid expenses and other current assets in the consolidated balance sheets. The Company's consolidated statements of cash flows include the following as of March 31, 2024 and 2023 (in thousands):

	March 31,	
	2024	2023
Cash and cash equivalents	$ 103,418	$ 125,925
Short-term restricted cash	—	289
Long-term restricted cash	1,377	1,311
Total cash, cash equivalents, and restricted cash	$ 104,795	$ 127,525

Warrants to Purchase Common Stock

In December 2019, the Company issued warrants to purchase common stock in connection with a private placement, or the 2019 Warrants. Pursuant to the terms of the 2019 Warrants, the Company could be required to settle the 2019 Warrants in cash in the event of certain acquisitions of the Company and, as a result, the 2019 Warrants are required to be measured at fair value and reported as a liability on the balance sheet. On December 20, 2022, the Company amended the terms of the outstanding 2019 Warrants held by certain members of the Board of Directors, or the Amended 2019 Warrants, to remove the cash settlement provision. As a result, the Amended 2019 Warrants were remeasured at fair value on December 20, 2022 and reclassified from a liability to equity on the balance sheet. See Note 12 to the consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2023 for further discussion on the equity-classified Amended 2019 Warrants.

In April 2022, the Company issued warrants in connection with an underwritten offering, or the 2022 Warrants. Pursuant to the terms of the 2022 Warrants, the Company could be required to settle the 2022 Warrants in cash in the event of an

acquisition of the Company under certain circumstances and, as a result, the 2022 Warrants are required to be measured at fair value and reported as a liability on the balance sheet.

The Company recorded the fair value of the 2019 Warrants and the 2022 Warrants upon issuance using the Black-Scholes valuation model and is required to revalue the 2019 Warrants and the 2022 Warrants at each reporting date, with any changes in fair value recorded in the statement of operations and comprehensive income (loss). The valuations of the 2019 Warrants and the 2022 Warrants are classified as Level 3 of the fair value hierarchy due to the need to use assumptions in the valuations that are both significant to the fair value measurement and unobservable, including the stock price volatility and the expected life of the 2019 Warrants and the 2022 Warrants. Generally, increases (decreases) in the fair value of the underlying stock and estimated term would result in a directionally similar impact to the fair value measurement.

The estimated fair values of the 2019 Warrants and the 2022 Warrants were determined using the following inputs to the Black-Scholes simulation valuation:

Estimated fair value of the underlying stock. The Company estimates the fair value of the common stock based on the closing stock price at the end of each reporting period.

Risk-free interest rate. The risk-free interest rate is based on the U.S. Treasury at the valuation date commensurate with the expected remaining life assumption.

Dividend rate. The dividend rate is based on the historical rate, which the Company anticipates will remain at zero.

Expected life. The expected life of the 2019 Warrants and the 2022 Warrants is assumed to be equivalent to their remaining contractual terms which expire on December 23, 2024 and April 11, 2027, respectively.

Volatility. The Company estimates stock price volatility based on the Company's historical volatility for a period of time commensurate with the expected remaining life of the warrants.

A summary of the Black-Scholes pricing model assumptions used to record the fair value of the 2019 Warrants liability is as follows:

	March 31, 2024	December 31, 2023
Risk-free interest rate	5.38 %	4.79 %
Dividend yield	—	—
Expected life (in years)	0.73	0.98
Expected volatility	96.03 %	83.67 %

A summary of the Black-Scholes pricing model assumptions used to record the fair value of the 2022 Warrants liability is as follows:

	March 31, 2024	December 31, 2023
Risk-free interest rate	4.40 %	4.01 %
Dividend yield	—	—
Expected life (in years)	3.03	3.28
Expected volatility	82.72 %	84.09 %

The following table reflects a roll-forward of fair value for the Company's Level 3 warrant liabilities (see Note 11 to these unaudited consolidated financial statements) for the three months ended March 31, 2024 (in thousands):

	Warrant liabilities
Fair value as of December 31, 2023	$ 6,394
Change in fair value	(1,042)
Fair value as of March 31, 2024	$ 5,352

Contingent Value Right

On December 6, 2023, as contemplated by the Merger Agreement, the Company entered into a contingent value rights agreement, or the CVR Agreement, pursuant to which each holder of common stock or a 2022 Warrant as of December 4, 2023 was distributed a CVR, issued by the Company for each share of common stock held directly or underlying a 2022 Warrant held by such holder as of December 4, 2023. Holders of warrants other than the 2022 Warrants will be entitled to receive, upon exercise of such warrants and in accordance with the terms of the warrants, one CVR per each share of common stock underlying such warrants.

Each CVR entitles its holder to distributions of the following, pro-rated on a per-CVR basis, during the period ending on the date on which the Royalty Term (as defined in the Sobi License) ends, or the Termination Date:

- 100% of all milestone payments, royalties and other amounts paid to the Company or its controlled affiliates, or the Company Entities, under the Sobi License or, following certain terminations of the Sobi License, any agreement a Company Entity enters into that provides for the development and commercialization of SEL-212; and
- 100% of all cash consideration and the actual liquidation value of any and all non-cash consideration of any kind that is paid to or is actually received by any Company Entity prior to the Termination Date pursuant to an agreement relating to a sale, license, transfer or other disposition of any transferable asset of the Company existing as of immediately prior to the Merger, other than those exclusively licensed under the Sobi License or which the Company Entities are required to continue to own in order to comply with the Sobi License.

The distributions in respect of the CVRs will be made on a semi-annual basis, and will be subject to a number of deductions, subject to certain exceptions or limitations, including for (i) certain taxes payable on the proceeds subject to the CVR distribution, (ii) certain out of pocket costs incurred by the Company Entities, including audit and accounting fees incurred in connection with reporting obligations relating to the CVRs and other expenses incurred in the performance of their obligations and other actions under the CVR Agreement, (iii) a fixed semi-annual amount of $0.75 million for general and administrative overhead, (iv) payments made and remaining obligations on lease liabilities of Selecta immediately prior to the Merger and (v) amounts paid and remaining obligations with regard to the Xork product candidate. Each of the deductions described in (iv) and (v) will be made only if certain milestone payments under the Sobi License are made and are also subject to certain adjustments as contemplated in the CVR Agreement.

The CVRs represent financial instruments that are accounted for under the fair value option election in ASC 825*, Financial Instruments*. Under the fair value option election, the CVRs are initially measured at the aggregate estimated fair value of the CVRs and will be subsequently remeasured at estimated fair value on a recurring basis at each reporting period date. The liability was recorded at the date of approval, November 13, 2023, as a dividend. The estimated fair value of the CVR liability was determined using a discounted cash flow methodology as of December 31, 2023 and a Monte Carlo simulation model as of March 31, 2024 to estimate future cash flows associated with the legacy assets, including the expected milestone and royalty payments under the Sobi License, net of deductions. Changes in fair value of the CVR liability are presented in the consolidated statements of operations and comprehensive income (loss). The liability value is based on significant inputs not observable in the market such as estimated cash flows, estimated probabilities of success, expected volatility of future revenues (Monte Carlo simulation model) and risk-adjustment discount rates (discounted cash flow methodology), which represent a Level 3 measurement within the fair value hierarchy. The significant inputs used to estimate the fair value of the CVR liability, which represented a financial instrument being accounted for under the fair value option, were as follows:

	March 31, 2024
Estimated cash flow dates	2024-2038
Estimated probability of success	95.0 %
Expected volatility of future revenues	25.0 %

	December 31, 2023
Estimated cash flow dates	2024 - 2038
Estimated probability of success	95.0 %
Risk-adjusted discount rate	13.7 %

The following table reflects a roll-forward of fair value for the Company's Level 3 CVR liability for the three months ended March 31, 2024 (in thousands):

	CVR liability
Fair value as of December 31, 2023	$ 358,600
Change in fair value	39,300
Fair value as of March 31, 2024	$ 397,900

Forward Contract Liabilities

Merger Consideration

In connection with the Merger, the Company entered into a contract for the issuance of 384,930.724 shares of Series A Preferred Stock as part of the consideration transferred. The fair value of the forward contract at the Closing Date was $155.3 million. The non-cash settlement of this liability occurred on December 5, 2023 with the issuance of the Series A Preferred Stock for $261.8 million.

November 2023 Private Placement

The Company entered into a contract for the issuance of 149,330.115 shares of Series A Preferred Stock as part of the November 2023 Private Placement which was settled in multiple tranches. The Company determined the obligation to issue 148,710.488 shares of Series A Preferred Stock to Dr. Timothy A. Springer, a member of the Company's Board of Directors, and TAS Partners LLC, an affiliate of Dr. Springer, represented a forward contract. See Note 10. The initial fair value of the forward contract liability on November 13, 2023 was insignificant as the fair value of the underlying Series A Preferred Stock was equal to the purchase price of the Series A Preferred Stock as agreed upon in the November 2023 Private Placement. Subsequent measurement of the fair value of the forward contract liability was based on the market price of the Company's common stock, which represented the redemption and conversion value of the Series A Preferred Stock, less the purchase price, on an as-converted basis. The non-cash settlement of a portion of the liability occurred on December 13, 2023 with the issuance of the first tranche of the Series A Preferred Stock for $14.8 million. The non-cash settlement of the remaining second and third tranches occurred on January 12, 2024 and February 11, 2024, respectively, for a total of $35.2 million.

The following table presents changes in the forward contract liabilities for the periods presented (in thousands):

	Forward contract liabilities
Fair value as of December 31, 2023	$ 28,307
Settlements	(35,197)
Change in fair value	6,890
Fair value as of March 31, 2024	$ —

6. Property and Equipment

Property and equipment consists of the following (in thousands):

	March 31, 2024	December 31, 2023
Laboratory equipment	$ 6,662	$ 6,280
Computer equipment and software	620	702
Leasehold improvements	61	61
Furniture and fixtures	452	452
Office equipment	196	196
Construction in process	241	150
Total property and equipment	8,232	7,841
Less: Accumulated depreciation	(5,830)	(5,728)
Property and equipment, net	$ 2,402	$ 2,113

Depreciation expense was $0.2 million for each of the three months ended March 31, 2024 and 2023.

7. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	March 31, 2024	December 31, 2023
Payroll and employee related expenses	$ 1,701	$ 4,390
Accrued patent fees	1,177	472
Accrued external research and development costs	2,614	4,896
Accrued professional and consulting services	3,055	4,331
Other	380	644
Accrued expenses	$ 8,927	$ 14,733

8. Leases

65 Grove Street Lease

In July 2019, the Company entered into a lease with BRE-BMR Grove LLC for 25,078 square feet of laboratory and office space located at 65 Grove Street, Watertown, Massachusetts, or the Watertown Lease. On September 1, 2022, the Company entered into an amendment to the Watertown Lease, or the Lease Agreement Amendment, to expand the Company's laboratory and office space located at 65 Grove Street, Watertown, Massachusetts by approximately 7,216 square feet. In connection with the Lease Agreement Amendment, the Company secured a letter of credit for the Watertown Lease from Silicon Valley Bank, a division of First-Citizens Bank & Trust Company (successor by purchase to the Federal Deposit Insurance Corporation as Receiver for Silicon Valley Bridge Bank, N.A. (as successor to Silicon Valley Bank)), or SVB, for $1.6 million as of December 31, 2022.

In May 2023, the Company received notice from BRE-BMR Grove LLC that the requirements to reduce the amount of the letter of credit for the Watertown Lease had been met. In connection therewith, in June 2023, the Company secured a letter of credit from JPMorgan Chase Bank, N.A. for $1.4 million, which is recognized as long-term restricted cash as of March 31, 2024 and December 31, 2023, and renews automatically each year. The $1.6 million letter of credit with SVB was released from restriction and returned to the Company on July 17, 2023, and therefore was reclassified into cash and cash equivalents in the consolidated balance sheets.

On October 6, 2022, the Company entered into a sublease agreement to sublease 7,216 square feet of space currently rented by the Company at 65 Grove Street, Watertown, Massachusetts. The sublease commenced on October 24, 2022, and the term expired on March 31, 2024. On October 31, 2023, in connection with entering into Amendment No. 1 to the Sobi License as described in Note 13, the Company entered into a sublease agreement with Sobi to sublease approximately 5,600 square feet of space currently rented by the Company at 65 Grove Street, Watertown, Massachusetts for which Sobi paid $1.0 million upfront rental payment. The sublease commenced on November 6, 2023, when the Company, Sobi, and BRE-BMR Grove LLC, executed a Consent to Sublease. The term of the sublease expires on November 5, 2024 with no option to extend the sublease term. As of March 31, 2024 and December 31, 2023, deferred rent of $0.6 million and $0.8 million is included within accrued expenses and other current liabilities in the consolidated balance sheets. Sublease income is included within other income, net in the consolidated statements of operations and comprehensive income (loss).

During the year ended December 31, 2023, the Company determined that the right-of-use asset related to the operating lease for approximately 7,216 square feet at 65 Grove Street was partially impaired as of November 30, 2023. As a result, the Company recognized a $0.7 million right-of-use asset impairment charge in the fourth quarter of 2023.

704 Quince Orchard Road Leases

In connection with the Merger, the Company acquired two operating leases for office and laboratory space in Gaithersburg, Maryland. The leases expire in January 2027 and do not contain any renewal rights. The discount rate of 11.5% was determined based on the Company's incremental borrowing rate adjusted for the lease term.

7495 New Horizon Way Lease

On February 28, 2024, the Company entered into a lease agreement with 7495 RP, LLC, or the Landlord, pursuant to which it agreed to lease from the Landlord the manufacturing space located at 7495 New Horizon Way, Frederick, Maryland, or the Frederick Lease Agreement. The space consists of 19,199 leasable square feet of integrated manufacturing and office space. The initial term of the Frederick Lease Agreement is expected to commence once the Landlord has obtained legal possession of the premises free of the existing tenant and delivered full possession of the premises to the Company, or the Commencement Date, which had not occurred as of March 31, 2024. Upon the Commencement Date, which was determined to be May 1, 2024, the Company will assess the classification of the lease and measure the right-of-use asset and lease liability. The Frederick Lease Agreement will terminate approximately seven years following the Commencement Date. The Company will have one option to extend the term of the Frederick Lease Agreement for a period of five years at a cost of 100% of the then-fair market value, not to exceed 103% of the then-current base rent. The base rent for the initial term is $0.1 million per month. The Company paid first month's rent of $0.1 million upon execution of the Frederick Lease Agreement and paid a cash security deposit of $0.3 million, both of which are classified as prepaid expenses and other current assets on the consolidated balance sheet.

For the three months ended March 31, 2024 and 2023, the components of lease costs were as follows (in thousands):

	Three Months Ended March 31,	
	2024	2023
Operating lease cost	$ 775	$ 696
Variable lease cost	397	142
Short-term lease cost	3	3
Less: Sublease income	(510)	(255)
Total lease cost	$ 665	$ 586

The maturity of the Company's operating lease liabilities as of March 31, 2024 were as follows (in thousands):

	March 31, 2024
2024 (remainder)	$ 2,316
2025	3,164
2026	3,248
2027	3,017
2028	946
Thereafter	—
Total future minimum lease payments	12,691
Less: Imputed interest	2,234
Total operating lease liabilities	$ 10,457

The supplemental disclosure for the statement of cash flows related to operating leases was as follows (in thousands):

	Three Months Ended March 31,	
	2024	2023
Cash paid for amounts included in the measurement of lease liabilities:	$ 761	$ 653

The changes in the Company's right-of-use assets and lease liabilities for the three months ended March 31, 2024 and 2023 are reflected in the non-cash lease expense and accrued expenses and other liabilities, respectively, in the consolidated statements of cash flows.

The following summarizes additional information related to operating leases:

	March 31,	
	2024	2023
Weighted-average remaining lease term	4.0 years	5.1 years
Weighted-average discount rate	9.9 %	9.7 %

9. Debt

2020 Term Loan

On August 31, 2020, the Company entered into a Loan and Security Agreement with Oxford Finance LLC, or Oxford, and Silicon Valley Bank, or the Loan and Security Agreement, and such facility, the 2020 Term Loan. On March 10, 2023, Silicon Valley Bank was closed by the California Department of Financial Protection and Innovation, and the Federal Deposit Insurance Corporation, or the FDIC, was appointed as receiver. On March 13, 2023, the FDIC announced that all of Silicon Valley Bank's deposits and substantially all of its assets had been transferred to a newly created, full-service, FDIC-operated bridge bank, Silicon Valley Bridge Bank, N.A., or SVBB. SVBB assumed all loans that were previously held by Silicon Valley Bank. On March 27, 2023, First-Citizens Bank & Trust Company assumed all of SVBB's customer deposits and certain other liabilities and acquired substantially all of SVBB's loans and certain other assets from the FDIC, including the 2020 Term Loan.

On September 11, 2023, the Company entered into a payoff letter with Oxford and SVB, pursuant to which the Company paid all outstanding amounts under the 2020 Term Loan, together with accrued interest and a prepayment penalty, resulting in the full extinguishment of the 2020 Term Loan. The total payoff amount was $22.3 million, consisting of the remaining

principal amount due of $19.8 million, the final payment fee of $2.3 million, the prepayment penalty of $0.2 million, and less than $0.1 million of accrued interest.

During the third quarter of 2023, the Company recorded a loss of $0.7 million on the extinguishment of the 2020 Term Loan, consisting of the prepayment penalty of $0.2 million and the write-off of $0.5 million of unamortized debt issuance costs and venture debt termination fee.

As of March 31, 2024 and December 31, 2023, the Company had no outstanding borrowings.

10. Series A Preferred Stock

The Certificate of Designation of Preferences, Rights, and Limitations of the Series A Non-Voting Convertible Preferred Stock, or the Certificate of Designation, was filed on November 13, 2023, which provided for the designation of shares of the Series A Preferred Stock and authorized the issuance of 548,375 shares of Series A Preferred Stock.

Additionally on November 13, 2023, the Company entered into the Securities Purchase Agreement with (i) Dr. Timothy A. Springer, a member of the Company's Board of Directors; (ii) TAS Partners LLC, an affiliate of Dr. Springer, and (iii) Seven One Eight Three Four Irrevocable Trust, a trust associated with Dr. Murat Kalayoglu, a co-founder and the former chief executive officer of Old Cartesian, who joined the Company's Board of Directors effective immediately after the effective time of the Merger, or the Investors. Pursuant to the Securities Purchase Agreement, the Company agreed to issue and sell an aggregate of 149,330.115 shares of Series A Preferred Stock for an aggregate purchase price of $60.25 million in the November 2023 Private Placement.

In the November 2023 Private Placement, Dr. Timothy A. Springer agreed to settle his purchases in three tranches of shares of Series A Preferred Stock, the first for a purchase price of $10.0 million and each thereafter for a purchase price of approximately $20.0 million, with the three tranches settling 30, 60, and 90 days, respectively, following the Closing Date. TAS Partners LLC agreed to settle its purchase for approximately $10.0 million within 30 days following the Closing Date. The first, second and third tranches were settled on December 13, 2023, January 12, 2024 and February 11, 2024, respectively, under which (i) 24,785.081 shares of Series A Preferred Stock were issued to each of TAS Partners LLC and Dr. Timothy A. Springer in the first tranche, (ii) 49,570.163 shares of Series A Preferred Stock were issued to Dr. Timothy A. Springer in the second tranche, and (iii) 49,570.163 shares of Series A Preferred Stock were issued to Dr. Timothy A. Springer in the third tranche. On November 15, 2023, the Company issued 619.627 shares of Series A Preferred Stock to Seven One Eight Three Four Irrevocable Trust for $0.25 million.

The Company determined the obligation to issue 148,710.488 shares of Series A Preferred Stock to Dr. Springer and TAS Partners LLC represented a forward contract and was accounted for as a liability with changes in fair value recorded in earnings. A portion of the liability was settled with the initial issuance of 49,570.162 shares of Series A Preferred Stock on December 13, 2023. The remaining portion of the forward contract liability was settled upon the issuance of 49,570.163 shares of Series A Preferred Stock each on January 12, 2024 and February 11, 2024, respectively (see Note 5).

On December 5, 2023, the Company issued 384,930.724 shares of Series A Preferred Stock as part of its consideration transferred in connection with the Merger which settled the related forward contract liability (see Note 5).

On March 26, 2024, the Company, with the consent of the requisite holders of Series A Preferred Stock, amended the Certificate of Designation such that the automatic conversion of the Series A Preferred Stock into common stock, or the Automatic Conversion, will occur eight business days following stockholder approval of the Conversion Proposal. Upon such date, each share of Series A Preferred Stock will automatically convert into 33.333 shares of common stock, subject to certain limitations, including that a holder of Series A Preferred Stock is prohibited from converting shares of Series A Preferred Stock into shares of common stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (to be established by the holder between 0% and 19.9%) of the total number of shares of common stock issued and outstanding immediately after giving effect to such conversion; provided, however, that such beneficial ownership limitation does not apply to Dr. Springer, TAS Partners LLC, or any of their respective affiliates. Each share of Series A Preferred Stock outstanding that is not otherwise automatically converted into common stock as a result of the beneficial ownership limitation shall be convertible at any time at the option of the holder following stockholder approval of the Conversion Proposal, only to the extent the beneficial ownership limitation does not apply to the shares of Series A Preferred Stock to be converted.

On March 27, 2024, the Company's stockholders approved the Conversion Proposal, among other matters, at the Special Meeting. As a result of the approval of the Conversion Proposal, all conditions that could have required cash redemption of the Series A Preferred Stock were satisfied. Since the Series A Preferred Stock is no longer redeemable, the associated balances of the Series A Preferred Stock were reclassified from mezzanine equity to permanent equity during the first quarter of 2024.

As of March 31, 2024, the Company had 534,260.839 shares of Series A Preferred Stock issued and outstanding.

On April 8, 2024, pursuant to the terms of the Certificate of Designation, as amended, 367,919.247 shares of Series A Preferred Stock automatically converted into 12,263,951 shares of common stock; 166,341.592 shares of Series A Preferred Stock did not automatically convert due to beneficial ownership limitations. The 166,341.592 shares of Series A Preferred Stock that did not automatically convert are convertible into 5,544,719 shares of common stock. Based on the 17,779,787 shares of common stock outstanding on April 8, 2024, there would be 23,324,506 shares of common stock outstanding if all shares of Series A Preferred Stock converted into common stock on such date.

11. Equity

Equity Financings

"At-the-Market" Offerings

On October 25, 2021, the Company entered into a sales agreement, or the 2021 Sales Agreement, with Leerink Partners LLC (then known as SVB Leerink LLC), or Leerink Partners, pursuant to which the Company may sell shares of the Company's common stock, from time to time, through an "at the market" equity offering program under which Leerink Partners will act as sales agent. The shares of common stock sold pursuant to the 2021 Sales Agreement, if any, would be issued and sold pursuant to a registration statement to be filed by the Company with the SEC, for aggregate remaining gross sales proceeds of up to $51.0 million.

During the three months ended March 31, 2024 and the year ended December 31, 2023, the Company sold no shares of its common stock pursuant to the 2021 Sales Agreement.

Warrants

The following is a summary of warrant activity for the three months ended March 31, 2024:

	Number of Warrants			
	Equity classified	Liability classified	Total	Weighted-average exercise price
Outstanding at December 31, 2023	74,420	966,393	1,040,813	$ 45.98
Exercises	(65,681)	—	(65,681)	43.80
Outstanding at March 31, 2024	8,739	966,393	975,132	$ 46.12

See Note 14 for further discussion on the exercise of the 65,681 warrants. See Note 12 to the consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2023 for further discussion of the terms related to the Company's warrants.

Reserved Shares

The Company has authorized shares of common stock for future issuance as of March 31, 2024 as follows:

Exercise of warrants	975,132
Shares available for future stock incentive awards	202,875
Unvested restricted stock units	464,018
Outstanding common stock options	1,347,618
Series A Preferred Stock	17,808,670
Outstanding Series A Preferred Stock options	470,403
Total	21,268,716

12. Stock Incentive Plans

The Company maintained the 2008 Stock Incentive Plan, or the 2008 Plan, for employees, consultants, advisors, and directors. The 2008 Plan provided for the granting of incentive and non-qualified stock option and restricted stock awards as determined by the Board of Directors. In connection with the Merger, all outstanding awards issued under the 2008 Plan were cancelled, and the Board of Directors formally terminated the 2008 Plan.

In June 2016, the Company's stockholders approved the 2016 Incentive Award Plan, or the 2016 Plan, which authorized 40,341 shares of common stock for future issuance under the 2016 Plan and the Company ceased granting awards under the 2008 Plan. Upon the effective date of the 2016 Plan, awards issued under the 2008 Plan remained subject to the terms of the 2008 Plan. Awards granted under the 2008 Plan that expired, lapsed or terminated became available under the 2016 Plan as shares available for future grants.

Additionally, pursuant to the terms of the 2016 Plan, the Board of Directors is authorized to grant awards with respect to common stock, and may delegate to a committee of one or more members of the Board of Directors or executive officers of the

Company the authority to grant options and restricted stock units. On December 9, 2020, the Board of Directors established a Stock Option Committee authorized to grant awards to certain employees and consultants subject to conditions and limitations within the 2016 Plan. In January 2024, the number of shares of common stock that may be issued under the 2016 Plan was increased by 215,903. As of March 31, 2024, 19,446 shares remain available for future issuance under the 2016 Plan.

In September 2018, the Company's 2018 Employment Inducement Incentive Award Plan, or the 2018 Inducement Incentive Award Plan, was adopted by the Board of Directors without stockholder approval pursuant to Rule 5635(c)(4) of the Nasdaq Stock Market LLC listing rules, which authorized 39,166 shares of its common stock for issuance. In March 2019, the Board of Directors approved an amendment and restatement of the 2018 Inducement Incentive Award Plan to reserve an additional 66,667 shares of the Company's common stock for issuance thereunder. In December 2023, the Board of Directors approved an amendment and restatement of the 2018 Inducement Incentive Award Plan to reserve an additional 60,833 shares of the Company's common stock for issuance thereunder. As of March 31, 2024, there are 113,927 shares available for future grant under the 2018 Inducement Incentive Award Plan.

In accordance with the Merger Agreement, the Company assumed Old Cartesian's 2016 Stock Incentive Plan, or the Old Cartesian Plan. The Old Cartesian Plan permits the granting of options or restricted stock to employees, officers, directors, consultants and advisors to the Company. The unvested common stock options and Series A Preferred Stock options assumed by the Company in connection with the Merger generally vest over a four-year period. Additionally, the stock options granted have a contractual term of ten years and only full shares can be exercised as per the individual award agreements. As of March 31, 2024, there are 23,707 shares available for future grant under the Old Cartesian Plan.

In connection with the Merger, the outstanding stock options to purchase Old Cartesian common stock were converted into stock options to purchase 776,865 shares of common stock and 14,112.299 shares of Series A Preferred Stock of the Company. These replacement awards were revalued at their acquisition-date fair value and then attributed to pre and post-combination service. This resulted in $2.6 million attributed to post-combination service to be recognized as stock-based compensation expense over the remaining terms of the replacement awards, of which $0.4 million was recognized as research and development expense in the consolidated statements of operations and comprehensive income (loss) during the three months ended March 31, 2024. Following the Automatic Conversion, the options exercisable for shares of Series A Preferred Stock became exercisable for shares of common stock.

Stock-Based Compensation Expense

Stock-based compensation expense by classification included within the consolidated statements of operations and comprehensive income (loss) was as follows (in thousands):

	Three Months Ended March 31,	
	2024	2023
Research and development	$ 712	$ 1,192
General and administrative	719	1,084
Total stock-based compensation expense	$ 1,431	$ 2,276

Stock Options

The estimated grant date fair values of stock option awards granted under the 2016 Plan and the 2018 Inducement Incentive Award Plan were calculated using the Black-Scholes option pricing model based on the following weighted-average assumptions:

	Three Months Ended March 31,	
	2024	2023
Risk-free interest rate	3.95 %	3.95 %
Dividend yield	—	—
Expected term (in years)	6.20	5.94
Expected volatility	95.37 %	94.64 %
Weighted-average fair value of common stock	$ 19.78	$ 34.50

The expected term of the Company's stock options granted has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. Under the simplified method, the expected term is presumed to be the midpoint between the vesting date and the end of the contractual term. The Company utilizes this method due to lack of historical exercise data and the plain nature of its stock-based awards.

The weighted-average grant date fair value of stock options granted was $15.79 and $26.87 during the three months ended March 31, 2024 and 2023, respectively.

As of March 31, 2024, total unrecognized compensation expense related to unvested common stock options and Series A Preferred Stock options was $8.3 million and $0.8 million, respectively, which is expected to be recognized over a weighted average period of 3.4 years and 1.4 years, respectively.

The following table summarizes the stock option activity under the 2016 Plan, the 2018 Inducement Incentive Award Plan, and Old Cartesian Plan for options for common stock:

	Number of common stock options	Weighted-average exercise price ($)	Weighted-average remaining contractual term (in years)	Aggregate intrinsic value (in thousands)
Outstanding at December 31, 2023	776,865	$ 2.97	6.50	$ 13,760
Granted	641,089	$ 19.78		
Exercised	(52,558)	$ 2.93		
Forfeited	(17,778)	$ 11.46		
Outstanding at March 31, 2024	1,347,618	$ 10.86	7.88	$ 11,827
Vested at March 31, 2024	583,183	$ 2.98	5.90	$ 9,633
Vested and expected to vest at March 31, 2024	1,200,826	$ 9.77	7.72	$ 11,827

The following table summarizes the stock option activity under the Old Cartesian Plan for options for Series A Preferred Stock:

	Number of Series A Preferred Stock options	Weighted-average exercise price ($)	Weighted-average remaining contractual term (in years)	Aggregate intrinsic value (in thousands)
Outstanding at December 31, 2023	14,112.299	$ 79.94	5.91	$ 8,601
Outstanding at March 31, 2024	14,112.299	$ 79.94	5.65	$ 8,043
Vested at March 31, 2024	11,323.762	$ 73.14	5.05	$ 6,530
Vested and expected to vest at March 31, 2024	14,112.299	$ 79.94	5.65	$ 8,043

As a result of the approval of the Conversion Proposal on March 27, 2024, all conditions that could have required cash redemption of the Series A Preferred Stock underlying the stock options were satisfied. Since the Series A Preferred Stock is no longer redeemable, the associated balances of the stock options to purchase Series A Preferred Stock were reclassified from mezzanine equity to additional paid-in capital during the first quarter of 2024.

Restricted Stock Units

During the three months ended March 31, 2024, the Company granted 471,104 restricted stock unit awards with a weighted-average fair value of $19.80 per share based on the closing price of the Company's common stock on the date of grant under the 2016 Plan and the Old Cartesian Plan, which generally vest over a four-year term. Forfeitures are estimated at the time of grant and are adjusted, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company has estimated a forfeiture rate of 10% for restricted stock unit awards based on historical experience.

Unrecognized compensation expense related to the restricted stock units was $6.5 million as of March 31, 2024, which is expected to be recognized over a weighted-average period of 3.7 years.

The following table summarizes the Company's restricted stock units under the 2016 Plan, the 2018 Inducement Incentive Award Plan, and the Old Cartesian Plan:

	Number of shares	Weighted-average grant date fair value ($)
Unvested at December 31, 2023	—	$ —
Granted	471,104	19.80
Forfeited	(7,086)	19.80
Unvested at March 31, 2024	464,018	$ 19.80

Employee Stock Purchase Plan

In June 2016, the Company approved the 2016 Employee Stock Purchase Plan, or the ESPP, which authorized 5,769 shares of common stock for future issuance under the ESPP to participating employees. As of March 31, 2024, 45,795 shares remain available for future issuance under the ESPP. In connection with the Merger, the Board of Directors suspended the offerings under the ESPP.

The Company recognized no and less than $0.1 million stock-based compensation expense under the ESPP for the three months ended March 31, 2024 and March 31, 2023, respectively.

13. Revenue Arrangements

Astellas Gene Therapies

In January 2023, the Company entered into a License and Development Agreement, or the Astellas Agreement, with Audentes Therapeutics, Inc., doing business as Astellas Gene Therapies, or Astellas. Under the Astellas Agreement, the Company granted Astellas an exclusive license to the Company's IdeXork technology arising from Xork (defined below), to develop and commercialize Xork for use in Pompe disease in combination with an Astellas gene therapy investigational or authorized product. Xork, Genovis' IgG Protease, is licensed by the Genovis Agreement, as described in Note 15 to these consolidated financial statements. Astellas paid a $10.0 million upfront payment to the Company upon signing of the Astellas Agreement, and the Company is entitled to receive up to $340.0 million in future additional payments over the course of the partnership that are contingent on the achievement of various development and regulatory milestones and, if commercialized, sales thresholds for annual net sales where Xork is used as a pre-treatment for an Astellas investigational or authorized product. The Company is also eligible for tiered royalty payments ranging from low to high single digits. Any proceeds received from milestone payments or royalties relating to Xork would be required to be distributed to holders of CVRs, net of certain deductions. A more detailed description of the Astellas Agreement and the Company's evaluation of this agreement under ASC 606 can be found in Note 14 to the consolidated financial statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2023.

In March 2024, the Company was notified by Astellas of its intention to terminate the Astellas Agreement, effective June 6, 2024.

As of March 31, 2024 and December 31, 2023, the Company recorded $0.4 million and $2.3 million as a short-term contract liability, respectively, and no and $3.5 million long-term contract liability, respectively, representing deferred revenue associated with the Astellas Agreement. As of March 31, 2024 and December 31, 2023, the Company recorded a receivable of $0.4 million and $0.3 million, respectively, representing billings for the Xork Development Services (as defined in the Astellas Agreement) that are subject to reimbursement by Astellas. Revenue of $5.8 million and $0.6 million related to the Astellas Agreement was recognized during the three months ended March 31, 2024 and 2023, respectively, inclusive of $3.2 million of revenue recognized from performance obligations related to prior periods as a result of the change in transaction price during the three months ended March 31, 2024.

Takeda Pharmaceuticals USA, Inc.

License and Development Agreement

In October 2021, the Company entered into a License Agreement, or the Takeda Agreement, with Takeda Pharmaceuticals USA, Inc., or Takeda. Under the Takeda Agreement, the Company granted Takeda an exclusive license to the Company's ImmTOR technology initially for two specified disease indications within the field of lysosomal storage disorders. Takeda paid a $3.0 million upfront payment to the Company upon signing of the Takeda Agreement, and the Company was entitled to receive up to $1.124 billion in future additional payments over the course of the partnership that were contingent on the achievement of development or commercial milestones or Takeda's election to continue its activities at specified development stages. The Company was also eligible for tiered royalties on future commercial sales of any licensed products. A more detailed

description of the Takeda Agreement and the Company's evaluation of this agreement under ASC 606 can be found in Note 14 to the consolidated financial statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2023.

On March 9, 2023, the Company was notified by Takeda of the achievement of the milestone event related to the completion of a non-clinical milestone for one of the specified disease indications within the field of lysosomal storage disorders under the Takeda Agreement. Accordingly, the Company received a milestone payment of $0.5 million during the three months ended June 30, 2023.

The Takeda Agreement was terminated effective July 25, 2023, following Takeda's decision to discontinue discovery and pre-clinical activities in adeno-associated virus, or AAV, gene therapy.

As of both March 31, 2024 and December 31, 2023, the Company recorded no contract liability related to the Takeda Agreement. No revenue related to the Takeda Agreement was recognized during the three months ended March 31, 2024. Revenue of $0.5 million related to the Takeda Agreement was recognized during the three months ended March 31, 2023, all from performance obligations related to prior periods as a result of the change in transaction price.

Swedish Orphan Biovitrum AB (publ.)

License and Development Agreement

In June 2020, the Company and Sobi entered into the Sobi License, which was subsequently amended. Pursuant to the Sobi License, the Company agreed to grant Sobi an exclusive, worldwide (except as to Greater China) license to develop, manufacture and commercialize the SEL-212 drug candidate, which is currently in development for the treatment of chronic refractory gout. The SEL-212 drug candidate is a pharmaceutical composition containing a combination of SEL-037, or the Compound, and ImmTOR. Pursuant to the Sobi License, in consideration of the license, Sobi agreed to pay the Company a one-time, upfront payment of $75.0 million. Sobi has also agreed to make milestone payments totaling up to $630.0 million to the Company upon the achievement of various development and regulatory milestones and, if commercialized, sales thresholds for annual net sales of SEL-212, and tiered royalty payments ranging from the low double digits on the lowest sales tier to the high teens on the highest sales tier. A more detailed description of the Sobi License and the Company's evaluation of this agreement under ASC 606 can be found in Note 14 to the consolidated financial statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2023.

On October 31, 2023, the Company and Sobi entered into Amendment No. 1 to the Sobi License, pursuant to which the Company granted Sobi an exclusive license to manufacture ImmTOR solely in connection with Sobi's development of SEL-212 under the License and Development Agreement and transferred certain contracts and manufacturing equipment to Sobi. Additionally, in connection with entry into the amendment, Sobi agreed to make employment offers to certain of the Company's employees engaged in ImmTOR manufacturing activities on or prior to a specified date, and the Company agreed not to terminate the employment of such employees prior to such specified date. The Company maintains no responsibilities to Sobi to manufacture, or supply Sobi with, ImmTOR under the Sobi License.

As of March 31, 2024 and December 31, 2023, the Company recorded a total outstanding receivable of $0.6 million and $4.6 million, respectively, representing billings for the Phase 3 DISSOLVE program that are subject to reimbursement by Sobi. Additionally, as of March 31, 2024 and December 31, 2023, the Company recorded a total unbilled receivable of $2.4 million and $3.0 million, respectively, representing revenue earned but not yet billed for the Phase 3 DISSOLVE program. No revenue and revenue of $4.4 million related to the Sobi License was recognized during the three months ended March 31, 2024 and 2023, respectively.

Sarepta Therapeutics, Inc.

Research License and Option Agreement

In June 2020, the Company and Sarepta Therapeutics, Inc., or Sarepta, entered into a Research License and Option Agreement, or the Sarepta Agreement. Pursuant to the Sarepta Agreement, the Company agreed to grant Sarepta a license under the Company's intellectual property rights covering the Company's antigen-specific biodegradable nanoparticle encapsulating ImmTOR to research and evaluate ImmTOR in combination with Sarepta's adeno-associated virus gene therapy technology, or gene editing technology, using viral or non-viral delivery, to treat Duchenne Muscular Dystrophy and certain Limb-Girdle Muscular Dystrophy subtypes, or the Indications. Sarepta initially had an option term of 24 months during which it could opt-in to obtain an exclusive license to further develop and commercialize the product to treat at least one indication, with a potential to extend the option term for an additional fee. The Company agreed to supply ImmTOR to Sarepta for clinical supply on a cost-plus basis under the Sarepta Agreement. A more detailed description of the Sarepta Agreement and the Company's evaluation of this agreement under ASC 606 can be found in Note 14 to the consolidated financial statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2023.

On March 13, 2023, the Company was notified by Sarepta that Sarepta would not be exercising its exclusive option under the Sarepta Agreement. Therefore, the remaining deferred revenue balance as of December 31, 2022 of $0.5 million was

recognized as revenue during the three months ended March 31, 2023. No revenue related to the Sarepta Agreement was recognized during the three months ended March 31, 2024.

Transaction Price Allocated to Future Performance Obligations

Remaining performance obligations represent the transaction price of contracts for which work has not been performed, or has been partially performed. As of March 31, 2024, the aggregate amount of the transaction price allocated to remaining performance obligations was $0.4 million.

Contract Balances from Contracts with Customers

The following table presents changes in the Company's contract liabilities during the three months ended March 31, 2024 (in thousands):

	Balance at beginning of period	Additions	Deductions	Balance at end of period
Three Months Ended March 31, 2024				
Contract liabilities:				
Deferred revenue	$ 5,849	$ —	$ (5,437)	$ 412
Total contract liabilities	$ 5,849	$ —	$ (5,437)	$ 412

14. Related-Party Transactions

November 2023 Securities Purchase Agreement

On November 13, 2023, the Company entered into the Securities Purchase Agreement with (i) Dr. Timothy A. Springer, (ii) TAS Partners LLC, an affiliate of Dr. Springer, and (iii) Seven One Eight Three Four Irrevocable Trust, a trust associated with Dr. Murat Kalayoglu, in which the Company agreed to issue and sell an aggregate of 149,330.115 shares of Series A Preferred Stock for an aggregate purchase price of $60.25 million (see Note 10). The November 2023 Private Placement includes a delayed settlement mechanism, and as a result, the below issuances and sales to related parties of the Company were made during the three months ended March 31, 2024.

Name	Shares of Series A Preferred Stock purchased	Total aggregate purchase price
Timothy A. Springer, Ph.D.	99,140.326	$ 40,000,000

Exercise of Amended 2019 Warrants

On March 26, 2024, TAS Partners LLC, an affiliate of Dr. Springer, exercised 65,681 Amended 2019 Warrants, paid the per-share exercise price of $43.80 in cash for an aggregate exercise price of $2.9 million, and received 65,681 shares of common stock and 1,970,443 CVRs.

During the three months ended March 31, 2023, there were no related party transactions.

15. Collaboration and License Agreements

Biogen MA, Inc.

On September 8, 2023, the Company entered into a non-exclusive, sublicensable, worldwide, perpetual patent license agreement, or the Biogen Agreement, with Biogen MA, Inc., or Biogen, to research, develop, make, use, offer, sell and import products or processes containing or using an engineering T-cell modified with an mRNA comprising, or encoding a protein comprising, certain sequences licensed under the Biogen Agreement for the prevention, treatment, palliation and management of autoimmune diseases and disorders, excluding cancers, neoplastic disorders, and paraneoplastic disorders. The Company is not obligated to pay Biogen any expenses, fees, or royalties.

The Company may terminate the Biogen Agreement for any reason or no reason, and Biogen may terminate the agreement after a notice-and-cure period of 30 days if the Company fails to pay a fee owed to Biogen or for any other material breach of the agreement. The Biogen Agreement will otherwise expire when all claims of all issued patents within the patents and patent applications licensed to the Company under the Biogen Agreement have expired or been finally rendered revoked, invalid or unenforceable by a decision of a court or government agency.

National Cancer Institute of the National Institutes of Health

Effective September 16, 2019, the Company entered into a nonexclusive, worldwide license agreement, or the NCI Agreement, with the U.S. Department of Health and Human Services, represented by the National Cancer Institute of the National Institutes of Health, or NCI.

Under the NCI Agreement, the Company was granted a license under certain NCI patents and patent applications designated in the agreement, to make, use, sell, offer and import products and processes within the scope of the patents and applications licensed under the NCI Agreement when developing and manufacturing anti-BCMA CAR-T cell products for the treatment of myasthenia gravis, pemphigus vulgaris, and immune thrombocytopenic purpura according to methods designated in the NCI Agreement.

In connection with the Company's entry into the NCI Agreement, Old Cartesian paid to NCI a one-time $0.1 million license royalty payment. Under the NCI Agreement, the Company is further required to pay NCI a low five-digit annual royalty. The Company must also pay earned royalties on net sales in a low single-digit percentage and pay up to $0.8 million in benchmark royalties upon the Company's achievement of designated benchmarks that are based on the commercial development plan agreed between the parties.

Under the NCI Agreement, the Company must use reasonable commercial efforts to bring licensed products and licensed processes to the point of Practical Application (as defined in the NCI Agreement). Upon the Company's first commercial sale, the Company must use reasonable commercial efforts to make licensed products and licensed processes reasonably accessible to the United States public. After the Company's first commercial sale, the Company must make reasonable quantities of licensed products or materials produced via licensed processes available to patient assistance programs and develop educational materials detailing the licensed products. Unless the Company obtains a waiver from NCI, the Company must have licensed products and licensed processes manufactured substantially in the United States. Prior to the first commercial sale, upon NCI’s request, the Company is obligated to provide NCI with commercially reasonable quantities of licensed products made through licensed processes to be used for in vitro research.

Additionally, the Company must use reasonable commercial efforts to initiate a Phase 3 clinical trial of a licensed product by the fourth quarter of 2024, submit a BLA with respect to a licensed product by the fourth quarter of 2026, and make a first commercial sale of a licensed product by the fourth quarter of 2028.

The NCI Agreement terminates upon the expiration of the last to expire of the patent rights licensed thereunder, if not sooner terminated. NCI has the right to terminate this agreement, after giving written notice and providing a cure period in accordance with its terms, if the Company is in default of a material obligation. The Company has the unilateral right to terminate the agreement in any country or territory by giving NCI 60 days’ written notice. The Company agreed to indemnify NCI against any liability arising out of the Company's, sublicensees’ or third parties’ use of the licensed patent rights and licensed products or licensed processes developed in connection with the licensed patent rights.

Ginkgo Bioworks Holdings, Inc.

Collaboration and License Agreements

On October 25, 2021, the Company entered into a Collaboration and License Agreement, or the First Ginkgo Agreement, with Ginkgo Bioworks Holdings, Inc., or Ginkgo. Under the First Ginkgo Agreement, Ginkgo will design next generation IgA proteases with potentially transformative therapeutic potential. In return, Ginkgo is eligible to earn both upfront research and development fees and milestone payments, including certain milestone payments for fixed fair values in the form of the Company's common stock, clinical and commercial milestone payments of up to $85.0 million in cash. The First Ginkgo Agreement was assessed for collaboration components and was determined not to be within the scope of ASC 808, *Collaborative Arrangements*, or ASC 808, as the risk and rewards are not shared by both parties. The Company will expense costs related to the First Ginkgo Agreement as incurred until regulatory approval is received in accordance with ASC 730, *Research and Development*, or ASC 730. The Company is accounting for the contingently issuable shares to be issued in exchange for the license obtained from Ginkgo as a liability classified stock-based compensation arrangement with a non-employee which will be recognized when achievement of the milestones is probable. The Company will assess the capitalization of costs incurred after the receipt of regulatory approval and, if applicable, will amortize these payments based on the expected useful life of each asset, typically based on the expected commercial exclusivity period. The Company is also obligated to pay Ginkgo tiered royalties ranging from low-single digit to high-single digit percentages of annual net sales of collaboration products which will be expensed as the commercial sales occur.

On January 3, 2022, the Company entered into a Collaboration and License Agreement, or the Second Ginkgo Agreement, with Ginkgo. Under this agreement, the Company will engage with Ginkgo to develop AAV capsids designed to enhance transduction efficiency and transgene expression. In return, Ginkgo is eligible to earn both upfront research and development fees and milestone payments, including certain milestone payments in the form of shares of the Company’s common stock, clinical and commercial milestone payments of up to $207 million in cash. The Second Ginkgo Agreement was assessed for collaboration components and was determined not to be within the scope of ASC 808 as the risk and rewards are not shared by

both parties. The Company will expense costs related to the Second Ginkgo Agreement as incurred until regulatory approval is received in accordance with ASC 730. The Company is accounting for the contingently issuable shares of common stock to be issued in exchange for the license obtained from Ginkgo as a liability-classified, stock-based compensation arrangement with a non-employee which will be recognized when achievement of the milestones is probable. The Company will assess the capitalization of costs incurred after the receipt of regulatory approval and, if applicable, will amortize these payments based on the expected useful life of each asset, typically based on the expected commercial exclusivity period. The Company is also obligated to pay Ginkgo tiered royalties ranging from low-single digit to high-single digit percentages of annual net sales of collaboration products which will be expensed as the commercial sales occur.

On June 13, 2022, the Company was notified of the achievement of the midpoint of the technical development plan under the First Ginkgo Agreement by Ginkgo. This milestone resulted in the payment of $0.5 million and issuance of 29,761 shares of the Company's common stock then-valued at $1.0 million to Ginkgo during the year ended December 31, 2022.

On July 19, 2023, the Company and Ginkgo mutually agreed that the completion of the technical development plan's midpoint task under the Second Ginkgo Agreement had been achieved as of June 30, 2023. This milestone resulted in the payment of $1.0 million and issuance of 44,642 shares of the Company's common stock then-valued at $1.5 million to Ginkgo during the year ended December 31, 2023.

Genovis AB (publ.)

License Agreement

In October 2021, the Company entered into an Exclusive License Agreement, or the Genovis Agreement, with Genovis AB (publ.), or Genovis. Under the Genovis Agreement, the Company paid to Genovis an upfront payment in exchange for an exclusive license to the Xork enzyme technology across all therapeutic uses in humans, excluding research, preclinical, diagnostic and other potential non-therapeutic applications of the enzyme. Genovis is eligible to earn from the Company development and sales-based milestones and sublicensing fees. The Genovis Agreement was assessed for collaboration components and was determined not to be within the scope of ASC 808 as the risk and rewards are not shared by both parties. The Company will expense costs related to the Genovis Agreement as incurred until regulatory approval is received in accordance with ASC 730. The Company will assess the capitalization of costs incurred after the receipt of regulatory approval and, if applicable, will amortize these payments based on the expected useful life of each asset, typically based on the expected commercial exclusivity period. The Company is also obligated to pay Genovis tiered royalties of low double digit percentages of worldwide annual net sales of collaboration products which will be expensed as the commercial sales occur.

In February 2023, the Company made a $4.0 million payment to Genovis as a result of the sublicense of Xork to Astellas. See Note 13 to these unaudited consolidated financial statements for further discussion on the Astellas Agreement.

In March 2024, the Company notified Genovis of its intention to terminate the Genovis Agreement effective September 13, 2024.

Cyrus Biotechnology, Inc.

Collaboration and License Agreement

In September 2021, the Company and Cyrus Biotechnology, Inc., or Cyrus, entered into a collaboration and license agreement, or the Cyrus Agreement. Pursuant to the Cyrus Agreement, Cyrus agreed to grant the Company an exclusive, worldwide license to certain intellectual property to form a protein engineering collaboration combining the Company's ImmTOR platform with Cyrus' ability to redesign protein therapeutics. The lead program was a proprietary interleukin-2, or IL-2, protein agonist designed to selectively promote expansion of regulatory T cells for treatment of patients with autoimmune diseases and other deleterious immune conditions. In return for the licensed intellectual property, the Company made an upfront payment and was obligated to pay certain discovery, development, and sales-based milestones which could have potentially totaled up to approximately $1.5 billion across multiple programs. The Cyrus Agreement was assessed for collaboration components and was determined not to be within the scope of ASC 808 as the risk and rewards are not shared by both parties. The Company expensed costs related to the Cyrus Agreement as incurred until regulatory approval is received in accordance with ASC 730. The Company assessed the capitalization of costs incurred after the receipt of regulatory approval and, if applicable, would have amortized these payments based on the expected useful life of each asset, typically based on the expected commercial exclusivity period. The Company was also obligated to pay Cyrus tiered royalties ranging from mid-single digit to low-double digit percentages of annual net sales of collaboration products which would have been expensed as commercial sales occur.

On June 13, 2022, the Company and Cyrus mutually agreed that the preclinical key in-vitro success milestone had been achieved.

In October 2023, the Company notified Cyrus of its termination of the Cyrus Agreement effective December 29, 2023.

Stock Purchase Agreement

Additionally, on September 7, 2021, the Company entered into a stock purchase agreement, or the Series B Preferred Stock Purchase Agreement, in connection with the Cyrus Agreement. Pursuant to the Series B Preferred Stock Purchase Agreement, the Company purchased 2,326,934 shares of Cyrus' Series B Preferred Stock, par value $0.0001 per share, at a purchase price of $0.8595 per share, for $2.0 million.

In accordance with ASC 810, the Company has a variable interest in Cyrus resulting from its equity investment. The Company will share in Cyrus' expected losses or receive a portion of its expected returns and absorb the variability associated with changes in the entity's net assets. However, the Company is not the primary beneficiary as it does not have the power to direct the activities most significant to Cyrus, and therefore it is not required to consolidate Cyrus. The Company has recognized the $2.0 million investment of Cyrus' Series B Preferred Stock at cost on the purchase date.

As of March 31, 2024, no impairment indicators were present and there were no observable price changes. Therefore, the carrying value of the investment in Cyrus is $2.0 million on the accompanying consolidated balance sheets. The Company's maximum exposure to loss related to this variable interest entity is limited to the carrying value of the investment. The Company has not provided financing to Cyrus other than the amount contractually required by the Series B Preferred Stock Purchase Agreement.

Asklepios Biopharmaceutical, Inc.

Feasibility Study and License Agreement

In August 2019, the Company entered into a feasibility study and license agreement, or the AskBio Collaboration Agreement, with Asklepios Biopharmaceutical, Inc., or AskBio. Pursuant to the AskBio Collaboration Agreement, the Company and AskBio agreed to license intellectual property rights to each other as part of a collaboration to research, develop, and commercialize certain AAV gene therapy products utilizing the Company's ImmTOR platform to enable re-dosing of such AAV gene therapy products to treat serious rare and orphan genetic diseases for which there is a significant unmet medical need.

Pursuant to the AskBio Collaboration Agreement, the Company and AskBio agreed to conduct proof of concept studies to potentially validate the use of ImmTOR in conjunction with AskBio's AAV gene therapy, or SEL-302, (previously disclosed as MMA-101, in combination with ImmTOR) for the treatment of methylmalonic acidemia, or MMA, to mitigate the formation of neutralizing anti-AAV capsid antibodies. On April 29, 2021, the Company was notified by AskBio that it intended to opt-out of development of the MMA indication.

The Company and AskBio shared responsibility for the research, development and commercialization of products developed under the SEL-399 program collaboration. The parties also shared research, development, and commercialization costs equally for all collaboration products, but with a right of either party to opt out of certain products, and thereby not be required to share costs for such products. Each party would have received a percentage of net profits under the collaboration equal to the percentage of shared costs borne by such party in the development of such product. Pursuant to the AskBio Collaboration Agreement, AskBio was responsible for manufacturing the AAV capsids and AAV vectors and the Company was responsible for manufacturing ImmTOR.

The Company and AskBio mutually agreed to the termination of the AskBio Collaboration Agreement, effective December 13, 2023.

No collaboration expense under the AskBio Collaboration Agreement was recognized during the three months ended March 31, 2024. For the three months ended March 31, 2023, the Company recognized $0.1 million of collaboration expense under the AskBio Collaboration Agreement in which actual costs incurred by both parties approximate a 50% cost share.

Shenyang Sunshine Pharmaceutical Co., Ltd

In May 2014, the Company entered into a license agreement, or the 3SBio License, with Shenyang Sunshine Pharmaceutical Co., Ltd., or 3SBio. The Company has paid to 3SBio an aggregate of $7.0 million in upfront and milestone-based payments under the 3SBio License as of March 31, 2024. The Company is required to make future payments to 3SBio contingent upon the occurrence of events related to the achievement of clinical and regulatory approval milestones of up to an aggregate of $15.0 million for products containing the Company's ImmTOR platform.

16. Income Taxes

As of March 31, 2024, we have not recorded any U.S. federal or state income tax benefits for either the net losses we have incurred or our earned research and orphan drug credits, due to the uncertainty of realizing a benefit from those items in the future.

17. Defined Contribution Plan

The Company maintains a defined contribution plan, or the 401(k) Plan, under Section 401(k) of the Internal Revenue Code. The 401(k) Plan covers all employees who meet defined minimum age and service requirements and allows participants

to defer a portion of their annual compensation on a pretax basis. The 401(k) Plan provides for matching contributions on a portion of participant contributions pursuant to the 401(k) Plan's matching formula. As of January 2022, all matching contributions vest ratably over two years and participant contributions vest immediately. Contributions by the Company totaled less than $0.1 million and $0.1 million during the three months ended March 31, 2024 and 2023, respectively.

18. Commitments and Contingencies

As of March 31, 2024, the Company was not a party to any litigation that could have a material adverse effect on the Company's business, financial position, results of operations or cash flows.

Other

As permitted under Delaware law, the Company indemnifies its directors for certain events or occurrences while the director is, or was, serving at the Company's request in such capacity. The term of the indemnification is for the director's lifetime. The maximum potential amount of future payments the Company could be required to make is unlimited; however, the Company has directors' insurance coverage that limits its exposure and enables it to recover a portion of any future amounts paid. The Company also has indemnification arrangements under certain of its facility leases that require it to indemnify the landlord against certain costs, expenses, fines, suits, claims, demands, liabilities, and actions directly resulting from certain breaches, violations, or non-performance of any covenant or condition of the Company's lease. The term of the indemnification is for the term of the related lease agreement. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited. To date, the Company had not experienced any material losses related to any of its indemnification obligations, and no material claims with respect thereto were outstanding.

The Company is a party in various other contractual disputes and potential claims arising in the ordinary course of business. The Company does not believe that the resolution of these matters will have a material adverse effect on the Company's business, financial position, results of operations or cash flows.

19. Restructuring

In April 2023, in light of current market conditions, the Board of Directors took steps to extend the Company's cash runway by pausing further development of SEL-302 for the treatment of MMA, and conducting a targeted headcount reduction. On August 17, 2023, the Company announced additional steps to extend cash runway and maximize value for stockholders by continuing to prioritize development of SEL-212 and support of its collaboration with Astellas for Xork, and pausing further development of all of the Company's other clinical and preclinical product candidates that it was no longer actively advancing.

As a result of these measures, the Company implemented a restructuring plan resulting in an approximate 79% reduction of the Company's existing headcount by March 31, 2024. The Company recognized restructuring expenses consisting of one-time cash severance payments and other employee-related costs of $6.4 million for the year ended December 31, 2023 with $5.6 million and $0.8 million recorded to research and development and general and administrative operating expense categories, respectively, on its consolidated statements of operations and comprehensive income (loss) based on each employee's role. Cash payments for employee related restructuring charges of $2.5 million were paid as of December 31, 2023.

For the three months ended March 31, 2024, the Company recorded restructuring expenses consisting of one-time cash severance payments and other employee-related costs of $0.3 million, with $0.2 million and $0.1 million recorded to research and development and general and administrative operating expense categories, respectively, on its consolidated statements of operations and comprehensive income (loss) based on each employee's role. Cash payments for employee related restructuring charges of $3.3 million were paid during the three months ended March 31, 2024.

The following table summarizes the change in the Company's accrued restructuring balance (in thousands):

	Beginning Balance December 31, 2023	Charges	Payments	Ending Balance March 31, 2024
Severance liability	$ 3,896	$ 292	$ (3,320)	$ 868

20. Subsequent Events

Reverse Stock Split

On April 4, 2024, the Company implemented the Reverse Stock Split. The Reverse Stock Split became effective at 4:30 p.m. Eastern Time on April 4, 2024. On April 5, 2024, the Company's common stock began trading on The Nasdaq Global Market on a split-adjusted basis under the symbol "RNAC" with a new CUSIP number, 816212302. As a result of the Reverse Stock Split, every 30 shares of common stock outstanding were combined, automatically and without any action on the part of the Company or its stockholders, into one share of common stock. Stockholders entitled to fractional shares as a result of the Reverse Stock Split received a cash payment in lieu of receiving fractional shares. The Reverse Stock Split did not change the number of authorized shares or par value of the Company's common or preferred stock.

Series A Preferred Stock Automatic Conversion

The Automatic Conversion of the Series A Preferred Stock occurred on April 8, 2024 at 5:00 p.m. Eastern Time pursuant to the terms of the Certificate of Designation, as amended. As a result, 367,919.247 shares of Series A Preferred Stock automatically converted into 12,263,951 shares of common stock; 166,341.592 shares of Series A Preferred Stock did not automatically convert due to beneficial ownership limitations. The 166,341.592 shares of Series A Preferred Stock that did not automatically convert are convertible into 5,544,719 shares of common stock. Based on the 17,779,787 shares of common stock outstanding on April 8, 2024, there would be 23,324,506 shares of common stock outstanding if all shares of Series A Preferred Stock converted into common stock on such date.

7495 New Horizon Way Lease Amendment

Effective May 7, 2024, the Company and the Landlord entered into a First Amendment to the Frederick Lease Agreement, or the Amendment, providing for the expansion of the premises leased pursuant to the Frederick Lease Agreement by approximately 7,842 square feet. In connection with the expansion of the leased premises, the Company will be obligated to pay $0.3 million in additional annual base rent for the first year of the term, which is subject to an annual upward adjustment of 3% of the then-current rental rate.

Item 2. 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 unaudited consolidated financial statements and related notes appearing elsewhere in this Quarterly Report and with our audited financial statements and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2023, which we filed with the SEC on March 7, 2024. In addition, you should read the "Risk Factors" and "Information Regarding Forward-Looking Statements" sections of this Quarterly Report and our Annual Report on Form 10-K for the year ended December 31, 2023 for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a clinical-stage biotechnology company developing mRNA cell therapies for the treatment of autoimmune diseases. We leverage our proprietary technology and manufacturing platform to introduce one or more mRNA molecules into cells to enhance their function. Unlike DNA, mRNA degrades naturally over time without integrating into the cell's genetic material. Therefore, our mRNA cell therapies are distinguished by their capacity to be dosed repeatedly like conventional drugs, administered in an outpatient setting, and given without pre-treatment chemotherapy required with many conventional cell therapies. In an open-label Phase 2 clinical trial in patients with myasthenia gravis, or MG, a chronic autoimmune disease that causes disabling muscle weakness and fatigue, we observed that our lead product candidate, Descartes-08, generated a deep and durable clinical benefit.

We are leveraging our proprietary technology and manufacturing platform, RNA Armory®, to develop mRNA cell therapies for autoimmune diseases across three modalities. Our mRNA CAR-T modality is a personalized approach that collects a patient's T-cells and uses mRNA to introduce a CAR into the cell. The CAR redirects the T-cells to target and destroy pathogenic self-reactive cells. Our mRNA MSC modality is an allogeneic approach that introduces one or more mRNAs into donor-sourced mesenchymal stem cells, enabling them to produce proteins that target key pathways involved in autoimmunity. These cells are banked and are designed to be administered off-the-shelf to any patient. Our mRNA *in situ* modality is designed to deliver mRNA into a patient's lymph node to generate CAR-T cells and other proteins that target autoimmunity.

Merger

On November 13, 2023, the Company (formerly known as Selecta Biosciences, Inc., or Selecta) merged with the private Delaware corporation which, immediately prior to the Merger (as defined below), was known as Cartesian Therapeutics, Inc., or Old Cartesian, in accordance with the terms of an Agreement and Plan of Merger, or the Merger Agreement, by and among
Selecta, Sakura Merger Sub I, Inc., a wholly owned subsidiary of Selecta, or First Merger Sub, Sakura Merger Sub II, LLC, a wholly owned subsidiary of Selecta, or Second Merger Sub, and Old Cartesian. Pursuant to the Merger Agreement, First Merger Sub merged with and into Old Cartesian, pursuant to which Old Cartesian was the surviving corporation and became a wholly owned subsidiary of Selecta, or the First Merger. Immediately following the First Merger, Old Cartesian merged with and into Second Merger Sub, pursuant to which Second Merger Sub was the surviving entity, or the Second Merger and, together with the First Merger, the Merger. In connection with the Second Merger, Old Cartesian changed its name to Cartesian Bio, LLC. In connection with the Merger and pursuant to the Merger Agreement, the Company changed its corporate name to Cartesian Therapeutics, Inc. See Note 3 of the accompanying notes to the unaudited consolidated financial statements appearing elsewhere in this Quarterly Report for additional information regarding the Merger.

Financial Operations

To date, we have financed our operations primarily through public offerings and private placements of our securities, funding received from research grants, collaboration and license arrangements and a credit facility. We do not have any products approved for sale and have not generated any product sales.

Except for the year ended December 31, 2022, we have incurred significant operating losses since our inception. We incurred a net loss of $56.8 million and $21.7 million for the three months ended March 31, 2024 and 2023, respectively. As of March 31, 2024, we had an accumulated deficit of $671.5 million. We expect to continue to incur significant expenses and operating losses for the foreseeable future as we:

- advance Descartes-08 for MG into Phase 3 development;
- continue to develop our preclinical and clinical-stage product candidates;
- seek regulatory approvals for any product candidates that successfully complete clinical trials; and
- maintain, expand and protect our intellectual property portfolio, including through licensing arrangements.

Until we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, and license and collaboration agreements. We may be unable to raise capital when needed or on reasonable terms, if at all, which would force us to delay, limit, reduce or terminate our product development or future commercialization efforts. We will need to generate significant revenues to achieve profitability, and we may never do so.

Concurrently with the closing of the Merger, we entered into a securities purchase agreement, or the Securities Purchase Agreement, pursuant to which we agreed to issue 149,330.115 shares of Series A Non-Voting Convertible Preferred Stock, par value $0.0001 per share, or the Series A Preferred Stock, in exchange for aggregate gross proceeds of $60.25 million, or the November 2023 Private Placement. We granted customary registration rights to investors in connection with the November 2023 Private Placement.

We believe that our existing cash, cash equivalents, and restricted cash as of March 31, 2024 will enable us to fund our operating expenses and capital expenditure requirements into the second half of 2026. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect.

We intend to seek collaboration partners for the assets in the development programs that we are no longer actively advancing.

The consolidated financial information presented below includes the accounts of Cartesian Therapeutics, Inc. and our wholly owned subsidiaries, Selecta (RUS) LLC, a Russian limited liability company, or Selecta (RUS), and Selecta Biosciences Security Corporation, a Massachusetts securities corporation, and Cartesian Bio, LLC, a Delaware limited liability company, which is a variable interest entity for which we are the primary beneficiary. All intercompany accounts and transactions have been eliminated.

Collaboration and license revenue

To date, we have not generated any revenue from product sales. Our revenue consists primarily of collaboration and license revenue, which includes amounts recognized related to upfront and milestone payments for research and development funding under collaboration and license agreements. We expect that any revenue we generate will fluctuate from quarter to quarter because of the timing and amounts of fees, research and development reimbursements and other payments from collaborators. We do not expect to generate revenue from product sales for at least the next several years. If we or our collaborators fail to complete the development of our product candidates in a timely manner or fail to obtain regulatory approval as needed, our ability to generate future revenue will be harmed, and will affect the results of our operations and financial position. For further description of the agreements underlying our collaboration and license revenue, see Note 13 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report.

Research and development

Our research and development expenses consist of external research and development costs, which we track on a program-by-program basis and primarily include contract manufacturing organization related costs and fees paid to contract research organizations, and internal research and development costs, which are primarily compensation expenses for our research and development employees, lab supplies, analytical testing, allocated overhead costs and other related expenses. Our internal research and development costs are often devoted to expanding our programs and are not necessarily allocable to a specific target.

We expense research and development costs as incurred. Conducting a significant amount of research and development is central to our business model. Product candidates in clinical development generally have higher development costs than those in earlier stages of development, primarily due to the size, duration and cost of clinical trials. The successful development of

our clinical and preclinical product candidates is highly uncertain. Clinical development timelines, the probability of success and development costs can differ materially from our expectations. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those which we currently expect will be required for the completion of clinical development of a product candidate, or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time to complete any clinical development.

In June 2020, we and Swedish Orphan Biovitrum AB, or Sobi, entered into a License and Development Agreement, which was amended in October 2023, or, as so amended, the Sobi License. Pursuant to the Sobi License, clinical trial costs incurred to complete development of the product candidate SEL-212, including but not limited to costs incurred while conducting and completing the Phase 3 DISSOLVE trials for SEL-212, were reimbursed by Sobi. These costs, when reimbursed, were recognized as revenue consistent with the revenue recognition methodology disclosed in Note 13 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report. The reimbursable costs exclude any costs of additional development activities required that were related to the ImmTOR platform and were unrelated to SEL-212.

In January 2023, we and Audentes Therapeutics, Inc., or Astellas, entered into a License and Development Agreement, or the Astellas Agreement. Pursuant to the Astellas Agreement, Astellas agreed to reimburse us for 25% of all budgeted costs incurred to complete the development of Xork, a bacterial IgG protease licensed from Genovis AB (publ.), or Genovis, for use in Pompe disease with an Astellas gene therapy investigational or authorized product. These costs, when reimbursed, will be recognized as revenue consistent with the revenue recognition methodology disclosed in Note 13 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report. In March 2024, we were notified by Astellas of its intention to terminate the Astellas Agreement, effective June 6, 2024.

General and administrative

General and administrative expenses consist primarily of salaries and related benefits, including stock-based compensation, related to our executive, finance, business development and support functions. Other general and administrative expenses include facility-related costs not otherwise allocated to research and development expenses, travel expenses for our general and administrative personnel and professional fees for auditing, tax and corporate legal services, including intellectual property-related legal services.

Investment income

Investment income consists primarily of interest income earned on our cash, cash equivalents and marketable securities.

Interest expense

Interest expense consists of interest expense on amounts borrowed under our credit facilities.

Other income, net

Other income, net consists primarily of sublease income.

Change in fair value of warrant liabilities

Common warrants classified as liabilities are remeasured quarterly at fair value, utilizing a Black-Scholes valuation methodology, with the change in fair value recognized as a component of earnings.

Change in fair value of contingent value right liability

The contingent value right, or CVR, liability is remeasured quarterly at fair value, utilizing a Monte Carlo simulation, with the change in fair value recognized as a component of earnings.

Change in fair value of Series A Preferred Stock forward contract liabilities

The forward contract liability associated with the delayed issuance of the Series A Preferred Stock related to the November 2023 Private Placement is remeasured quarterly at fair value, utilizing the market price of our common stock, with the change in fair value recognized as a component of earnings.

Foreign currency transaction gain (loss)

The functional currency of Selecta (RUS) is the Russian ruble. In addition to holding cash denominated in Russian rubles, our Russian bank accounts also hold cash balances denominated in U.S. dollars to facilitate payments to be settled in U.S. dollars or other currencies. As of both March 31, 2024 and December 31, 2023, we maintained cash of $0.2 million in Russian bank accounts in denominations of both Russian rubles and U.S. dollars. The amounts denominated in U.S. dollars and used in

transacting the day-to-day operations of our Russian subsidiary are subject to transaction gains and losses, which are reported as incurred.

Results of Operations

Comparison of the Three Months Ended March 31, 2024 and 2023

Collaboration and license revenue

During the three months ended March 31, 2024, we recognized $5.8 million of collaboration and license revenue, compared to $5.9 million for the three months ended March 31, 2023, a decrease of $0.1 million, or 2%. The decrease was primarily due to a decrease of revenue recognized under the Sobi License resulting from both the shipment of clinical supply and the reimbursement of costs incurred for the Phase 3 DISSOLVE clinical program offset by an increase in revenue recognized under the Astellas Agreement.

Research and development expenses

For the three months ended March 31, 2024, our research and development expenses were $9.7 million compared to $18.6 million for the three months ended March 31, 2023, a decrease of $8.9 million, or 48%. The decrease in cost primarily resulted from reductions in expenses incurred for preclinical and clinical programs due to the strategic reprioritization.

General and administrative expenses

For the three months ended March 31, 2024, our general and administrative expenses were $9.5 million compared to $5.7 million for the three months ended March 31, 2023, an increase of $3.8 million, or 66%. The increase in cost was primarily the result of an increase in professional fees incurred in connection with the Merger.

Investment income

Investment income for the three months ended March 31, 2024 was $1.2 million, compared to $1.3 million for the three months ended March 31, 2023. The decrease in investment income was due to decreased investment balance.

Foreign currency transaction gain (loss)

We recognized de minimis foreign currency fluctuations during each of the three months ended March 31, 2024 and 2023.

Interest expense

We recognized no interest expense for the three months ended March 31, 2024, compared to $0.8 million for the three months ended March 31, 2023, representing interest expense and amortization of the carrying costs of our credit facilities that were extinguished during the year ended December 31, 2023.

Change in fair value of warrant liabilities

For the three months ended March 31, 2024, we recognized $1.0 million of income from the decrease in the fair value of warrant liabilities, compared to a $4.1 million charge from the increase in the fair value of warrant liabilities for the three months ended March 31, 2023, a decrease of $5.1 million, or 126%. Fair value of warrant liabilities was determined utilizing the Black-Scholes valuation methodology. The decrease in warrant value was primarily driven by a decrease in the per-share price of our common stock.

Change in fair value of contingent value right liability

For the three months ended March 31, 2024, we recognized $39.3 million of expense associated with the increase in the fair value of the CVR liability. The fair value of the CVR liability as of March 31, 2024 was determined utilizing a Monte Carlo simulation model. The increase in the fair value of CVR liability was primarily driven by the passage of time since December 31, 2023. There was no CVR liability prior to the Merger and as such, no change in the fair value of the CVR liability is reflected in our unaudited consolidated financial statements for the three months ended March 31, 2023.

Change in fair value of Series A Preferred Stock forward contract liabilities

For the three months ended March 31, 2024, we recognized $6.9 million of expense associated with the increase in the fair value of Series A Preferred Stock forward contract liabilities. The increase in Series A Preferred Stock value was primarily driven by an increase in the per-share price of our common stock since December 31, 2023 through settlement. The remaining Series A Preferred Stock forward contract liability was settled during the three months ended March 31, 2024. There was no Series A Preferred Stock forward contract liability prior to the Merger and as such, no change in the fair value of the Series A Preferred Stock forward contract liability is reflected in our unaudited consolidated financial statements for the three months ended March 31, 2023.

Other income, net

During the three months ended March 31, 2024, we recognized other income, net of $0.5 million, compared to $0.3 million for the three months ended March 31, 2023, an increase of $0.2 million, or 99%. The increase was primarily driven by sublease income.

Net loss

Net loss for the three months ended March 31, 2024 was $56.8 million as compared to net loss of $21.7 million for the three months ended March 31, 2023, a decrease of $35.1 million or 162%. The change was primarily due to expenses associated with the change in the fair value of the CVR liability and Series A Preferred Stock forward contract liability and increased general and administrative expenses, partially offset by decreased research and development expenses and income associated with the change in the fair value of the warrant liabilities.

Liquidity and Capital Resources

Except for net income of $35.4 million for the year ended December 31, 2022, we have incurred recurring net losses since our inception. We expect that we will continue to incur losses and that such losses will increase for the foreseeable future. We expect that our research and development and general and administrative expenses will continue to increase and, as a result, we will need additional capital to fund our operations, which we may raise through a combination of equity offerings, debt financings, third-party funding, potential royalty and/or milestone monetization transactions and other collaborations and strategic alliances.

As of March 31, 2024, our cash, cash equivalents, and restricted cash were $104.8 million, of which $1.4 million was restricted cash related to lease commitments and $0.2 million was held by our Russian subsidiary designated solely for use in its operations.

In addition to our existing cash equivalents, we from time to time have received and may receive in the future research and development funding pursuant to our collaboration and license agreements. Currently, funding from payments under our collaboration agreements represent our only source of committed external funds.

The liability associated with the contingent value rights agreement, or CVR Agreement, entered into on December 6, 2023, will be settled solely through cash flow received under the Sobi License and any other Gross Proceeds (as such term is defined in the CVR Agreement) net of certain agreed deductions. Under the CVR Agreement, 100% of all milestone payments, royalties, and other amounts paid to us or our controlled entities under the Sobi License, and any other Gross Proceeds, in each case net of certain agreed deductions, will be distributed to holders of the CVRs. There is no contractual obligation for us to fund any amount related to the CVR liability.

Collaboration and License Agreements

In-licenses

In September 2023, we entered into a non-exclusive, sublicensable, worldwide, perpetual patent license agreement, or the Biogen Agreement, with Biogen MA, Inc., or Biogen, to research, develop, make, use, offer, sell and import products or processes containing or using an engineering T-cell modified with an mRNA comprising, or encoding a protein comprising, certain sequences licensed under the Biogen Agreement for the prevention, treatment, palliation and management of autoimmune diseases and disorders, excluding cancers, neoplastic disorders, and paraneoplastic disorders. We are not obligated to pay Biogen any expenses, fees, or royalties. For further description of the Biogen Agreement, see Note 15 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report.

Effective September 2019, we entered into a nonexclusive, worldwide license agreement, or the NCI Agreement, with the U.S. Department of Health and Human Services, represented by the National Cancer Institute of the National Institutes of Health, or NCI. Under the NCI Agreement, we were granted a license under certain NCI patents and patent applications designated in the agreement, to make, use, sell, offer and import products and processes within the scope of the patents and applications licensed under the NCI Agreement when developing and manufacturing anti-BCMA CAR-T cell products for the treatment of MG, pemphigus vulgaris, and immune thrombocytopenic purpura according to methods designated in the NCI Agreement. In connection with our entry into the NCI Agreement, we paid to NCI a one-time $0.1 million license royalty payment. Under the NCI Agreement, we are further required to pay NCI a low five-digit annual royalty. We must also pay earned royalties on net sales in a low single-digit percentage and pay up to $0.8 million in benchmark royalties upon our achievement of designated benchmarks that are based on the commercial development plan agreed between the parties. For further description of the NCI Agreement, see Note 15 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report.

In October 2021, we and Ginkgo Bioworks Holdings, Inc., or Ginkgo, entered into a Collaboration and License Agreement, or the First Ginkgo Agreement, and paid Ginkgo a $0.5 million one-time upfront payment. In June 2022, we paid $0.5 million

and issued 29,761 shares of our common stock then-valued at $1.0 million to Ginkgo for the achievement of certain preclinical milestones under the First Ginkgo Agreement. In January 2022, we entered into a Collaboration and License Agreement, or the Second Ginkgo Agreement, and paid Ginkgo a $1.5 million one-time upfront payment. In July 2023, we paid $1.0 million and issued 44,642 shares of our common stock then-valued at $1.5 million to Ginkgo for the achievement of certain preclinical milestones under the Second Ginkgo Agreement. For further description of the First Ginkgo Agreement and the Second Ginkgo Agreement, see Note 15 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report.

Additionally, in October 2021, we entered into an Exclusive License Agreement with Genovis, or the Genovis Agreement, and paid Genovis a $4.0 million one-time upfront payment. In February 2023, as a result of the sublicense of Xork to Astellas, we made a $4.0 million payment to Genovis. In March 2024, we informed Genovis of our intent to terminate the Genovis Agreement, effective September 13, 2024. For further description of the Genovis Agreement, see Note 15 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report.

On September 7, 2021, we entered into a Collaboration and License Agreement, or the Cyrus Agreement, with Cyrus Biotechnology, Inc., or Cyrus, and purchased 2,326,934 shares of Cyrus' Series B Preferred Stock, par value $0.0001 per share at a purchase price of $0.8595 per share for an aggregate purchase price of $2.0 million. In October 2023, we notified Cyrus of our termination of the Cyrus Agreement, effective December 29, 2023. For further description of the Cyrus Agreement, see Note 15 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report.

Out-licenses

In January 2023, we entered into the Astellas Agreement with Astellas. Under this agreement, Astellas obtained the sole and exclusive right to commercialize Xork for use in Pompe disease in combination with an Astellas gene therapy investigational or authorized product, with a current focus on AT845. In connection with entry into this agreement, we received a $10 million upfront payment and are eligible to receive $340.0 million for certain additional development and commercial milestones plus royalties on any potential commercial sales where Xork is used as a pre-treatment for AT845. As a result of the sublicense of Xork to Astellas, we made a $4.0 million payment to Genovis in February 2023. In March 2024, we were notified by Astellas of their intention to terminate the Astellas Agreement, effective June 6, 2024. For further description of the Astellas Agreement, see Note 13 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report.

On October 1, 2021, we entered into a License Agreement, or the Takeda Agreement, with Takeda Pharmaceuticals USA, Inc., or Takeda. We received a $3.0 million upfront payment and were entitled to receive up to $1.124 billion in future additional payments over the course of the partnership that were contingent on the achievement of development or commercial milestones or Takeda's election to continue its activities at specified development stages. The Takeda Agreement was terminated effective July 25, 2023. For further description of the Takeda Agreement, see Note 13 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report.

In June 2020, we entered into the Sobi License. Sobi paid us a one-time, upfront payment of $75 million, and upon the closing of a private placement of our common stock to Sobi at a price of $138.468 per share, we received an additional $25 million from Sobi. We are eligible to receive $630 million in milestone payments upon the achievement of various development and regulatory milestones and sales thresholds for annual net sales of SEL-212, and tiered royalty payments ranging from the low double digits on the lowest sales tier to the high teens on the highest sales tier. Sobi has agreed to fund the Phase 3 clinical program of SEL-212, which commenced in September 2020. In July 2022, we received $10.0 million for the completion of the enrollment of the DISSOLVE II trial. Proceeds from milestone payments and royalties on sales of SEL-212, if any, are required to be distributed, net of certain agreed deductions, to holders of the CVRs. For further description of the Sobi License, see Note 13 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report.

Additionally, in June 2020, we and Sarepta Therapeutics, Inc., or Sarepta, entered into a Research License and Option Agreement, or the Sarepta Agreement. Sarepta paid us a $2.0 million upfront payment upon closing and $3.0 million for the achievement of certain pre-clinical milestones in June 2021. In August 2022, we received a payment of $2.0 million in exchange for a nine-month extension to Sarepta's options to both Duchenne muscular dystrophy and certain limb-girdle muscular dystrophies and a payment of $4.0 million for the achievement of certain non-clinical milestones. In March 2023, we were notified by Sarepta that Sarepta would not be exercising its exclusive option under the Sarepta Agreement. The Sarepta Agreement terminated upon the expiration of the option in March 2023. For further description of the Sarepta Agreement, see Note 13 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report.

Financings

On October 25, 2021, we entered into a Sales Agreement, or the 2021 Sales Agreement, with Leerink Partners LLC, or Leerink Partners (and then known as SVB Leerink LLC), to sell shares of our common stock, from time to time, through an "at the market" equity offering program under which Leerink Partners will act as sales agent. The shares of common stock sold pursuant to the 2021 Sales Agreement, if any, would be issued and sold pursuant to a registration statement filed with the Securities and Exchange Commission, or SEC, for remaining aggregate gross sales proceeds of up to $51.0 million.

During the three months ended March 31, 2024 and the year ended December 31, 2023, we sold no shares of our common stock pursuant to the 2021 Sales Agreement. During the year ended December 31, 2022, we sold 25,818 shares of our common stock pursuant to the 2021 Sales Agreement for aggregate net proceeds of $2.1 million, after deducting commissions and other transaction costs.

On November 13, 2023, we entered into the Securities Purchase Agreement with (i) Dr. Timothy A. Springer, a member of our Board of Directors; (ii) TAS Partners LLC, an affiliate of Dr. Springer, and (iii) Seven One Eight Three Four Irrevocable Trust, a trust associated with Dr. Murat Kalayoglu, a co-founder and the former chief executive officer of Old Cartesian, who joined our Board of Directors effective immediately after the effective time of the Merger, providing for the November 2023 Private Placement. In the November 2023 Private Placement, we issued and sold an aggregate of 149,330.115 shares of Series A Preferred Stock for an aggregate purchase price of $60.25 million, of which 50,189.789 shares of Series A Preferred Stock were issued and sold in the year ended December 31, 2023 for gross proceeds of $20.25 million, and 99,140.326 shares of Series A Preferred Stock were issued and sold during the three months ended March 31, 2024 for gross proceeds of $40.0 million.

Indebtedness

We previously maintained a term loan of up to $35.0 million, of which $25.0 million was funded in August 2020. In September 2023, we entered into a payoff letter with Oxford Finance LLC and Silicon Valley Bank, a division of First-Citizens Bank & Trust Company (successor by purchase to the Federal Deposit Insurance Corporation as Receiver for SVBB (as successor to Silicon Valley Bank)), the lenders under the term loan, pursuant to which we paid all outstanding amounts under such term loan, together with accrued interest and a prepayment penalty, resulting in the full extinguishment of such term loan. The total payoff amount was $22.3 million, consisting of the remaining principal amount due of $19.8 million, the final payment fee of $2.3 million, the prepayment penalty of $0.2 million, and less than $0.1 million of accrued interest.

If in the future we seek debt financing, the terms of such debt could restrict our operating and financial flexibility by imposing liens on our assets and covenants on the operation of our business.

Future funding requirements

As of the date of this Quarterly Report, we have not generated any revenue from product sales. We do not know when, or if, we will generate revenue from product sales. We will not generate significant revenue from product sales unless and until we obtain regulatory approval and commercialize one of our current or future product candidates. Our primary uses of capital are, and we expect will continue to be, compensation and related expenses, third-party clinical research and development services, laboratory and related supplies, clinical costs, legal and other regulatory expenses, milestone and royalty payments for in-licenses, and general overhead costs. We expect that we will continue to generate losses for the foreseeable future, and we expect the losses to increase as we continue the development of, and seek regulatory approvals for, our product candidates, and begin to commercialize any approved products. We are subject to risks in the development of our products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. We expect that we will need substantial additional funding to support our continuing operations.

As of March 31, 2024, we had an accumulated deficit of $671.5 million. We anticipate operating losses to continue for the foreseeable future due to, among other things, costs related to research, development of our product candidates, conducting preclinical studies and clinical trials, and our administrative organization. We will require substantial additional financing to fund our operations and to continue to execute our strategy, and we will pursue a range of options to secure additional capital.

We regularly evaluate various potential sources of additional funding such as strategic collaborations, license agreements, debt issuance, potential royalty and/or milestone monetization transactions and the issuance of equity instruments to fund our operations. If we raise additional funds through strategic collaborations and alliances, which may include existing collaboration partners, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us. To the extent that we raise additional capital through the sale of equity instruments, the ownership interest of our existing stockholders will be diluted, and other preferences may be necessary that adversely affect the rights of existing stockholders.

We believe that our existing cash, cash equivalents, and restricted cash as of March 31, 2024 will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months. We may pursue additional cash resources through public or private equity or debt financings, by establishing collaborations with other companies or through the monetization of potential royalty and/or milestone payments pursuant to our existing collaboration and license arrangements. Management’s expectations with respect to our ability to fund current and long-term planned operations are based on estimates that are subject to risks and uncertainties. If actual results are different from management’s estimates, we may need to seek additional strategic or financing opportunities sooner than would otherwise be expected. However, there is no guarantee that any of these strategic or financing opportunities will be executed on favorable terms, and some could be dilutive to existing stockholders. If we are unable to obtain additional funding on a timely basis, we may be forced to significantly

curtail, delay, or discontinue one or more of our planned research or development programs or be unable to expand our operations, meet long-term obligations or otherwise capitalize on our commercialization of our product candidates.

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

- the scope, progress, results and costs of our clinical trials, preclinical development, manufacturing, laboratory testing and logistics;
- the number of product candidates that we pursue and the speed with which we pursue development;
- our headcount growth and associated costs;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs and timing of future commercialization activities, including manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing approval;
- the revenue, if any, from commercial sales of our product candidates for which we receive marketing approval;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims;
- the effect of competing technological and market developments; and
- the extent to which we acquire or invest in businesses, products and technologies, including entering into licensing or collaboration arrangements for product candidates.

Summary of Cash Flows

The following table summarizes our cash flows for the three months ended March 31, 2024 and 2023:

	Three Months Ended March 31,	
(In thousands)	**2024**	**2023**
Cash (used in) and provided by:		
Operating activities	$ (15,917)	$ (8,765)
Investing activities	(602)	28,124
Financing activities	43,031	149
Effect of exchange rate changes on cash	(5)	(21)
Net change in cash, cash equivalents, and restricted cash	$ 26,507	$ 19,487

Operating activities

Net cash used in operating activities for the three months ended March 31, 2024 was $15.9 million compared to $8.8 million for the three months ended March 31, 2023. The increase in net cash used in operating activities of $7.1 million was primarily due to $9.5 million of net loss, adjusted for non-cash items, and approximately $6.4 million cash used in changes in operating assets and liabilities.

Investing activities

Net cash used in investing activities for the three months ended March 31, 2024 was $0.6 million compared to net cash provided by investing activities of $28.1 million for the three months ended March 31, 2023, a decrease of $28.7 million. The net cash used in investing activities for the three months ended March 31, 2024 consisted primarily of purchases of property and equipment. The net cash provided by investing activities for the three months ended March 31, 2023 was primarily proceeds from the maturities of marketable securities offset by purchases of property and equipment.

Financing activities

Net cash provided by financing activities for the three months ended March 31, 2024 was $43.0 million compared to net cash provided by financing activities of $0.1 million for the three months ended March 31, 2023, an increase of $42.9 million. The net cash provided by financing activities in the three months ended March 31, 2024 was primarily the result of proceeds of the November 2023 Private Placement. The net cash provided by financing activities in the three months ended March 31, 2023 was primarily the result of proceeds from issuance of common stock under the 2016 Employee Stock Purchase Plan

Recent Accounting Pronouncements

For a discussion of recently adopted or issued accounting pronouncements please see Note 2 to our unaudited consolidated financial statements included elsewhere in this Quarterly Report.

Off-Balance Sheet Arrangements

As of March 31, 2024, we did not have any off-balance sheet arrangements as defined in the rules and regulations of the SEC.

Critical Accounting Policies and Use of Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgements that affect the reported amounts of assets, liabilities, revenues and expenses, and disclosure of contingent assets and liabilities in our consolidated financial statements. Actual results may differ from these estimates under different assumptions or conditions. During the three months ended March 31, 2024, there were no material changes to our critical accounting policies from those described in our Annual Report on Form 10-K for the year ended December 31, 2023.

Smaller Reporting Company

We qualify as a "smaller reporting company" under the rules of the Securities Act and the Exchange Act. As a result, we may choose to take advantage of certain scaled disclosure requirements available specifically to smaller reporting companies. We will remain a smaller reporting company until the last day of the fiscal year in which the aggregate market value of our common stock held by non-affiliated persons and entities, or our public float, is more than $700 million as of the last business day of our most recently completed second fiscal quarter, or until the fiscal year following the year in which we have at least $100 million in revenue and at least $250 million in public float as of the last business day of our most recently completed second fiscal quarter.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The market risk inherent in our financial instruments and in our financial position represents the potential loss arising from adverse changes in interest rates. As of March 31, 2024 and December 31, 2023, we had cash, cash equivalents, and restricted cash of $104.8 million and $78.3 million, respectively, consisting of non-interest and interest-bearing money market accounts. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates. Due to the short-term and the low risk profile of our money market accounts and marketable securities, and our current policy to hold marketable securities to maturity, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our cash equivalents or short-term marketable securities.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated, as of the end of the period covered by this Quarterly Report, the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were not effective at the reasonable assurance level as of March 31, 2024 because of the material weakness in internal control over financial reporting discussed below.

Material Weakness

As a result of its review of the internal control procedures for the year ended December 31, 2023, management identified a material weakness. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that a reasonable possibility exists that a material misstatement of our annual or interim financial statements would not be prevented or detected on a timely basis. There are no material accounting errors or omissions within the consolidated financial statements as a result of this material weakness. Management concluded that it did not design and implement effective internal controls specifically related to the documentation of the assumptions supporting the valuation of the in-process intangible assets in connection with the Old Cartesian material business combination and the initial and ongoing contingent value right obligation issued at the time to legacy Selecta stockholders. This includes a lack of sufficient documentation to provide evidence of the associated management review controls.

Remediation Plans for Material Weakness in Internal Control over Financial Reporting

We are committed to maintaining a strong internal control environment. In response to the identified material weakness above, we, with the oversight of the Audit Committee, intend to take comprehensive actions to remediate the material weakness in internal control over financial reporting. We expect to re-evaluate the scope and level of precision for conducting and documenting the reviews over significant acquisitions and contingent value rights including the review of prospective financial information used in valuation reports produced by third-party specialists supporting the accounting for business combinations and contingent value rights. The remediation efforts are intended both to address the identified material weakness and to enhance our overall financial control environment.

Inherent Limitations on Effectiveness of Controls

There are inherent limitations to the effectiveness of any system of internal control over financial reporting. Accordingly, even an effective system of internal control over financial reporting can only provide reasonable assurance with respect to financial statement preparation and presentation in accordance with U.S. GAAP. Our internal controls over financial reporting are subject to various inherent limitations, including cost limitations, judgments used in decision making, assumptions about the likelihood of future events, the soundness of our systems, the possibility of human error, and the risk of fraud. Moreover, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may be inadequate because of changes in conditions and the risk that the degree of compliance with policies or procedures may deteriorate over time.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the three months ended March 31, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

On February 7, 2024, Justin Sloan, a purported stockholder of our Company, filed a putative class action on behalf of himself and similarly situated stockholders of our Company against us and members of our Board of Directors in the Court of Chancery of the State of Delaware, titled Sloan v. Barabe, et al., No. 2024-0105. The complaint alleges that the individual defendants breached their fiduciary duties by failing to disclose purportedly material information to our stockholders in our Preliminary Proxy Statement filed on January 31, 2024 in connection with the solicitation of stockholder approval of the Conversion Proposal. The complaint seeks a temporary injunction against the stockholder vote on the Conversion Proposal, compensatory damages, pre- and post-judgment interest, and attorneys' fees and costs. At a telephonic hearing on February 28, 2024, the Court denied the Plaintiff's motion to expedite the proceedings, rejecting Plaintiff's argument that the lawsuit raised colorable disclosure claims warranting expedited treatment. The action was subsequently dismissed on March 13, 2024.

On February 21, 2024, Paul Wymer, a purported stockholder of our Company, filed an action against us and members of our Board of Directors in the U.S. District Court for the Southern District of New York, titled Wymer v. Cartesian Therapeutics, Inc., et al., No. 24-cv-01288. The complaint alleges that the defendants violated Sections 14(a) and 20(a) of the Exchange Act by failing to disclose purportedly material information to our stockholders in our Preliminary and Definitive Proxy Statements filed on January 31, 2024, and February 14, 2024, respectively, in connection with the solicitation of stockholder approval of the Conversion Proposal. The complaint seeks injunctive relief enjoining or rescinding the Merger, issuance of an amended proxy statement, and attorneys' fees and costs. This action was voluntarily dismissed on March 11, 2024.

Item 1A. Risk Factors

See the risk factors previously disclosed in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2023. There have been no material changes from the risk factors previously disclosed in such filings.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

During the quarter ended March 31, 2024, no director or officer adopted or terminated any contract, instrument or written plan for the purchase or sale of Cartesian securities intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) under the Exchange Act or any non-Rule 10b5-1 trading arrangement as defined in Item 408(c) of Regulation S-K.

Effective May 7, 2024, the Company and the Landlord entered into the Amendment providing for the expansion of the premises leased pursuant to the Frederick Lease Agreement by approximately 7,842 square feet. In connection with the expansion of the leased premises, the Company will be obligated to pay $0.3 million in additional annual base rent for the first year of the term, which is subject to an annual upward adjustment of 3% of the then-current rental rate.

Item 6. Exhibits

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
2.1*	Agreement and Plan of Merger, dated November 13, 2023, by and among Selecta Biosciences, Inc., Sakura Merger Sub I, Inc., Sakura Merger Sub II, LLC, and Cartesian Therapeutics, Inc.	8-K	001-37798	2.1	11/13/2023
3.1(a)	Restated Certificate of Incorporation of Selecta Biosciences, Inc.	8-K	001-37798	3.1	6/29/2016
3.1(b)	Certificate of Amendment to the Restated Certificate of Incorporation of Selecta Biosciences, Inc., dated June 21, 2022	8-K	001-37798	3.1	6/21/2022
3.1(c)	Certificate of Amendment to the Restated Certificate of Incorporation of Selecta Biosciences, Inc., dated November 13, 2023	8-K	001-37798	3.3	11/13/2023
3.1(d)	Certificate of Amendment to the Restated Certificate of Incorporation, as amended, of Cartesian Therapeutics, Inc., dated March 28, 2024.	8-K	001-37798	3.2	3/28/2024
3.2	Amended and Restated By-laws of Cartesian Therapeutics, Inc.	8-K	001-37798	3.2	11/13/2023
4.1(a)	Certificate of Designation of Preferences, Rights and Limitations of Series A Non-Voting Convertible Preferred Stock	8-K	001-37798	3.4	11/13/2023
4.1(b)	Certificate of Amendment to the Certificate of Designation of Series A Non-Voting Convertible Preferred Stock, dated March 26, 2024.	8-K	001-37798	3.1	3/28/2024
10.1#	Employment Agreement, dated as of March 26, 2024, by and between the Registrant and Christopher Jewell, Ph.D.	8-K	001-37798	10.1	4/1/2024
10.2#	Employment Agreement, dated as of March 28, 2024, by and between the Registrant and Metin Kurtoglu, M.D., Ph.D.	8-K	001-37798	10.2	4/1/2024
10.3(a)†	Lease Agreement by and between 7495 RP, LLC and Cartesian Therapeutics, Inc. dated February 28, 2024	10-K	001-37798	10.12	3/7/2024
10.3(b)†	First Amendment to Lease Agreement by and between 7495 RP, LLC and Cartesian Therapeutics, Inc. dated May 7, 2024	-	-	-	Filed herewith
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	-	-	-	Filed herewith
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	-	-	-	Filed herewith
32.1	Certification of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	-	-	-	Furnished herewith
101.INS	Inline XBRL Instance Document (the Instance Document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document)	-	-	-	Filed herewith
101.SCH	Inline XBRL Taxonomy Extension Schema Document	-	-	-	Filed herewith
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	-	-	-	Filed herewith
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	-	-	-	Filed herewith

101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	-	-	-	Filed herewith
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	-	-	-	Filed herewith
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)	-	-	-	Filed herewith

* Certain annexes, schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company agrees to furnish supplementally a copy of any omitted attachment to the SEC on a confidential basis upon request.

Management contract or compensatory plan or arrangement.

† Certain confidential information contained in this exhibit, marked by brackets and asterisks, has been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K because the information (i) is not material and (ii) is the type of information that the Company both customarily and actually treats as private and confidential.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant in the capacities and on the dates indicated.

CARTESIAN THERAPEUTICS, INC.

Date: May 8, 2024

By: /s/ Carsten Brunn, Ph.D.
Carsten Brunn, Ph.D.
President and Chief Executive Officer, and Director
(Principal Executive Officer)

Date: May 8, 2024

By: /s/ Blaine Davis
Blaine Davis
Chief Financial Officer
(Principal Financial Officer)

FIRST AMENDMENT TO LEASE AGREEMENT

THIS FIRST AMENDMENT TO LEASE AGREEMENT (this "**First Amendment**") is made and entered into this 7th day of May, 2024 ("**Effective Date**"), by and between **7495 RP, LLC,** a Maryland limited liability company, having an address at 5377 Jackson Mountain Road, Frederick, Maryland 21702 ("**Landlord**"), and **CARTESIAN THERAPEUTICS, INC.**, a Delaware corporation, having a headquarters address at 704 Quince Orchard Road (Suite 140), Gaithersburg, Maryland 20878 ("**Tenant**").

RECITALS

This First Amendment is made and entered with respect to the following:

R-1. Landlord and Tenant are the current parties to that certain Lease dated February 28, 2024 (the "**Lease**"), pursuant to which Landlord has agreed to lease to Tenant approximately 19,199 square feet of Rentable Area on the first floor (the "**Existing Premises**") of the building located at 7495 New Horizon Way, Frederick, Maryland 21702 ("**Building**")

R-2. Landlord desires to lease to Tenant and Tenant desires to lease from Landlord on the terms set forth herein, in addition to the Existing Premises, approximately 7,842 square feet of Rentable Area designated as Suite 220 and Suite 230 (the "**Expansion Premises**") located on the second (2nd) floor of the Building. The Expansion Premises is more particularly shown on Exhibit "A" which is attached hereto and made a part hereof.

R-3. Landlord and Tenant desire to expand the Existing Premises to include the Expansion Premises, and to otherwise modify the Lease as set forth herein in this First Amendment.

NOW, THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are acknowledged by Landlord and Tenant, Landlord and Tenant covenant and agree as follows:

1. **RECITALS; CAPITALIZED TERMS.** The above-mentioned Recitals are incorporated herein by this reference as though fully set forth at length. Capitalized terms used in this First Amendment but not defined herein shall have the meanings ascribed to them in the Lease.

2. **TERM**. The term of the Lease with respect to the Expansion Premises ("**Expansion Premises Term**") shall commence as of the Effective Date (the "**Expansion Premises Lease Commencement Date**") and shall expire at the expiration of the Term of the Lease (it being the intent of the parties that the term of Tenant's leasing of the Existing Premises and the term of Tenant's leasing of the Expansion Premises shall be coterminous). The first "Expansion Premises Lease Year" (or "**EPLY**") shall commence on the Expansion Premises Commencement Date and shall end on the last day of the first Lease Year (as defined in Section

1.1 of the Lease). Each subsequent year shall be coterminous with the corresponding Lease Year as provided for in the Lease.

3. **DELIVERY; ALLOWANCE**.

(a) Tenant shall accept the Expansion Premises in its "as is" condition on the Expansion Premises Commencement Date; provided, however, that Landlord will deliver the Expansion Premises with all fixtures, equipment and Building systems servicing the Expansion Premises in good repair and working order. Tenant has had an opportunity to inspect the Expansion Premises and has determined that the same is sufficient for Tenant's use thereof.

(a) Landlord shall repair with reasonable promptness any latent defects in said Building systems reported by Tenant to Landlord in writing within 360 days of the Commencement Date. If identified in writing, Landlord shall, at Landlord's sole cost and expense, commence to repair or replace said item(s) within a commercially-reasonable period of time following receipt of such notice.

(b) If Landlord does not deliver possession of the Expansion Premises on the Expansion Premises Commencement Date or any other date targeted therefor, Landlord shall not have any liability whatsoever to Tenant on account of such failure to deliver possession of the Expansion Premises to Tenant and neither this First Amendment nor the Lease shall be rendered void or voidable as a result of such delay. However, under such circumstances, the Expansion Premises Commencement Date shall be postponed until Landlord has delivered possession of the Expansion Premises to Tenant.

(c) Landlord shall provide Tenant a tenant improvement allowance of up to Seventy-Eight Thousand Four Hundred and Twenty Dollars ($**78,420.00**) (the "**Expansion Allowance**") which shall be payable and subject to the same terms and provisions as provided for the disbursement of the Improvement Allowance in Exhibit B-1 of the Lease.

4. **PREMISES**. Beginning on the Expansion Premises Commencement Date, Tenant shall lease the Expansion Premises from Landlord subject to the terms of the Lease, as modified hereby. Notwithstanding any provision of the Lease to the contrary, from and after the Expansion Premises Commencement Date, except where there is a conflict with the terms of this First Amendment, the "**Premises**," as such term is used in the Lease, shall include the Existing Premises and the Expansion Premises, containing a total of approximately **27,041 square feet of Rentable Area**. The Premises (including the Existing Premises and the Expansion Premises) shall be known as 7495 New Horizon Way, Suites 130, 140, 150, 220 and 230, Frederick, Maryland 21702. As of the Effective Date, Section 2.2.1(b) of the Lease is hereby amended to replace "twenty-five and nine tenths percent (25.9%)" with "**thirty-six and five tenths percent (36.5%).**"

5. RENT.

(a) Expansion Premises Annual Rent. In addition to the Base Rent with respect to the Existing Premises, Tenant shall pay to Landlord Base Rent with respect to the Expansion Premises ("**Expansion Premises Base Rent**") as follows:

Lease Year	Annual Rent	Monthly Base Rent	Rent Per Square Foot
EPLY-end of 1st Lease Year*	$266,628.00	$22,219.00	$34.00
2	$274,626.84	$22,885.57	$35.02
3	$282,860.94	$23,571.75	$36.07
4	$291,330.30	$24,277.53	$37.15
5	$300,113.34	$25,009.45	$38.27
6	$309,131.64	$25,760.97	$39.42
7	$318,385.20	$26,532.10	$40.60

*This period may be less than twelve full calendar months

The foregoing Base Rent for the Expansion Premises shall be paid by Tenant to Landlord in accordance with the terms of the Lease, commencing on the first (1st) day of the fourth (4th) month following the Expansion Premises Lease Commencement Date. In the event the Expansion Premises Commencement Date is on other than the first day of a calendar month, then the Rent payment for such partial month shall be prorated on a per diem basis.

(b) Additional Rent. Tenant shall pay all Additional Rent for the Expansion Premises as required pursuant to the terms of the Lease, including, but not limited to, Section 2 thereof.

6. **SECURITY DEPOSIT**. The parties acknowledge that Landlord is currently holding a security deposit in the amount of **$225,588.25**. Simultaneously with the execution and delivery of this First Amendment, Tenant shall deposit with Landlord an additional security deposit in the amount of **$66,657.00** (which amount represents three (3) months of Base Rent for the Expansion Premises). Landlord shall hold, apply and disburse the entire security deposit (i.e., **$292,245.25**) in accordance with the applicable provisions of the Lease concerning the Security Deposit.

7. **REPRESENTATIONS**.

A. To induce Landlord to enter into this First Amendment, Tenant hereby represents and warrants to Landlord that as of the date of this First Amendment:

(a) Tenant has not assigned the Lease or sublet any portion of the Existing Premises;

(b) The Lease is unmodified (except as otherwise expressly set forth to the contrary in this First Amendment) and is in full force and effect;

(c) Tenant has no claims against Landlord arising under or in connection with the Lease, and Tenant has no set off or defenses against the enforcement of any right or remedy of Landlord under the Lease; and

(d) Landlord is not in default of any of its obligations under the Lease and no event has occurred and no condition exists which, with the giving of notice or the lapse of time, or both, will constitute a default by Landlord under the Lease.

B. Landlord hereby represents and warrants to Tenant as of the date of this First Amendment:

(a) The Lease is unmodified (except as otherwise expressly set forth to the contrary in this First Amendment) and is in full force and effect; and

(b) To Landlord's knowledge, Tenant is not in default of any of its obligations under the Lease and no event has occurred and no condition exists which, with the giving of notice or the lapse of time, or both, will constitute a default by Tenant under the Lease.

8. **RATIFICATION**. Unless a term or condition of the Lease is expressly contradicted by the terms of this First Amendment or modified hereby, all terms and conditions of the Lease shall remain in full force and effect and continue to bind Landlord and Tenant. In the event that a term of this First Amendment is fundamentally inconsistent with a term of the Lease, the terms of this First Amendment shall control. The terms of the Lease, as modified hereby, are ratified and affirmed by the parties.

9. **ENTIRE AGREEMENT.** This First Amendment constitutes the entire agreement of the parties with respect to the subject matter addressed herein. No terms, conditions, representations, warranties, promises, or understandings, of any nature whatsoever, express or implied, have been made or relied upon by any party hereto. This First Amendment may not be modified, waived, discharged or terminated other than by a writing executed by the parties hereto.

10. **BROKER.** Landlord and Tenant each represent and warrant to the other that it has not employed any broker, agent or finder with regard to this First Amendment, other than Scheer Partners, Inc. which shall be paid by Landlord pursuant to a separate agreement. Each party hereby indemnifies and holds harmless the other for any other claims relating to

commissions or brokerage fees arising from a breach of the foregoing representation and warranty.

11. **BINDING EFFECT; MERGER**. The terms and provisions of this First Amendment shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns under the Lease. Notwithstanding anything herein to the contrary, in the event Landlord obtains a judgment against Tenant in connection with the Lease, the Lease shall not merge into the judgment.

12. **COUNTERPARTS; ELECTRONIC SIGNATURES**. This First Amendment may be executed in multiple counterparts each of which counterparts shall be deemed an original and all of which counterparts collectively shall constitute one and the same document. The parties agree that the signatures of the person executing this First Amendment may be transmitted via electronic means and shall be sufficient evidence of the execution of this First Amendment.

13. **GOVERNING LAW**. This First Amendment shall be governed by and ·interpreted under the laws of the State of Maryland.

14. **AUTHORITY**. Each individual executing this First Amendment hereby represents and warrants that she or he has the capacity set forth on the signature pages hereof with full power and authority to bind the party on whose behalf she or he is executing this First Amendment to the terms hereof. The parties have read and understood this First Amendment and have had the opportunity to consult with legal counsel with respect hereto.

[***Signature Page Follows***]

IN WITNESS WHEREOF, each party hereto has executed and ensealed this First Amendment to Lease Agreement or caused it to be executed and ensealed on its behalf by its duly authorized representatives, the day and year first written above.

LANDLORD:

7495 RP, LLC

By: /s/ William C. Robertson
Name: William C. Robertson
Title: Manager

TENANT:

CARTESIAN THERAPEUTICS, INC.

By: /s/ Blaine Davis
Name: Blaine Davis
Title: Chief Financial Officer

EXHIBIT "A"

EXPANSION PREMISES

[***]

Exhibit 31.1

CERTIFICATIONS

I, Carsten Brunn, Ph.D., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cartesian Therapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

May 8, 2024

/s/ Carsten Brunn, Ph.D.

Carsten Brunn, Ph.D.
President and Chief Executive Officer, and Director
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATIONS

I, Blaine Davis, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cartesian Therapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

May 8, 2024

/s/ Blaine Davis

Blaine Davis
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Cartesian Therapeutics, Inc. (the "Company") for the period ended March 31, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company hereby certifies, pursuant to 18 U.S.C. Section 1350, that to his knowledge:

1. The Quarterly Report on Form 10-Q of the Company for the period ended March 31, 2024 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 8, 2024

/s/ Carsten Brunn, Ph.D.
Carsten Brunn, Ph.D.
President and Chief Executive Officer, and Director
(Principal Executive Officer)

May 8, 2024

/s/ Blaine Davis
Blaine Davis
Chief Financial Officer
(Principal Financial Officer)