UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2023

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: 001-40532

GRAPHITE BIO, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**84-4867570**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
611 Gateway Blvd, Suite 120 South San Francisco, CA	**94080**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (650) 484-0886

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, par value $0.00001 per share	GRPH	The Nasdaq Global Market

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 November 9, 2023, the registrant had 57,996,481 shares of common stock, $0.00001 par value per share, outstanding.

Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q (this "Form 10-Q"), including its section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains express or implied forward-looking statements that are based on our management's belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future operational or financial performance, and involve known and unknown risks, uncertainties, and other 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 these forward-looking statements. Forward-looking statements in this Form 10-Q may include, but are not limited to, statements about:

- our plans and expectations regarding strategic alternatives that could significantly impact our future operations and financial position, and the timing and success of such process;
- the therapeutic potential of any product candidates, and the disease indications for which we intend to develop any product candidates;
- estimates of our expenses, ongoing losses, future revenue, capital requirements and our need for or ability to obtain additional funding before we can expect to generate any revenue from product sales;
- our ability to establish or maintain licenses, collaborations, partnerships or strategic relationships;
- our ability to create and maintain a pipeline of product candidates;
- our ability to advance any product candidate into, and successfully complete clinical trials;
- our ability to obtain and maintain intellectual property protection for our current and future product candidates, the duration of such protection and our ability to operate our business without infringing on the intellectual property rights of others;
- other implementation and effects of the restructuring initiative that we announced in February 2023, our subsequent reductions in force in July and August 2023, and any future restructuring plans that we may pursue;
- our expectations regarding use of our cash, cash equivalents and investments in marketable securities;
- our financial performance;
- our ability to retain and recruit key personnel;
- our competitive position and development of and projections relating to our competitors or our industry;
- the impact of laws and regulations in the United States and foreign countries on various aspects of our operations, including our regulatory and clinical strategy;
- the impact of global economic and market conditions, a continued and prolonged public health emergency such as the COVID-19 pandemic, and wars and armed conflicts, on various aspects of our business, results of operations and financial condition; and
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act.

In some cases, forward-looking statements can be identified by terminology such as "will," "may," "should," "could," "expects," "intends," "plans," "aims," "anticipates," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. These statements are only predictions. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties, and other factors, which are, in some cases, beyond our control and which could materially affect results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under the section entitled "Risk Factors" and elsewhere in this Form 10-Q. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual events or results may vary significantly from those expressed or implied by the forward-looking statements. No forward-looking statement is a promise or a guarantee of future performance.

The forward-looking statements in this Form 10-Q represent our views as of the date of this Form 10-Q. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should therefore not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this Form 10-Q.

This Form 10-Q may include statistical and other industry and market data that we obtained from industry publications and research, surveys, and studies conducted by third parties. Industry publications and third-party research, surveys, and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. We have not independently verified the information contained in such sources.

We use various trademarks and trade names in our business, including without limitation our corporate name and logo. All other trademarks or trade names referred to in this Form 10-Q are the property of their respective owners. Solely for convenience, the trademarks and trade names in this Form 10-Q may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

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Graphite Bio, Inc.
Condensed Balance Sheets
(in thousands, except share and per share data)
(unaudited)

	September 30, 2023	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	$ 182,988	$ 47,730
Investments in marketable securities, current	50,998	220,499
Assets held for sale	20	—
Prepaid expenses and other current assets	4,777	7,136
Total current assets	238,783	275,365
Restricted cash	1,716	1,716
Investments in marketable securities, non-current	—	15,322
Property and equipment, net	12,534	22,630
Operating lease right-of-use assets	13,195	5,580
Other assets	—	1,289
Total assets	$ 266,228	$ 321,902
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 3,753	$ 2,608
Accrued compensation	1,899	3,799
Accrued research costs	30	720
Accrued expenses and other current liabilities	3,416	1,871
Operating lease liabilities, current	3,439	4,045
Total current liabilities	12,537	13,043
Operating lease liabilities, non-current	49,672	1,749
Other long- term liabilities	—	10,819
Total liabilities	62,209	25,611
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred stock, $0.00001 par value, 10,000,000 shares authorized as of September 30, 2023 and December 31, 2022; and no shares issued and outstanding as of September 30, 2023 and December 31, 2022	—	—
Common stock, $0.00001 par value, 300,000,000 shares authorized as of September 30, 2023 and December 31, 2022; 57,971,910 and 58,221,760 shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	1	1
Additional paid-in capital	548,249	539,741
Accumulated other comprehensive loss	(95)	(1,048)
Accumulated deficit	(344,136)	(242,403)
Total stockholders' equity	204,019	296,291
Total liabilities and stockholders' equity	$ 266,228	$ 321,902

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

Graphite Bio, Inc.
Condensed Statements of Operations and Comprehensive Loss
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Operating expenses:				
Research and development	$ 2,384	$ 18,302	$ 32,136	$ 54,325
General and administrative	11,294	7,852	26,372	24,563
Restructuring and impairment costs	11,349	—	51,128	—
Total operating expenses	25,027	26,154	109,636	78,888
Loss from operations	(25,027)	(26,154)	(109,636)	(78,888)
Other income (expense), net:				
Interest income, net	2,955	1,472	8,387	2,435
Loss on disposal of assets	—	—	(71)	—
Other income (expense), net:	(413)	—	(413)	—
Total other income, net	2,542	1,472	7,903	2,435
Net loss	$ (22,485)	$ (24,682)	$ (101,733)	$ (76,453)
Unrealized gain (loss) on investments in marketable securities	176	(563)	953	(1,596)
Comprehensive loss	$ (22,309)	$ (25,245)	$ (100,780)	$ (78,049)
Net loss per share attributable to common stockholders—basic and diluted	$ (0.39)	$ (0.45)	$ (1.79)	$ (1.40)
Weighted-average shares used in computing net loss per share—basic and diluted	57,257,241	55,206,139	56,748,995	54,591,593

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

Graphite Bio, Inc.
Condensed Statements of Stockholders' Equity
(in thousands, except share data)
(unaudited)

	Common Stock Shares	Amount	Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
Balance at December 31, 2022	58,221,760	$ 1	$ 539,741	$ (1,048)	$ (242,403)	$ 296,291
Vesting of early exercised shares	—	—	25	—	—	25
Repurchase of unvested early exercised shares	(26,942)	—	—	—	—	—
Stock-based compensation expense	—	—	3,263	—	—	3,263
Unrealized gain on investments in marketable securities	—	—	—	579	—	579
Net loss	—	—	—	—	(23,934)	(23,934)
Balance at March 31, 2023	58,194,818	$ 1	$ 543,029	$ (469)	$ (266,337)	$ 276,224
Common stock issued upon exercise of options	55,047	—	18	—	—	18
Common stock issued under ESPP	65,222	—	157	—	—	157
Vesting of early exercised shares	—	—	18	—	—	18
Repurchase of founders' shares	(152,694)	—	—	—	—	—
Repurchase of unvested early exercised shares	(173,120)	—	—	—	—	—
Stock-based compensation expense	—	—	2,845	—	—	2,845
Unrealized gain on investments in marketable securities	—	—	—	198	—	198
Net loss	—	—	—	—	(55,314)	(55,314)
Balance at June 30, 2023	57,989,273	$ 1	$ 546,067	$ (271)	$ (321,651)	$ 224,146
Common stock issued upon exercise of options	10,367	—	16	—	—	16
Vesting of early exercised shares	—	—	5	—	—	5
Repurchase of unvested early exercised shares	(27,730)	—	—	—	—	—
Stock-based compensation expense	—	—	2,161	—	—	2,161
Unrealized gain on investments in marketable securities	—	—	—	176	—	176
Net loss	—	—	—	—	(22,485)	(22,485)
Balance at September 30, 2023	57,971,910	$ 1	$ 548,249	$ (95)	$ (344,136)	$ 204,019

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

Graphite Bio, Inc.
Condensed Statements of Stockholders' Equity
(in thousands, except share data)
(unaudited)

	Common Stock Shares	Amount	Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
Balance at December 31, 2021	58,010,823	$ 1	$ 525,400	$ —	$ (141,351)	$ 384,050
Stock-based compensation expense	—	—	3,342	—	—	3,342
Vesting of early exercised shares	—	—	51	—	—	51
Unrealized loss on investments in marketable securities	—	—	—	(309)	—	(309)
Net loss	—	—	—	—	(25,835)	(25,835)
Balance at March 31, 2022	58,010,823	$ 1	$ 528,793	$ (309)	$ (167,186)	$ 361,299
Common stock issued upon exercise of options	43,945	—	13	—	—	13
Common stock issued under ESPP	207,137	—	414	—	—	414
Vesting of early exercised shares	—	—	30	—	—	30
Repurchase of unvested early exercised stock options	(50,713)	—	—	—	—	
Stock-based compensation expense	—	—	3,360	—	—	3,360
Unrealized loss on investments in marketable securities	—	—	—	(724)	—	(724)
Net loss	—	—	—	—	(25,936)	(25,936)
Balance at June 30, 2022	58,211,192	$ 1	$ 532,610	$ (1,033)	$ (193,122)	$ 338,456
Common stock issued upon exercise of options	17,000	—	5	—	—	5
Vesting of early exercised shares	—	—	27	—	—	27
Repurchase of unvested early exercised stock options	(78,875)	—	—	—	—	—
Stock-based compensation expense	—	—	3,210	—	—	3,210
Unrealized loss on investments in marketable securities	—	—	—	(563)	—	(563)
Net loss	—	—	—	—	(24,682)	(24,682)
Balance at September 30, 2022	58,149,317	$ 1	$ 535,852	$ (1,596)	$ (217,804)	$ 316,453

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

Graphite Bio, Inc.
Condensed Statements of Cash Flows
(in thousands)
(unaudited)

	Nine Months Ended September 30,	
	2023	**2022**
Cash flows from operating activities:		
Net loss	$ (101,733)	$ (76,453)
Adjustments to reconcile net loss to net cash used in operating activities:		
Net amortization of premiums and discounts on investments in marketable securities	(3,422)	(479)
Depreciation and amortization	2,265	1,670
Non-cash lease expense	3,860	4,454
Stock-based compensation expense	8,269	9,912
Loss on sale/ disposal of assets	71	—
Impairment of assets	43,276	—
Changes in assets and liabilities:		
Assets held for sale	(20)	—
Prepaid expenses and other current assets and other assets	4,884	(2,437)
Accounts payable	1,145	1,275
Accrued compensation	(1,900)	657
Accrued research costs	(690)	(280)
Accrued expenses and other current liabilities and other liabilities	2,479	399
Operating lease liabilities	(2,614)	(4,269)
Net cash used in operating activities	(44,130)	(65,551)
Cash flows from investing activities:		
Purchases of property and equipment	(10,806)	(5,573)
Proceeds from sales of property and equipment	1,225	—
Purchases of investments in marketable securities	(28,130)	(339,814)
Proceeds from maturities of marketable securities	216,975	90,000
Net cash provided by (used in) investing activities	179,264	(255,387)
Cash flows from financing activities:		
Proceeds from issuance of common stock upon exercise of vested stock options	34	18
Proceeds from employee stock purchase plan	157	414
Repurchase of unvested early exercised shares and founders' shares	(67)	(79)
Net cash provided by financing activities	124	353
Net increase (decrease) in cash, cash equivalents and restricted cash	135,258	(320,585)
Cash, cash equivalents and restricted cash, at beginning of period	49,446	378,692
Cash, cash equivalents and restricted cash, at end of period	$ 184,704	$ 58,107
Reconciliation of cash, cash equivalents and restricted cash to statement of financial position:		
Cash and cash equivalents	182,988	56,391
Restricted cash	1,716	1,716
Cash, cash equivalents and restricted cash in statement of financial position	$ 184,704	$ 58,107
Supplemental disclosures of non-cash investing and financing information:		
Property and equipment purchases in accounts payable and accrued expenses	$ —	$ (319)
Lessor funded lease incentive additions included in property and equipment	$ 7,193	$ 2,616
Proceeds from sale of property and equipment in accounts receivable	$ 449	$ —
Additions to ROU assets from new operating lease liabilities	$ 31,974	$ —
Vesting of early exercised stock options	$ 48	$ 108

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

1.Description of Business, Organization and Liquidity

Organization and Business

Graphite Bio, Inc. (the "Company") has historically been a clinical-stage, next-generation gene editing company. In January 2023, the Company announced a voluntary pause of its Phase 1/2 CEDAR study of nulabeglogene autogedtemcel ("nula-cel"), the Company's lead product candidate for sickle cell disease ("SCD"), due to a serious adverse event in the first patient dosed, which the Company concluded is likely related to study treatment. Nula-cel was designed to provide a highly differentiated approach with the potential to directly correct the mutation that causes SCD and restore normal adult hemoglobin expression.

The Company was incorporated in Ontario, Canada in June 2017 as Longbow Therapeutics Inc., and was reincorporated in the State of Delaware in October 2019. In February 2020, the Company changed its name to Integral Medicines, Inc., and again in August 2020, changed the name to Graphite Bio, Inc. Research and development of the Company's initial technology ceased at the end of 2018, and the Company did not have any significant operations or any research and development activities in 2019. In March 2020, the Company identified new gene editing technology which the Company sought to further develop, and the Company licensed the related intellectual property rights from The Board of Trustees of the Leland Stanford Junior University ("Stanford") in December 2020 (Note 6).

In February 2023, the Company announced its decision to discontinue the development of nula-cel and initiate a process to explore strategic alternatives (the "Restructuring Plan"). As a result of this decision, the Company conducted a corporate restructuring that resulted in an approximately 50% reduction in force in February 2023 and additional reductions in July and August 2023 that resulted in a total reduction in force of 78.1%. In August 2023, the Company subleased some of its facilities to recover a portion of the total costs. Together, these restructuring actions are intended to reduce the Company's operational cash burn in an effort to maximize its strategic optionality.

The Company had previously disclosed its intention to continue research activities associated with its pre-clinical non-genotoxic conditioning program, with the goal of advancing toward one or more potential development candidates. In August, the Company entered into an asset purchase agreement pursuant to which the Company transferred to a third-party its pre-clinical non-genotoxic conditioning program, including its technology and intellectual property. Also in August 2023, the Company entered into a license and option agreement (the "LOA"), pursuant to which it granted another third-party an option to acquire certain of the Company's technology and intellectual property related to its nula-cel program and related pre-clinical platform assets. On September 12, 2023, the Company and such counterparty entered into an amendment to the LOA under which the Company agreed to assign certain contracts to such counterparty prior to exercise of the option. The Company continues to explore strategic alternatives.

From its inception in 2017, the Company's primary activities have been to perform research and development, undertake preclinical studies and enable manufacturing activities in support of its product development efforts, organize and staff the Company, establish its intellectual property portfolio, and raise capital to support and expand such activities.

Liquidity Matters

The Company has incurred significant operating losses since inception and has primarily relied on private equity and convertible debt financings to fund its operations. As of September 30, 2023, the Company had an accumulated deficit of $344.1 million. The Company expects to continue to incur substantial losses. The Company may never achieve profitability, and unless and until then, the Company will need to continue to raise additional capital. Management expects that the existing cash, cash equivalents, and marketable securities of $234.0 million as of September 30, 2023 will be sufficient to fund the Company's current operating plan for at least the next 12 months from the date of issuance of these unaudited condensed financial statements.

On July 21, 2022, the Company filed a shelf registration statement on Form S-3 (the "2022 Shelf") with the SEC in relation to the registration of up to an aggregate offering price of $300.0 million of common stock, preferred stock, debt securities, warrants and units or any combination thereof. The Company also simultaneously entered into a Controlled Equity Offering^{SM} Sales Agreement with Cantor Fitzgerald & Co. (the "Sales Agent"), to provide for the offering, issuance and sale by the Company of up to an aggregate of $75.0 million of its common stock from time to time in "at-the-market" offerings under the 2022 Shelf and subject to the limitations thereof (the "Sales Agreement"). The Company will pay to the Sales Agent cash commissions of up to 3.0 percent of the gross proceeds of sales of common stock under the Sales Agreement. The Company has not issued any shares or received any proceeds from any offerings under the 2022 Shelf through November 13, 2023.

2. Summary of Significant Accounting Policies

Basis of Presentation

These financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP").

Unaudited Interim Condensed Financial Statements

The interim condensed balance sheet as of September 30, 2023 and the condensed statements of operations and comprehensive loss and stockholders' equity for the three and nine months ended September 30, 2023 and 2022 and the condensed statements of cash flows for the nine months ended September 30, 2023 and 2022 are unaudited. The unaudited interim condensed financial statements have been prepared on the same basis as the annual financial statements and reflect, in the opinion of management, all adjustments of a normal and recurring nature that are necessary for the fair statement of the Company's financial position as of September 30, 2023 and its results of operations for the three and nine months ended September 30, 2023 and cash flows for the nine months ended September 30, 2023 and 2022. The financial data and the other financial information disclosed in these notes to the financial statements related to the three and nine month periods are also unaudited. The results of operations for the three and nine months ended September 30, 2023 are not necessarily indicative of the results to be expected for the year ending December 31, 2023 or for any other future annual or interim period. The condensed balance sheet as of December 31, 2022 included herein was derived from the audited financial statements as of that date. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted from these interim financial statements. These condensed financial statements should be read in conjunction with the Company's audited financial statements and the related notes thereto for the year ended December 31, 2022, which are included in the Company's Annual Report on Form 10-K filed with the SEC.

Significant Accounting Policies

The significant accounting policies used in preparation of these condensed financial statements for the three and nine months ended September 30, 2023 are consistent with those discussed in Note 2 to the condensed financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2022.

Use of Estimates

The preparation of condensed financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the condensed financial statements, and the reported amounts of expenses during the reporting period. On an ongoing basis, the Company evaluates estimates and assumptions, including but not limited to those related to the fair value of the marketable securities, stock-based compensation expense, accruals for research and development costs, lease assets and liabilities, the valuation of deferred tax assets, valuation of uncertain income tax positions, and impairment of long-lived assets. Management bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from those estimates.

Principles of Consolidation

The Company assesses entities for consolidation based on the specific facts and circumstances surrounding that entity. The Company first considers whether an entity is considered a variable interest entity ("VIE") and therefore whether to apply the consolidation guidance under the VIE model. Entities that do not qualify as VIEs are assessed for consolidation as voting interest entities ("VOE") under the voting interest model.

An entity is considered to be a VIE if any of the following conditions exist: (i) the equity investment at risk is not sufficient to finance the activities of the entity without additional subordinated financial support, (ii) as a group, the holders of the equity investment at risk lack the power to direct the activities that most significantly impact the entity's economic performance or the obligation to absorb the expected losses or right to receive the expected residual returns, and (iii) the voting rights of some holders of the equity investment at risk are disproportionate to their obligation to absorb losses or right to receive returns, and substantially all of the activities are conducted on behalf of the holder of equity investment at risk with disproportionately few voting rights.

The Company consolidates all VIEs in which it is the primary beneficiary. An entity is determined to be the primary beneficiary if it holds a controlling financial interest in a VIE. The consolidation guidance requires an analysis to determine (i) whether an entity in which the Company holds a variable interest is a VIE and (ii) whether the Company's involvement, through holding interest directly or indirectly in the entity or contractually through other variable interests, would give it a controlling financial interest. Performance of that analysis requires judgment.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with a maturity of three months or less at the date of purchase to be cash equivalents. As of September 30, 2023 and December 31, 2022, cash and cash equivalents consisted of cash, money market funds, and commercial paper.

Restricted Cash

Restricted cash of $1.7 million as of September 30, 2023 and December 31, 2022 represented security deposits in the form of letters of credit issued in connection with the lease of 233 E. Grand Ave, which was to be the company's headquarters. A lease amendment was executed in October 2023, whereby the Company will have no further rent obligations to the landlord following the effective date, and the landlord will return the Company's letter of credit within 60 days following the amendment's effective date (Note 14). The letter of credit will be returned to the Company per the lease amendment.

Marketable Securities

The Company's marketable securities are accounted for as available-for-sale and recorded at fair value with the related unrealized gains and losses included in accumulated other comprehensive gain (loss).

The Company reviews its investment portfolio to identify and evaluate investments that have an indication of possible other-than-temporary impairment. Factors considered in determining whether a loss is other-than-temporary include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near-term prospects of the investee and the Company's intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value.

Operating Leases

The Company accounts for its operating leases by recording right-of-use assets and lease liabilities on the Company's condensed balance sheets in accordance with Accounting Standards Codification ("ASC") 842, "Leases" ("ASC 842"). Right-of-use assets represent the Company's right to use an underlying asset over the lease term and include any lease payments made prior to the lease commencement date and are reduced by lease incentives. Lease liabilities represent the present value of the total lease payments over the lease term, calculated using the Company's incremental borrowing rate. The incremental borrowing rate is determined by using the rate of interest that the Company would pay to borrow on a collateralized basis an amount equal to the lease payments for a similar term and in a similar economic environment. The Company recognizes options to extend a lease when it is reasonably certain that it will exercise such extension. The Company does not recognize options to terminate a lease when it is reasonably certain that it will not exercise such early termination options. Lease expense is recognized on a straight-line basis over the expected lease term.

Recently Issued and Adopted Accounting Pronouncements

The Company is a smaller reporting company and an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). Under the JOBS Act, emerging growth companies can delay the adoption of new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. Thus, the Company has elected to use the extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that (i) the Company is no longer an emerging growth company or (ii) the Company affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. The Company may early adopt certain accounting standards, as the JOBS Act does not preclude an emerging growth company from adopting a new or revised accounting standard earlier than the time that such standard applies to private companies to the extent early adoption is permitted.

3. Fair Value of Financial Assets

Assets and liabilities recorded at fair value on a recurring basis in the condensed balance sheets, as well as assets and liabilities measured at fair value on a non-recurring basis or disclosed at fair value, are categorized based upon the level of judgment associated with inputs used to measure their fair values. The accounting guidance for fair value provides a framework for measuring fair value and requires certain disclosures about how fair value is determined. Fair value is defined as the price that would be received upon the sale of an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date.

The accounting guidance also establishes a three-level valuation hierarchy that prioritizes the inputs to valuation techniques used to measure fair value based upon whether such inputs are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions made by the reporting entity. The three-level hierarchy for the inputs to valuation techniques is briefly summarized as follows:

Level 1 — Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2 — Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level 3 — Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. An assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability. Changes in the ability to observe valuation inputs may result in a reclassification of levels of certain securities within the fair value hierarchy. The Company recognizes transfers into and out of levels within the fair value hierarchy in the period in which the actual event or change in circumstances that caused the transfer occurs.

As of September 30, 2023 and December 31, 2022, Level 1 securities consist of U.S. Treasury and money market funds, for which the carrying amounts are based on the quoted market prices in active markets.

As of September 30, 2023 and December 31, 2022, Level 2 securities consist of highly rated commercial paper, U.S. agency securities, and asset-backed securities, for which fair value is determined through the use of models or other valuation methodologies.

During the periods presented, the Company did not have any Level 3 securities.

The following tables set forth the financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy as of September 30, 2023 and December 31, 2022 (in thousands):

	September 30, 2023			
	Total Fair Value	Level 1	Level 2	Level 3
Cash equivalents:				
Money market funds [1]	$ 182,988	$ 182,988	$ —	$ —
Commercial paper [1]	—	—	—	—
Total cash equivalents	182,988	182,988	—	—
Marketable securities:				
U.S. treasuries [2]	4,456	4,456	—	—
Commercial paper [2]	7,937	—	7,937	—
U.S. agency securities [2]	36,626	—	36,626	—
Asset-backed securities [2]	1,979	—	1,979	—
Total marketable securities	50,998	4,456	46,542	—
Total cash equivalents and marketable securities	$ 233,986	$ 187,444	$ 46,542	$ —

	December 31, 2022			
	Total Fair Value	Level 1	Level 2	Level 3
Cash equivalents:				
Money market funds [1]	$ 45,739	$ 45,739	$ —	$ —
Commercial paper [1]	1,991	—	1,991	—
Total cash equivalents	47,730	45,739	1,991	—
Marketable securities:				
U.S. treasuries [2]	65,391	65,391	—	—
Commercial paper [2]	115,061	—	115,061	—
U.S. agency securities [2]	53,455	—	53,455	—
Asset-backed securities [2]	1,914	—	1,914	—
Total marketable securities	235,821	65,391	170,430	—
Total cash equivalents and marketable securities	$ 283,551	$ 111,130	$ 172,421	$ —

[1] Included within cash and cash equivalents on the condensed balance sheets.

[2] Included within investments in marketable securities, current and investments in marketable securities, non-current on the condensed balance sheets.

4. Marketable Securities

All marketable securities were considered available-for-sale as of September 30, 2023 and December 31, 2022. The amortized cost, gross unrealized holding gains or losses, and fair value of the Company's marketable securities by major security type are summarized in the tables below (in thousands):

	September 30, 2023			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Available-for-sale securities				
U.S. treasuries	$ 4,469	$ —	$ (13)	$ 4,456
Commercial paper	7,942	—	(5)	7,937
U.S. agency securities	36,700	—	(74)	36,626
Asset-backed securities	1,982	—	(3)	1,979
Total available-for-sale securities	$ 51,093	$ —	$ (95)	$ 50,998

	December 31, 2022			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Available-for-sale securities				
U.S. treasuries	$ 65,807	$ —	$ (416)	$ 65,391
Commercial paper	115,381	13	(333)	115,061
U.S. agency securities	53,767	15	(327)	53,455
Asset-backed securities	1,914	—	—	1,914
Total available-for-sale securities	$ 236,869	$ 28	$ (1,076)	$ 235,821

The amortized cost of available-for-sale securities is adjusted for amortization of premiums and accretion of discounts to maturity. As of September 30, 2023, the aggregate fair value of securities with remaining maturities of less than one year held by the Company in an unrealized loss position was $51.0 million. The Company has the intent and ability to hold such securities until recovery and has determined that there has been no material change to its credit risk. As a result, the Company determined it did not hold any investments with a credit loss at September 30, 2023.

There were no realized gains or losses recognized on the sale or maturity of available-for-sale securities during the three and nine months ended September 30, 2023, and as a result, there were no reclassifications out of accumulated other comprehensive gain (loss) for the same periods.

5. Balance Sheet Components

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets as of September 30, 2023 and December 31, 2022 consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Advances to suppliers	$ —	$ 2,486
Prepaid insurance	1,227	1,343
Other prepaid expenses	3,550	3,307
Total prepaid expenses and other current assets	$ 4,777	$ 7,136

Property and Equipment, Net

Property and equipment, net as of September 30, 2023 and December 31, 2022 consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Furniture and fixtures	$ 1,264	$ 321
Computers and network equipment	—	251
Lab equipment	—	12,521
Leasehold improvements	12,108	304
Construction-in-progress	—	12,440
Total property and equipment	13,372	25,837
Less: accumulated depreciation	(838)	(3,207)
Total property and equipment, net	12,534	22,630

Depreciation expense for the three and nine months ended September 30, 2023 was $0.8 million and $2.3 million, respectively. Depreciation expense for the three and nine months ended September 30, 2022 was $0.7 million and $1.7 million, respectively.

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities as of September 30, 2023 and December 31, 2022 consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Professional fees	$ 178	$ 367
Early exercise liability	34	150
Other accrued expenses	221	1,354
Accrued employee termination benefits	2,983	—
Total accrued expenses and other current liabilities	$ 3,416	$ 1,871

6. Significant Agreements

Stanford Exclusive License Agreement and Option Agreement

In December 2020, the Company entered into an exclusive license agreement (the "License Agreement") with The Board of Trustees of the Leland Stanford Junior University (Stanford), pursuant to which Stanford granted the Company a worldwide license to specified technology and patent rights to develop, manufacture and commercialize human prophylactic and therapeutic products. Other than with respect to specified, broadly applicable assays and procedures and subject to retained rights by Stanford, the license is exclusive with respect to human prophylactic and therapeutic products for the treatment of SCD, XSCID and beta thalassemia. The license is non-exclusive with respect to those broadly applicable assays and procedures and with respect to all human prophylactic and therapeutic products other than for the treatment of SCD, XSCID and beta thalassemia.

Pursuant to the License Agreement, the Company paid an upfront license fee of $50.0 thousand and as additional consideration for the license, the Company agreed to issue to Stanford approximately 0.6 million shares of common stock. As of December 31, 2020, the Company recorded its obligations to issue Stanford shares of common stock at an estimated fair value of $2.8 million to additional paid in capital. The shares of common stock were expected to be issued when Stanford provided the inventors' names for allocation of the shares. Stanford also received an option to purchase up to 10% of newly issued shares in the future private financings at the price paid by other participating investors. During the year ended December 31, 2021, the Company entered into an amendment to the License Agreement, pursuant to which it extended the time when the shares would be issued to May 7, 2021.

On May 7, 2021, the Company issued an aggregate of 640,861 shares of the Company's common stock to Stanford and certain individuals designated by Stanford in consideration for rights granted to the Company under the Company's exclusive license agreement.

On June 18, 2021, the Company exercised its right to repurchase an aggregate of 624,845 shares from each founder and investor under the Stanford Adjustment Repurchase Right as described below.

The acquisition of the exclusive license, including patent rights and know-how, and clinical supplies was accounted for as an asset acquisition and as the acquired technology and inventories did not have an alternative use, the total consideration of $2.8 million was recorded as research and development expense in the statements of operations and comprehensive loss for the year ended December 31, 2020.

In connection with the License Agreement, the Company reimbursed Stanford $0.2 million for previously incurred patent costs, which were recorded in general and administrative expenses for the year ended December 31, 2020 and in addition, is obligated to reimburse future patent costs. The Company is also obligated to pay annual maintenance fees as follows: $5.0 thousand in the first year, $10.0 thousand in each year 2 and 3, $25.0 thousand in each year 3 through 6, $50.0 thousand each subsequent year until first commercial sale and $200.0 thousand each subsequent year after the first commercial sale. No fees were recorded during the three and nine months ended September 30, 2023. The Company did not record any patent fees during the three and nine months ended September 30, 2023.

The Company is obligated to make future development and regulatory milestone payments in total of up to $5.3 million, sales based milestone payments of up to $7.5 million and royalties on future sales at percentage rates ranging in the low single digits. In addition, if the Company receives any sublicense income, it is required to share it with Stanford as a certain percentage defined for each milestone in the License Agreement. The Company will record the maintenance fees, when payable, and will record milestones when contingencies are resolved and milestones are due. No milestones were achieved and recorded as of September 30, 2023.

In January 2021, the Company entered into an option agreement (the "First Option Agreement") with Stanford, pursuant to which Stanford granted the Company the right to obtain a license to specified patent rights relating to human prophylactic and therapeutic products. The Company may exercise the option in whole or in part to obtain a license under one or more of the optioned patent rights.

Subject to the Company's exercise of the option under the First Option Agreement and its execution of an amendment to the License Agreement that incorporates the optioned patent rights and any optioned technology, the Company has agreed to issue to Stanford 132,137 shares of its common stock and pay a license execution fee of $10.0 thousand.

The term of the First Option Agreement expires 18 months after its effective date, subject to the Company's right to extend such expiration date by up to an additional one year upon notice to Stanford and by another additional one year upon the reasonable agreement of Stanford. The First Option Agreement will terminate if the License Agreement terminates. On June 23, 2022, the Company exercised its right to extend the term of the First Option Agreement for an additional year. On June 6, 2023, the Company and Stanford agreed to extend the term of the First Option Agreement for another additional year. As of September 30, 2023, the Company had not exercised the option under the First Option Agreement and no fees have been paid for the First Option Agreement.

In April 2021, the Company entered into an option agreement (the "Second Option Agreement") with Stanford to negotiate the license for additional technologies from Stanford. Pursuant to the Second Option Agreement, the Company agreed to pay Stanford option fees in an aggregate amount of $30.0 thousand over the term of the option. On April 13, 2022, the Company entered into an amendment to the Second Option Agreement which extended the term for an additional year. On March 8, 2023, the Company terminated the Second Option Agreement without exercising the option to negotiate a license for additional technologies from Stanford. No maintenance fees were paid during the three and nine months ended September 30, 2023.

LCGM Service Agreement

On August 30, 2021, the Company entered into a Master Manufacturing and Service Agreement with the Laboratory for Cell & Gene Medicine at Stanford ("LCGM MSA"). Pursuant to the LCGM MSA, LCGM will conduct clinical manufacturing, release testing, and product release for nula-cel in the Company's Phase 1/2 CEDAR clinical trial to treat SCD. During 2021, the Company entered into various Statements of Work under the LCGM MSA under which it received technology transfer and related services for HBB Beta-Globin Gene Variant for SCD, manufacturing engineer test runs, the exclusive use of a manufacturing suite at the LCGM facility, and Phase 1/2 CEDAR clinical development and manufacturing of the HBB Variant for SCD. During the three months ended September 30, 2023, the Company did not recognize any research and development expense in connection with the LCGM MSA. The Company recognized $1.1 million during the nine months ended September 30, 2023. During the three and nine months ended September 30, 2022, the Company recognized $1.7 million and $4.5 million, respectively, in research and development expense in connection with the LCGM MSA. As of September 30, 2023, the Company does not expect to incur any additional expenses associated with the LCGM MSA.

IDT License Agreement

On June 7, 2021, the Company entered into a License Agreement ("IDT License Agreement") with Integrated DNA Technologies, Inc. ("IDT"). Pursuant to the IDT License Agreement, IDT granted the Company and its affiliates a worldwide, non-exclusive, sublicensable license to research and develop products incorporating HiFi Cas9 protein variants for use in human therapeutic

applications for SCD, XSCID and Gaucher disease (the "Field") and a worldwide, exclusive, sublicensable license to commercialize such products in the Field. The Company has also been granted the right to expand the licensed Field to include human therapeutic applications in the additional fields of beta thalassemia disorder and lysosomal storage disorders upon the payment of an exercise fee in the amount of $0.5 million per additional field or $1.0 million for both additional fields.

In consideration of the licenses and rights granted to the Company under the IDT License Agreement, the Company agreed to pay to IDT an upfront payment in the amount of $3.0 million and up to $5.3 million (or $8.8 million if the Company elects to expand the Field as described above to include both the beta thalassemia and lysosomal storage disorders fields) in total regulatory milestone payments. Each regulatory milestone payment is payable once on an indication-by-indication basis. In addition, the Company has agreed to pay IDT a low single-digit royalty on the net sales of products, subject to reductions in specified circumstances. As the acquisition of the license was accounted for as an asset acquisition and as the acquired technology did not have an alternative use, the total consideration of $3.0 million was recorded as research and development expense in the statements of operations and comprehensive loss during the year ended December 31, 2021.

The IDT License Agreement remains in effect on a country-by-country and product-by-product basis until the expiration of the royalty term for such product in such jurisdiction. The Company and IDT each have the right to terminate the IDT License Agreement for the other party's material breach of its obligations under the IDT License Agreement, subject to specified rights to cure. Additionally, the Company may terminate the IDT License Agreement for any reason upon written notice.

During the three and nine months ended September 30, 2023, the Company has not recognized any research and development expense in connection with the IDT License Agreement. There are no milestones probable as of September 30, 2023 and 2022; therefore, no milestone payments have been recognized in the three and nine months ended September 30, 2023 and 2022. As of September 30, 2023, the Company does not expect to incur any additional expenses associated with the IDT License Agreement.

Sale of Non-Genotoxic Targeted Conditioning Technology Assets

On August 1, 2023, the Company entered into an asset purchase agreement (the "APA") with a third party pursuant to which the Company sold to the counterparty, concurrently with the execution of the APA, certain assets related to the Company's non-genotoxic conditioning technology in exchange for upfront consideration of $0.5 million. Additional consideration included certain contingent milestone payments totaling up to approximately $1.0 million in the aggregate as well as royalties on net sales by the acquirer of certain products incorporating the acquired technology, and potential fees upon the completion of certain transactions by the acquirer. The APA also provided for reimbursement of certain research and development amounts incurred prior to closing of approximately $0.6 million.

The disposal of certain assets sold pursuant to the APA was accounted for as a deconsolidation of a subsidiary or group of assets in accordance with ASC 810. During the three and nine months ended September 30, 2023, the Company recognized a loss on disposal of $0.1 million, which was recorded in other income. The Company will record amounts related to the contingent milestone payments, royalties, and potential transaction fees when contingencies are resolved and amounts are due in accordance with ASC 450. No contingencies were resolved and recorded as of September 30, 2023.

License and Option to Acquire Nula-Cel Assets

On August 4, 2023, the Company entered into an LOA with a third party pursuant to which the Company exclusively licensed to the counterparty, and granted the counterparty, an option to acquire certain intellectual property and materials related to the Company's nula-cel program and related pre-clinical platform assets. Exercise of the option is contingent on the counterparty timely achieving a financing milestone, and all rights to the intellectual property and materials will revert to the Company if the milestone is not achieved or if the counterparty elects not to exercise the option. In return for this license and option, the Company received an equity interest in the counterparty representing 20% of all outstanding shares on a fully diluted basis. As a result of the 20% equity interest, the Company has the ability to exert significant influence over the counterparty and accounts for the interest as an equity method investment. The Company records its proportionate share of investee's equity in earnings or losses based on the most recently available financial information.

The Company assessed the entity under the VIE model to assess whether to apply the consolidation guidance in accordance with ASC 810. The Company holds variable interests in the entity, and the entity was determined to be a VIE which is not consolidated as it is determined the Company lacks the power to direct the activities that most significantly impact the entity's economic performance. The condensed balance sheets do not contain assets and liabilities related to the Company's interest in the non-consolidated VIE. Additionally, the Company's maximum exposure to loss is limited to the carrying value of the equity interest in the counterparty. No arrangements exist where additional financial support would need to be provided by the Company.

The 20% equity interest in the counterparty had minimal value upon execution of the LOA and the Company did not record any amount related to the equity interest as of September 30, 2023 or for the three and nine months ended September 30, 2023. As of September 30, 2023, the counterparty has not achieved the financial milestone and does not have the right to exercise the option.

7. Commitments and Contingencies

Research and Development Agreements

The Company enters into contracts in the normal course of business with CROs for clinical trials, with CMOs or other vendors for preclinical and clinical studies, supplies and other services and products for operating purposes. These contracts generally provide for termination on notice or may have a potential termination fee if a purchase order is cancelled within a specified time. As of September 30, 2023 and December 31, 2022, there were no amounts accrued related to termination and cancellation charges and the Company does not expect to incur any additional expenses associated with termination and cancellation charges.

License Agreements

The Company enters into license agreements (Note 6), pursuant to which the Company may acquire or license other patents, patent applications or know-how from various third parties to access intellectual property covering product candidates that the Company is developing. Under these acquisitions or licensing agreements, the Company may be liable for certain diligence obligations and payments, which are contingent upon achieving various development, regulatory and commercial milestones. Also, pursuant to the terms of some of these license agreements, when and if commercial sales of a product commence, the Company may be obligated to pay royalties to such third parties on net sales of the respective products. No such milestones were achieved or probable as of September 30, 2023 and December 31, 2022.

Legal Contingencies

From time to time, the Company may become involved in legal proceedings arising from the ordinary course of business. The Company records a liability for such matters when it is probable that future losses will be incurred and that such losses can be reasonably estimated. Significant judgment by the Company is required to determine both probability and the estimated amount. Management is currently not aware of any legal matters that could have a material adverse effect on its financial position, results of operations or cash flows.

Guarantees and Indemnifications

In the normal course of business, the Company enters into agreements that contain a variety of representations and provide for general indemnification. Its exposure under these agreements is unknown because it involves claims that may be made against the Company in the future. To the extent permitted under Delaware law, the Company has agreed to indemnify its directors and officers for certain events or occurrences while the director or officer is, or was serving, at a request in such capacity. To date, the Company has not paid any claims or been required to defend any action related to its indemnification obligations. As of September 30, 2023 and December 31, 2022, the Company did not have any material indemnification claims that were probable or reasonably possible and consequently has not recorded related liabilities.

8. Operating Leases

As of September 30, 2023, the current and non-current portions of the total liability for operating leases was $3.4 million and $49.7 million, respectively. As of September 30, 2023, the weighted average remaining lease term on the operating leases is 110 months. The weighted average incremental borrowing rate used to determine the operating lease liabilities included on the condensed balance sheet was 10.9%.

Facility leases

On January 27, 2021, the Company entered into a new lease agreement for office and lab space in South San Francisco, California that included two office suites. The lease terms for the two office suites commenced during July and August 2021, respectively. The term of the lease is 44 months for the first office suite and 43 months for the second office suite with an option to extend the term for an additional two years on the same terms and conditions. This option to extend the lease term was not determined to be reasonably certain and therefore has not been included in the Company's calculation of the associated operating lease liability under ASC 842. The corresponding right-of-use assets and lease liabilities related to the two office suites were recorded on the Company's balance sheet upon the lease commencement date, which was the date the Company was deemed to have obtained control of the premises.

In August 2023, the Company subleased one of its office suites in the South San Francisco lease for 20 months starting from August 2023 for aggregate sublease payments of $0.5 million. The sublease income, while it reduces the rent expense, is not considered in the value of the right-of-use assets or lease liabilities. The Company's sublease income was $0.1 million for the three and nine months ended September 30, 2023.

On November 10, 2021, the Company entered into a sublease agreement for office and lab space located in Brisbane, California. The sublease expires on December 6, 2023. The corresponding right-of-use assets and lease liabilities related to the sublease were recorded on the Company's balance sheet upon the lease commencement date, which was the date the Company was deemed to have obtained control of the premises.

On December 16, 2021, the Company entered into a lease agreement with Bayside Area Development, LLC ("Bayside") for 85,165 square feet of office and laboratory space in South San Francisco, CA. The lease for the office and laboratory space commenced in April 2023. The term of the lease is 120 months with the option to extend the term up to an additional ten years. This option to extend the lease term was not determined to be reasonably certain and therefore has not been included in the Company's calculation of the associated operating lease liability under ASC 842. During the second quarter of 2023, the Company took possession of the Bayside lease and recognized a $32.0 million right-of-use asset and corresponding lease liability upon the lease commencement date. In addition, the Company recognized $27.2 million in leasehold improvements. Bayside provided a tenant improvement allowance of up to $14.9 million, which was fully utilized and recorded in lease liability.

In October 2023, the Company entered into a sublease agreement and amendment to the original master lease with the landlord to accelerate the termination date of the Bayside lease, and in November 2023, the Company entered into an amendment to the original lease agreement to reassign the second suite of the South San Francisco lease (Note 14).

As of September 30, 2023, the Company had operating lease right-of-use assets of $13.2 million and operating lease liabilities of $53.1 million related to the office suite leases recorded on its condensed balance sheet.

Embedded leases

On May 10, 2021 and August 30, 2021, the Company and LCGM entered into the LCGM MSA and Statement of Work #3 ("SOW #3"), respectively, for the exclusive use of a manufacturing suite at the LCGM facility. Pursuant to the terms of SOW #3, LCGM agreed to provide the Company with certain dedicated space for the clinical manufacturing, release testing, and product release in the Company's Phase 1/2 CEDAR clinical trial to treat sickle cell disease. The Company concluded that the agreement contains an embedded lease as the Company controls the use of a dedicated manufacturing suite and the equipment therein. The agreement includes fixed lease payments of $5.6 million from inception of lease through April 30, 2023, the expiration date of SOW #3. As of September 30, 2023, the Company has paid all fixed lease payments on the LCGM embedded lease.

The Company and Explora BioLabs, Inc. ("Explora") entered into a License Service Agreement and Master Services Agreement (together, the "Explora Agreements") on November 17, 2021 and December 16, 2021, respectively. Pursuant to the terms of the Explora Agreements, Explora agreed to provide a certain dedicated space to perform in vitro or in vivo studies, obtain or house research animals, and provide scientific or technical consultation to the Company. The Company concluded that the Explora Agreements contain an embedded lease as the Company controls the use of a dedicated manufacturing suite and the equipment therein. The Explora Agreements contain fixed lease payments of $0.7 million from inception of lease through November 2023. As of September 30, 2023, the Company does not have any remaining obligations related to the Explora embedded lease.

As of September 30, 2023, the Company did not have any operating lease right-of-use assets and operating lease liabilities related to the embedded leases recorded on its condensed balance sheet.

Operating Lease Obligations

As of September 30, 2023, the future minimum lease payments for the Company's operating leases for each of the years ending December 31 were as follows (in thousands):

		Amount
2023 (Remaining three months)	$	2,155
2024		9,177
2025		8,336
2026		8,223
2027		8,493
Thereafter		50,103
Total undiscounted lease payments		86,487
Present value adjustment		(33,376)
Total net lease liabilities	$	53,111

Lease expense was $2.4 million and $6.4 million for the three and nine months ended September 30, 2023, respectively. Lease expense was $1.7 million and $5.0 million for the three and nine months ended September 30, 2022, respectively.

Under the terms of the remaining lease agreements, the Company is also responsible for certain variable lease payments that are not included in the measurement of the lease liability. Variable lease payments for operating leases were $0.8 million and $1.8 million for the three and nine months ended September 30, 2023, respectively, including non-lease components such as common area maintenance fees, taxes, and insurance. Variable lease payments for operating leases were $0.3 million and $1.0 million for the three and nine months ended September 30, 2022, respectively.

The following information represents supplemental disclosure for the statement of cash flows related to the operating leases (in thousands):

		September 30, 2023
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows under operating leases	$	4,817

9. Common Stock

As of September 30, 2023 and December 31, 2022, the Company was authorized to issue 300,000,000 shares of its common stock with $0.00001 par value per share. Each share of the Company's common stock is entitled to one vote. In connection with the IPO in June 2021, all outstanding shares of redeemable convertible preferred stock were converted into 30,761,676 shares of common stock. The IPO closed on June 29, 2021, pursuant to which the Company issued and sold 14,000,000 shares of its common stock at a public offering price of $17.00 per share.

On June 29, 2021, the underwriters also exercised their option to purchase an additional 2,100,000 shares of common stock at the IPO price, less the underwriting discounts and commissions. The closing of the offering of the additional shares occurred on July 2, 2021. The Company issued and sold 2,100,000 shares of its common stock at a public offering price of $17.00 per share.

Shares Reserved for Future Issuance

As of September 30, 2023 and December 31, 2022, the Company reserved common stock for future issuances as follows:

	September 30, 2023	December 31, 2022
Outstanding stock option awards	6,380,515	7,755,303
Shares available for future stock option grants	9,831,161	5,382,907
ESPP shares available for future grants	1,253,729	754,951
Total shares reserved for future issuance	17,465,405	13,893,161

Founders' and Investor's Restricted Common Stock

In March 2020, the Board approved and in April 2020, the Company issued 6,081,413 shares of its common stock to its founders and 2,467,104 shares of its common stock to its investor at the purchase price of $0.00002 per share. As of December 31, 2020, the investor's shares were fully vested and a portion of the shares issued were subject to the Company's option to repurchase per the Stanford Adjustment Repurchase Right, as described below.

The shares of the Company's common stock issued to its founders for their services as an employee, advisor, or consultant vest monthly over four years with one year cliff from the vesting commencement date. The vesting commencement date was the date of the

initial closing of the Series A preferred stock financing or June 24, 2020. Pursuant to the restricted stock purchase agreements with each of the founders, the vesting of the founders' common stock shares could be accelerated upon the occurrence of certain events, including signing of the term sheet for the license with Stanford, a change in control, or if the founder's service is terminated by the Company without cause. The Company signed the term sheet with Stanford in June 2020, and as a result, an aggregate of 912,212 shares of founders' common stock vested pursuant to the acceleration terms. As of September 30, 2023, certain founder agreements were terminated without cause and shares were accelerated.

If a founder terminates the service relationship with the Company during the vesting period, the Company may repurchase any unvested restricted common stock at the price per share equal to the lower of (i) the original purchase price, subject to adjustment in the event of any reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split, or (ii) the current fair market value as of the date the Company elects to exercise its Stanford Adjustment Repurchase Right, as described below. The repurchase right lapses in 180 days after the termination of the founder's service or employment. During the vesting term, holders of founders' common stock awards are deemed to be common stockholders and have the right to receive dividends and voting rights.

The founders' shares of common stock are also subject to the Company's option to repurchase per the Stanford Adjustment Repurchase Right, as described below.

The Company accounts for shares issued to founders as equity compensation awards and the estimated fair value at the grant date was minimal. The Company did not repurchase any founders' common stock awards during the three months ended September 30, 2023. During the nine months ended September 30, 2023, the Company repurchased 152,694 shares of founders' common stock awards. 647,803 and 1,938,430 shares of founders' common stock awards were unvested and expected to vest in 0.7 years and 1.5 years as of September 30, 2023 and December 31, 2022, respectively.

Stanford Adjustment Repurchase Right

Upon the issuance of shares of common stock to Stanford pursuant to the License Agreement, as discussed in Note 6, the Company has a right to repurchase from each founder and an investor a number of shares of common stock equal to the number of shares issued to Stanford multiplied by the applicable number of shares issued to the founder or investor, as applicable, divided by 7,273,848 shares (a fully diluted number of shares of the Company at the end of March 2020, after the founders' and investor's shares were approved by the board of directors). The Stanford Adjustment Repurchase Right may be exercised by the Company within six months following the date of the issuance of the shares of common stock to Stanford. The repurchase price per share is equal to the lower of (i) the purchase price, subject to adjustment in the event of any reorganization, recapitalization, reclassification, etc., or (ii) the current fair market value as of the date the Company elects to exercise its Stanford Adjustment Repurchase Right.

On May 7, 2021, the Company issued an aggregate of 640,861 shares of the Company's common stock to Stanford and certain individuals designated by Stanford in consideration for rights granted to the Company under the Company's exclusive license agreement.

On June 18, 2021, the Company exercised its right to repurchase an aggregate of 624,845 shares from each founder and investor under the Stanford Adjustment Repurchase Right. As of September 30, 2023, the Company has not exercised the right to repurchase the remaining 16,016 shares.

The Company accounts for the founders and investor's shares of restricted common stock as equity share-based awards.

10. Equity Incentive Plans

2020 Stock Option and Grant Plan

Prior to the effectiveness of the registration statement on Form S-1 (File No. 333-256838) for its IPO, the Company granted share-based awards under the 2020 Stock Option and Grant Plan, as amended (the "2020 Plan"). The Company was authorized to grant under the 2020 Plan incentive stock options, nonqualified stock options, restricted stock awards, restricted stock units and other share-based awards to the Company's officers, employees, directors and consultants. Options under the 2020 Plan could be granted for periods of up to 10 years and at prices no less than 100.0% of the estimated fair value of the shares on the date of grant as determined by the Board, provided, however, that the exercise price of an incentive stock option granted to a 10.0% stockholder shall not be less than 110.0% of the estimated fair value of the shares on the date of grant and the option is not exercisable after the expiration of five years from the date of grant. Options generally vest monthly over four years with or without one year cliff vesting. Per the 2020 Plan, granted options may be early exercised prior to vesting and the Company will issue shares of restricted stock upon the early exercise with vesting terms consistent with the original grant. Upon completion of the Company's IPO, the remaining shares available for issuance under the 2020 Plan were retired, and the Company no longer grants awards pursuant to the 2020 Plan.

2021 Stock Option and Incentive Plan

In June 2021, the Company's board of directors approved the 2021 Stock Option and Incentive Plan (the "2021 Plan") that became effective immediately prior to the date when the Company's prospectus was declared effective by the SEC on June 24, 2021. The Company initially reserved 5,636,000 shares of common stock for issuance of awards under the 2021 Plan. The 2021 Plan provides that the number of shares reserved and available for issuance under the plan will automatically increase each January 1, beginning on January

1, 2022, by 5% of the outstanding number of shares of the Company's common stock on the immediately preceding December 31, or such lesser number of shares as determined by the Company's compensation committee. On January 1, 2022 and 2023, the number of shares of common stock available under the 2021 Plan increased by 2,900,541 shares and 2,911,088 shares, respectively pursuant to this evergreen provision of the 2021 Plan. The option exercise price of each option will be determined by the Company's compensation committee but generally may not be less than 100% of the fair market value of the Company's common stock on the date of grant. The term of each option will be fixed by the Company's compensation committee and may not exceed ten years from the date of grant. The grant date fair value of all awards made under the 2021 Plan and all other cash compensation paid by the Company to any non-employee director for services as a non-employee director in any calendar year may not exceed $1.0 million for the first year of service and $750.0 thousand for each year of service thereafter.

As of September 30, 2023, there were 9,831,161 shares available for future issuance under the 2021 Plan.

Restricted Stock Awards

During the year ended December 31, 2020, the Company issued 832,983 shares as restricted stock awards under the 2020 Plan. The purchase price of the restricted common stock awards was fair value as determined by the Board at the issuance date. The shares vest monthly over four years with the one-year cliff vesting from the grant date. Upon termination of employment, the Company has the right to repurchase any unvested restricted shares. The repurchase price for unvested shares of common stock will be the lower of (i) the fair market value on the date of repurchase or (ii) their original purchase price. There were no grants of restricted stock awards for the three and nine months ended September 30, 2023 and 2022.

The Company accounted for restricted stock awards as early exercised options and recognized a liability in other liabilities when cash was received for the purchase of shares of restricted stock awards. As shares of restricted stock awards vest, the Company reclassified the liability to common stock and additional paid in capital. As of September 30, 2023 and December 31, 2022, the Company recorded a minimal liability for restricted stock awards included in other liabilities.

There were 1,542 and 11,136 restricted stock award shares canceled and repurchased during the three and nine months ended September 30, 2023, respectively. There were 5,140 shares canceled and repurchased during the three and nine months ended September 30, 2022. There were 703,035 and 553,443 shares of restricted stock vested as of September 30, 2023 and December 31, 2022, respectively.

Employee Stock Purchase Plan

In June 2021, the Company's board of directors and stockholders approved the 2021 Employee Stock Purchase Plan (the "ESPP") which became effective upon the IPO. Pursuant to the ESPP, certain employees of the Company, excluding consultants and non-employee directors, are eligible to purchase common stock of the Company at a reduced rate during offering periods. The ESPP permits participants to purchase common stock using funds contributed through payroll deductions, subject to a calendar year limit of $25,000 and at a purchase price of 85% of the lower of the fair market value of the Company's common stock on the first trading day of the

offering period or on the applicable purchase date, which will be the final trading day of the applicable purchase period. The ESPP has two annual purchase periods extending from June to November and December to May.

The Company recorded a minimal liability for ESPP in accrued liabilities as of September 30, 2023 and December 31, 2022. The Company did not issue any shares during the three months ended September 30, 2023 and 2022. The Company issued 65,222 shares and 207,137 shares under the ESPP during the nine months ended September 30, 2023 and 2022, respectively.

Incentive Stock Options and Nonqualified Stock Options

Stock options issued under the 2020 Plan and 2021 Plan generally vest over a four-year period and expire ten years from the date of grant. Certain options provide for accelerated vesting if there is a change in control, as defined in the individual award agreements.

A summary of option activity under the 2020 Plan and the 2021 Plan during the nine months ended September 30, 2023 is as follows:

	Number of Options	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2022	7,755,303	$ 8.47	8.67	$ 794
Options granted - 2021 Plan	3,223,400	$ 2.22		
Options exercised	(65,414)	$ 0.52		
Options cancelled	(4,532,774)	$ 6.50		
Outstanding as of September 30, 2023	6,380,515	$ 6.79	5.6	$ 695
Exercisable	4,231,849	$ 6.86	4.4	$ 472
Vested and expected to vest as of September 30, 2023	6,380,515	$ 6.79	5.6	$ 695

Aggregate intrinsic value represents the difference between the fair value of the underlying common stock and the exercise price as of September 30, 2023. The weighted-average grant date fair value of options granted during the three and nine months ended September 30, 2023 was $1.89 and $1.56 per share, respectively. There were 10,367 and 65,414 stock options exercised during the three and nine months ended September 30, 2023, respectively.

Early Exercise of Stock Options

The terms of the 2020 Plan permit the exercise of options granted prior to vesting, subject to required approvals. The unvested shares are subject to the repurchase right upon termination of employment at the original purchase price. The repurchase right lapses in 180 days after the termination of the employee's employment. Shares purchased by employees pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be issued until those shares vest according to their respective vesting schedules. Cash received for early exercised stock options is recorded as other liabilities on the balance sheet and is reclassified to common stock and additional paid-in capital as such shares vest. During the three and nine months ended September 30, 2023, the Company repurchased 26,188 and 216,656 shares, respectively, that were previously early exercised. The Company repurchased 73,735 shares and 124,448 shares that were previously early exercised during the three and nine months ended September 30, 2022, respectively.

As of September 30, 2023 and December 31, 2022, 111,600 and 554,695 shares, respectively, remained subject to the right of repurchase as a result of the early exercised stock options. As of September 30, 2023, the Company has a minimal remaining liability related to early exercised shares, which is recorded within accrued expenses and other liabilities on the Company's condensed balance sheets.

Stock-Based Compensation Expense

The following table presents the components of stock-based compensation expense for the Company's stock-based awards for the periods presented (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Restricted stock awards and founders' common stock awards	$ 1	$ 2	$ 5	$ 6
ESPP	1	58	96	316
Stock options	2,159	3,150	8,168	9,590
Total stock-based compensation expense	$ 2,161	$ 3,210	$ 8,269	$ 9,912

The above stock-based compensation expense also includes the expenses of $0.4 million and $1.1 million related to stock options issued to non-employees during the three and nine months ended September 30, 2023, respectively. There was $0.8 million and $0.9 million in stock-based compensation expense for options issued to non-employees during the three and nine months ended September 30, 2022.

The following table presents the classification of stock-based compensation expense for the Company's stock-based awards for the periods presented (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Research and development expenses	$ 37	$ 1,249	$ 1,904	$ 3,881
General and administrative expenses	2,124	1,961	6,365	6,031
Total stock-based compensation expense	$ 2,161	$ 3,210	$ 8,269	$ 9,912

As of September 30, 2023 and December 31, 2022 there was $9.9 million and $31.0 million of unrecognized stock-based compensation expense related to the employee and non-employee awards, which is expected to be recognized over a weighted-average period of 1.9 and 2.6 years, respectively.

11. Restructuring Activities

In February 2023, the Company's board of directors approved a restructuring plan (the "First Restructuring Plan") to reduce the Company's operating costs and better align its workforce with the needs of its business. The First Restructuring Plan eliminated approximately 50% of the Company's workforce.

Employees affected by the First Restructuring Plan obtained involuntary termination benefits that are provided pursuant to a one-time benefit arrangement. For employees who were notified of their termination in February 2023 and have no requirements to provide future service, the Company recognized the liability for the termination benefits in full at fair value in February 2023. For employees who are required to render services beyond a minimum retention period to receive their one-time termination benefits, the Company recognized the termination benefits ratably over their future service periods. The service periods began in February 2023 and ended at various dates through June 2023. The Company has incurred approximately $3.4 million of employee termination benefits expense to implement the First Restructuring Plan.

In August 2023, the Company's board of directors approved a second restructuring plan (the "Second Restructuring Plan"; together with the First Restructuring Plan, the "Restructuring Plans") to further reduce the Company's operating costs and align its workforce with the needs of its business. The Second Restructuring Plan eliminated approximately an additional 33.1% of its total workforce, and in aggregate, 78.1 % of its total workforce. Employees affected by the Second Restructuring Plan obtained involuntary termination benefits that are provided to an ongoing benefit arrangement. Accordingly, the Company is recognizing termination benefits upon announcement of termination to all employees. The Company expects to incur approximately $3.5 million of employee termination benefits expense to implement the Second Restructuring Plan.

In addition, the Company determined that as of September 30, 2023, it was reasonably likely to incur additional employee termination benefits expense for its remaining employees within the next twelve months. Accordingly, it recognized termination benefits for the remaining employees totaling $1.0 million.

The following table summarizes the Company's restructuring liability that is included in accrued expenses and other current liabilities in the accompanying condensed balance sheet:

	Nine Months Ended September 30, 2023
Accrued employee termination benefits beginning balance	$ —
Employee termination benefits charges incurred during the period	7,883
Amounts paid or otherwise settled during the period	(4,900)
Accrued employee termination benefits as of September 30, 2023	$ 2,983

In addition, the board of directors determined that it was in the best interests of the Company and its stockholders to put in place arrangements designed to provide that the Company will have the continued dedication and commitment of those employees, including executives, determined to be key to the Company's planned go-forward operations. The Board approved, and management implemented, a retention program for certain employees staying with the Company which includes cash retention bonuses totaling $4.2 million for certain retained employees provided that they remain within the Company through the requisite service period, which is the earlier of March 1, 2024 or the termination date upon a Restructuring Plan. As a result, these cash retention bonuses are being accrued over the requisite service period, with $2.8 and $4.0 million recognized during the three and nine months ended September 30, 2023, respectively,

and included within general and administrative and research and development expenses in the condensed statements of operations. During the three and nine months ended September 30, 2023, the Company paid $2.1 million in retention bonuses to employees impacted by the Second Restructuring Plan for fulfilling their requisite service periods.

In June 2023, the Company committed to a plan to sell certain of its lab equipment associated with the Restructuring Plan. During the three months ended September 30, 2023, the Company implemented a plan to sell its remaining lab equipment as well as other fixed assets not transferred to the Bayside lease. As of September 30, 2023, it disposed of the majority of its assets, with a minimal amount of assets on the condensed balance sheet meeting the criteria of held for sale. These assets are recognized at the lower of cost or fair value less cost to sell using market approach. The fair value of these assets are classified as Level 3 in the fair value hierarchy due to a mix of unobservable inputs utilized such as independent research in the market as well as actual quotes from market participants. Subsequent changes to the estimated selling price of assets held for sale are recorded as gains or losses to the condensed statements of operations and comprehensive loss wherein the recognition of subsequent gains is limited to the cumulative loss previously recognized. During the three and nine months ended September 30, 2023, the Company recorded impairment charges and loss on disposal of assets, which was included in restructuring and impairment costs in the condensed statements of operations and comprehensive loss, of $5.3 million and $6.8 million, respectively.

In connection with the Restructuring Plans, the Company has determined that it will not utilize the Bayside and South San Francisco leases for purposes of its own operations. In August 2023, the Company subleased one of its office suites in the South San Francisco lease for 20 months starting from August 2023 for aggregate sublease payments of $0.5 million. In October 2023, the Company entered into a sublease agreement and amendment to the original master lease with the landlord to accelerate the termination date of the Bayside lease and in November 2023, the Company entered into an amendment to the original lease agreement to reassign the second suite of the South San Francisco lease (Note 14). The Company performed a recoverability test by comparing the future cash flows attributable to the asset group to the carrying value of the long-lived assets. Future cash flows were estimated using comparable laboratory and office facilities discounted at a market discount rate over the remaining term of the Company's lease. During the three and nine months ended September 30, 2023, the Company recorded a non-cash impairment of $1.4 million and $36.4 million, respectively, to the right-of-use asset and related leasehold improvement, which was included in restructuring and impairment costs in the condensed statements of operations and comprehensive loss.

The Company entered into an asset purchase agreement with a third party pursuant to which the Company sold to the counterparty, concurrently with the execution of the APA, certain assets related to the Company’s non-genotoxic conditioning technology in exchange for upfront consideration of $0.5 million. Additional consideration included certain contingent milestone payments totaling up to approximately $1.0 million in the aggregate, as well as royalties on net sales by the acquirer of certain products incorporating the acquired technology, and potential fees upon the completion of certain transactions by the acquirer. The APA also provided for reimbursement of certain research and development amounts incurred prior to closing of approximately $0.6 million.

In addition, the Company also entered into an LOA with another third party pursuant to which the Company exclusively licensed to the counterparty, and granted the counterparty an option to acquire, certain intellectual property and materials related to the Company’s nulabeglogene autogedtemcel (nula-cel) program and related pre-clinical platform assets. Exercise of the option is contingent on the counterparty timely achieving a financing milestone, and all rights to the intellectual property and materials will revert to the Company if the milestone is not achieved or if the counterparty elects not to exercise the option. In return for this license and option, the Company received an equity interest in the counterparty representing 20% of all outstanding shares on a fully diluted basis.

12. Net Loss Per Share Attributable to Common Stockholders

The following table sets forth the computation of basic and diluted net loss per share attributable to common stockholders, which excludes shares which are legally outstanding, but subject to repurchase by the Company (in thousands, except share and per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Numerator:				
Net loss	$ (22,485)	$ (24,682)	$ (101,733)	$ (76,453)
Denominator:				
Weighted-average common shares outstanding	57,977,907	58,189,211	58,064,472	58,085,711
Less: weighted-average unvested restricted shares and shares subject to repurchase	(720,666)	(2,983,072)	(1,315,477)	(3,494,118)
Weighted-average shares used to compute basic and diluted net loss per share attributable to common stockholders	57,257,241	55,206,139	56,748,995	54,591,593
Net loss per share attributable to common stockholders — basic and diluted:	$ (0.39)	$ (0.45)	$ (1.79)	$ (1.40)

Anti-dilutive Outstanding Shares or Equivalents

The following outstanding options, unvested shares, and ESPP shares were excluded (as common stock equivalents) from the computation of diluted net loss per common share for the periods presented as their effect would have been anti-dilutive (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Options to purchase common stock	6,380,515	7,849,590	6,380,515	7,849,590
Common stock subject to vesting or repurchase	873,062	3,236,152	873,062	3,236,152
Employee Stock Purchase Plan shares	10,437	128,888	10,437	128,888
Total	7,264,014	11,214,630	7,264,014	11,214,630

13. Income Taxes

During the nine months ended September 30, 2023 and 2022, the Company recorded a full valuation allowance on federal and state deferred tax assets since management does not forecast the Company to be in a taxable position in the near future.

14. Subsequent Events

Amendment to Lease Agreement and Sublease of Company's Premises

In October 2023, the Company entered into a sublease agreement (the "Sublease") with Soleil Labs, LLC ("Tenant") for certain premises constituting approximately 32,113 square feet of space in the building located at 233 E. Grand Avenue, South San Francisco, California (the "Premises"). The Company currently leases approximately 85,165 square feet of office space in the Premises pursuant to a Lease dated as of December 16, 2021 (as amended, the "Master Lease"), by and between the Company and Bayside Area Development, LLC (the "Landlord"). The term of the Sublease commenced on October 26, 2023 and expires on December 31, 2024. Pursuant to the Sublease, Tenant agrees to make rent payments directly to the Landlord in the amount of $183,044.10 per month for the first twelve months and $189,450.64 per month for the remainder of the Term. The rights and obligations of Tenant under the Sublease are subject to the terms of the Master Lease.

On October 26, 2023, the Company also entered into a First Amendment to Lease with the Landlord (the "Lease Amendment") to adjust the timeline for certain payments under the Master Lease and to effect the acceleration of the termination date of the Master Lease. The Lease Amendment provides that the Master Lease will terminate on December 31, 2024, and that the Landlord may further accelerate the termination date for the premises not subject to the Sublease by delivering written notice and paying the Company $20,000 per month for each month of further acceleration. At signing, the Company prepaid all remaining amounts payable during the term of the Master Lease (including the difference between the rent obligations due under the Master Lease and the rent to be paid by Tenant under the Sublease for the Premises), in an amount equal to $15.9 million, as well as a lease termination payment of approximately $20.8 million.

Partial Lease and Assignment Agreement

In addition, in November 2023, the Company entered into a sublease agreement with a third party for certain premises constituting approximately 15,212 square feet of space in the building located at 201 Haskins Way, South San Francisco, California (the "Subleased Haskins Premises"). The Company currently leases approximately 19,000 square feet of office space at the location of the Subleased Haskins Premises pursuant to a lease dated as of February 26, 2021 (as amended, the "ARE Master Lease"), by and between the Company and ARE-San Francisco No. 65, LLC ("ARE"). Pursuant to the sublease for the Subleased Haskins Premises, the third party agreed to assume all of the Company's obligations under the ARE Master Lease, including the obligation to make rent payments, as well as all of the Company's obligations under the services agreement associated with the ARE Master Lease, through the end of the term of the ARE Master Lease on March 31, 2025, and to indemnify the Company for all obligations under the ARE Master Lease and the associated services agreement, in exchange for the Company's payment to the third party of approximately $1.4 million in assumption costs.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our unaudited condensed financial statements and the related notes and other financial information included elsewhere in this Quarterly Report on Form 10-Q, and the financial statements and accompanying notes, as well as Management's Discussion and Analysis of Financial Condition and Results of Operations contained in our Annual Report on Form 10-K for the year ended December 31, 2022. Certain of the information contained in this discussion and analysis or set forth elsewhere in this Quarterly Report, including information with respect to plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the section entitled "Risk Factors," our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. You should carefully read the section entitled "Risk Factors" to gain an understanding of the material and other risks that could cause actual results to differ materially from our forward-looking statements. Please also see the section entitled "Cautionary Note Regarding Forward-Looking Statements."

Overview

We have historically been a clinical-stage, next-generation gene editing company. In January 2023, we announced a voluntary pause of our Phase 1/2 CEDAR study of nulabeglogene autogedtemcel (nula-cel), for sickle cell disease ("SCD") due to a serious adverse event in the first patient dosed, which we concluded is likely related to study treatment. Nula-cel was being developed as a highly differentiated approach to treating SCD, with the potential to directly correct the mutation that causes SCD and restore normal adult hemoglobin expression.

In February 2023, we announced our decision to discontinue the development of nula-cel and initiate a process to explore strategic alternatives. As a result of this decision, we announced a corporate restructuring that resulted in an approximately 71.2% reduction in our workforce. We also disclosed our intention to continue research activities associated with our pre-clinical non-genotoxic conditioning program, with the goal of advancing toward one or more potential development candidates. As part of the corporate restructuring, we also elected not to utilize the portion of our facilities space subject to our lease agreement with Bayside Area Development for purposes of our own operations and intend to sublease the vacant space to recover a portion of the total cost.

In August 2023, we entered into a license and option agreement (the "LOA"), pursuant to which we granted a third-party an option to acquire certain of our technology and intellectual property related to our nula-cel program and related pre-clinical platform assets. We also entered into an asset purchase agreement pursuant to which we transferred to another third-party our pre-clinical non-genotoxic conditioning program, including technology and intellectual property, while we continued to explore strategic alternatives. On September 12, 2023, we entered into an amendment to the LOA with such counterparty, under which we agreed to assign certain contracts to such counterparty prior to exercise of the option.

In October 2023, we entered into a sublease for a portion of the facility leased to us by Bayside Area Development, as well as an amendment to the master lease, which provided for an accelerated termination of the lease and a release of liabilities under the lease and the new sublease upon payment of a lump sum at the time of signing. Following this transaction, we are no longer obligated for any rent payments under our lease with Bayside Area Development.

We continue to explore strategic alternatives, but there can be no assurance that the strategic review process will result in us pursuing such a transaction(s), or that any transaction(s), if pursued, will be completed on terms favorable to us and our stockholders in the existing entity or any possible entity that results from a combination of entities. If the strategic review process is unsuccessful, our board of directors may decide to pursue a dissolution and liquidation.

We were incorporated in Ontario, Canada in June 2017 as Longbow Therapeutics Inc. and were reincorporated in the State of Delaware in October 2019. In February 2020, we changed our name to Integral Medicines, Inc. and in August 2020, we changed our name to Graphite Bio, Inc. Research and development of our initial technology ceased at the end of 2018 and we did not have any significant operations or any research and development activities in 2019. In March 2020, we identified new gene editing technology which we sought to further develop, and we licensed the related intellectual property rights from The Board of Trustees of the Leland Stanford Junior University (Stanford) in December 2020.

Since our inception in June 2017, we have devoted substantially all of our resources to performing research and development, enabling manufacturing activities in support of our product development efforts, hiring personnel, acquiring and developing our technology and product candidates, organizing and staffing our Company, performing business planning, establishing our intellectual property portfolio, raising capital and providing general and administrative support for these activities. We have had one product candidate that has an accepted IND, which has been transferred to a third party in connection with our execution of the LOA. All of our other product candidates were in preclinical development, and we do not have any products approved for sale and have not generated any revenue from product sales. To date, we have funded our operations primarily with an aggregate of $197.7 million in aggregate gross proceeds from the sales of our redeemable convertible preferred stock and the issuance of convertible notes. In June and July 2021, we completed our initial public offering ("IPO") and issued 16,100,000 shares of our common stock for $17.00 a share with a total net proceeds of approximately $251.3 million, and total underwriting costs of $19.1 million and issuance costs of $3.2 million. We will continue to require additional capital to fund our operations for the foreseeable future and ensure we have adequate personnel, pay for

accounting, audit, legal, and consulting services, and pay costs associated with maintaining compliance with Nasdaq listing rules and the requirements of the SEC, director and officer liability insurance and other expenses associated with operating as a public company. Accordingly, until such time as we can generate significant revenue from product sales, if ever, we expect to finance our cash needs through public or private equity or debt financings, and collaborations, strategic alliances and licensing arrangements with third parties.

We have incurred significant operating losses since inception. As of September 30, 2023, we had cash, cash equivalents and marketable securities of $234.0 million and an accumulated deficit of $344.1 million. We expect to continue to incur substantial losses for the foreseeable future, and our transition to profitability will depend upon successful development, approval and commercialization of product candidates and upon achievement of sufficient revenues to support our cost structure. We are not presently developing any product candidates, and if we resume any such development activities, we will not generate revenue from product sales unless and until we successfully complete preclinical and clinical development and obtain regulatory approval for such product candidates. We may never achieve profitability, and if we resume development of product candidates, we will need to continue to raise additional capital.

Based upon our current operating plan, we estimate that our cash, cash equivalents and investments in marketable securities as of September 30, 2023 will be sufficient to fund our operating expenses and capital expenditure requirements for at least the next 12 months.

We expect to continue to incur significant expenses in connection with the process of evaluating our strategic alternatives. There can be no assurance, however, that we will be able to successfully consummate any particular strategic transaction. The process of continuing to evaluate strategic transactions may be very costly, time-consuming and complex, and we have incurred, and may in the future incur, significant costs related to these processes, such as legal, accounting and advisory fees and expenses and other related charges. A considerable portion of these costs will be incurred regardless of whether any particular course of action is implemented or transaction is completed. Any such expenses will decrease the remaining cash available for use in our business. In addition, any strategic business combination or other transactions that we may consummate in the future could have a variety of negative consequences and we may implement a course of action or consummate a transaction that yields unexpected results that adversely affects our business and decreases the remaining cash available for use in our business or the execution of our strategic plan. There can be no assurances that any particular course of action, business arrangement, transaction, or series of transactions, will be pursued, successfully consummated, lead to increased stockholder value or achieve the anticipated results. Any failure of such potential transaction to achieve the anticipated results could significantly impair our ability to enter into any future strategic transactions and may significantly diminish or delay any future distributions to our stockholders.

Should we resume development of product candidates, our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of one or more product candidates. In addition, we will incur substantial research and developments costs and other expenditures to develop such product candidates, particularly as we:

- advance any product candidates through preclinical studies and clinical trials;
- manufacture supplies for our preclinical studies and clinical trials;
- seek marketing approval for product candidates that successfully complete clinical development, if any;
- maintain compliance with applicable regulatory requirements;
- develop and scale up our capabilities to support preclinical activities and clinical trials for product candidates and commercialization of product candidates for which we obtain marketing approval, if any;
- retain key personnel to continue our go-forward operations
- operate as a public company;
- explore and execute on our strategic alternative process or a potential strategic transaction;
- implement and maintain operational, financial and management systems; and
- obtain, maintain, expand and protect our portfolio of intellectual property rights.

We have relied and may in the future rely on third parties in the conduct of our preclinical studies and clinical trials and for manufacturing and supply of our product candidates if we resume any development activities. We have no internal manufacturing capabilities, and we may continue to rely on third parties for our preclinical and clinical trial materials, of which the main suppliers are single-source suppliers. Given our stage of development, we do not yet have a marketing or sales organization or commercial infrastructure. Accordingly, if we obtain regulatory approval for any future product candidates, we also expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution.

Because of the numerous risks and uncertainties associated with product development, we are unable to predict the timing or amount of increased expenses or when or if we will be able to achieve or maintain profitability. Even if we are able to generate revenue from sales of any product for which we receive regulatory approval, we may not become profitable. If we fail to become profitable or

are unable to sustain profitability on a continuing basis, we may be unable to continue our operations at planned levels and may be forced to reduce our operations.

Stanford Exclusive License Agreement and Option Agreement

In December 2020, we entered into an exclusive license agreement (the "License Agreement"), with The Board of Trustees of the Leland Stanford Junior University (Stanford), pursuant to which Stanford granted us a worldwide license to specified technology and patent rights to develop, manufacture and commercialize human prophylactic and therapeutic products. Other than with respect to specified, broadly applicable assays and procedures and subject to retained rights by Stanford, the license is exclusive with respect to human prophylactic and therapeutic products for the treatment of SCD, XSCID and beta thalassemia. The license is non-exclusive with respect to those broadly applicable assays and procedures and with respect to all human prophylactic and therapeutic products other than for the treatment of SCD, XSCID and beta thalassemia.

To date, pursuant to the License Agreement, we have paid an upfront license fee to Stanford of $50.0 thousand and issued to Stanford and its designees an aggregate of approximately 0.6 million shares of our common stock. The acquisition of the exclusive license, including patent rights and know-how, and clinical supplies was accounted for as an asset acquisition and as the acquired technology and inventories did not have an alternative use, the total consideration of $2.8 million was recorded as research and development expense in the statements of operations and comprehensive loss for the year ended December 31, 2020. We are obligated to pay Stanford an annual license maintenance fee on each anniversary of the effective date of the License Agreement. The annual license maintenance fee initially is $5.0 thousand and will increase to $50.0 thousand in three increments over the first seven anniversaries of the effective date of the License Agreement. After the first commercial sale of a product falling within the scope of the license (the "Licensed Product"), the annual license maintenance fee is $200.0 thousand.

In May 2021, we issued 640,861 shares of our common stock in connection with the License Agreement. Subsequently, in June 2021, related to the License Agreement, we repurchased 624,845 shares of our common stock from investors and founders.

We are required to share with Stanford a portion of any non-royalty income we receive from sublicensing the licensed patent rights or technology, subject to specified exclusions. With respect to sublicenses granted to products for the treatment of SCD, XSCID and beta thalassemia, the portion of sublicense income we must share with Stanford varies by indication and declines from between a mid-teen to a second quartile double-digit percentage prior to the filing of an IND to between a high single-digit to very low double-digit percentage upon achievement of a specified clinical milestone. With respect to sublicenses granted under the licensed technology rights and not licensed patent rights, the portion of sublicense income shared with Stanford declines from between a mid-single-digit and very low double-digit percentage prior to the filing of an IND to a low single-digit percentage after filing of an IND.

We are obligated to make payments to Stanford with respect to each Licensed Product of up to an aggregate of $12.8 million upon the achievement of certain development, regulatory and commercial milestones. Such amounts are payable only once upon the first occurrence of a particular milestone event with respect to each Licensed Product and only once with respect to each new indication covered by any of the Licensed Products.

We also are obligated to pay Stanford low single-digit royalties based on worldwide annual net sales of any Licensed Product, subject to specified reductions. We will be obligated to continue to pay royalties on a Licensed Product-by-Licensed Product and country-by-country basis, until the latest of (i) the expiration of the last valid claim under the licensed patents that covers the sale or manufacture of such Licensed Product in such country, (ii) the expiration of any period of regulatory exclusivity with respect to such Licensed Product in such country or (iii) the expiration of ten years after the first commercial sale of such Licensed Product in such country.

The term of the License Agreement expires on the later of (i) the expiration of the last patent or abandonment of the last patent application within the license patent rights or (ii) the expiration of all royalty terms with respect to Licensed Products. The License Agreement may be terminated by us at will or by Stanford if we remain in breach of the License Agreement following a cure period to remedy the breach.

We are required to use diligent efforts to manufacture, market and sell Licensed Products for the treatment of each of SCD, XSCID and beta thalassemia. In addition, we are required to achieve specified milestones by specified dates with respect to Licensed Products for the treatment of each of SCD, XSCID and beta thalassemia. If we fail to satisfy our diligence obligations, Stanford may terminate the License Agreement for our breach. For more details on the License Agreement, please see Note 6 of the Notes to Condensed Financial Statements.

In January 2021, we entered into an option agreement (the "First Option Agreement"), with Stanford, pursuant to which Stanford granted us the right to obtain a license to specified patent rights relating to human prophylactic and therapeutic products. We may exercise the option in whole or in part to obtain a license under one or more of the optioned patent rights.

Subject to our exercise of the option under the First Option Agreement and our execution of an amendment to the License Agreement that incorporates the optioned patent rights and any optioned technology, we have agreed to issue to Stanford 132,137 shares of our common stock and pay a license execution fee of $10.0 thousand.

The term of the First Option Agreement expires 18 months after its effective date, subject to our right to extend such expiration date by up to an additional one year upon notice to Stanford and by another additional one year upon the reasonable agreement of Stanford. The First Option Agreement will terminate if the License Agreement terminates. On June 23, 2022, we exercised the right to extend the term of the First Option Agreement for an additional year. On June 6, 2023, we agreed to extend the term of the First Option Agreement for another additional year. As of September 30, 2023, we have not exercised the option and no fees have been paid under the First Option Agreement.

In April 2021, we entered into an option agreement (the "Second Option Agreement") with Stanford to negotiate the license for additional technologies from Stanford. Pursuant to the Second Option Agreement, we agreed to pay Stanford option fees in an aggregate amount of $30.0 thousand over the term of the option. On April 13, 2022, we entered into an amendment to the Second Option Agreement which extended the term for an additional year. On March 8, 2023, we terminated the Second Option Agreement without exercising the option to negotiate a license for additional technologies from Stanford.

LCGM Service Agreement

On August 30, 2021, we entered into a Master Manufacturing and Service Agreement with the Laboratory for Cell & Gene Medicine ("LCGM") at Stanford ("LCGM MSA"). Pursuant to the LCGM MSA, LCGM will conduct clinical manufacturing, release testing, and product release for nula-cel in our Phase 1/2 CEDAR clinical trial to treat SCD. During 2021, we entered into various statements of work under the LCGM MSA under which we received technology transfer and related services for HBB Beta-Globin Gene Variant for SCD, manufacturing engineer test runs, the exclusive use of a manufacturing suite at the LCGM facility, and Phase 1/2 CEDAR clinical development and manufacturing of the HBB Variant for SCD. During the three months ended September 30, 2023, we did not recognize any research and development expense in connection with the LCGM MSA. We recognized $1.1 million during the nine months ended September 30, 2023. We recognized $1.3 million and $2.8 million during the three and nine months ended September 30, 2022, respectively, in research and development expense in connection with the LCGM MSA. As of September 30, 2023, we do not expect to incur any additional expenses associated with the LCGM MSA.

IDT License Agreement

On June 7, 2021, we entered into a License Agreement (the "IDT License Agreement") with Integrated DNA Technologies, Inc. (IDT). Pursuant to the IDT License Agreement, IDT granted us and our affiliates a worldwide, non-exclusive, sublicensable license to research and develop products incorporating HiFi Cas9 protein variants for use in human therapeutic applications for SCD, XSCID and Gaucher disease (the "Field") and a worldwide, exclusive, sublicensable license to commercialize such products in the Field. We have also been granted the right to expand the licensed Field to include human therapeutic applications in the additional fields of beta thalassemia disorder and lysosomal storage disorders upon the payment of an exercise fee in the amount of $0.5 million per additional field or $1.0 million for both additional fields.

In consideration of the licenses and rights granted to us under the IDT License Agreement, we agreed to pay to IDT an upfront payment in the amount of $3.0 million and up to $5.3 million (or $8.8 million if we elect to expand the Field as described above to include both the beta thalassemia and lysosomal storage disorders fields) in total regulatory milestone payments. Each regulatory milestone payment is payable once on an indication-by-indication basis. In addition, we have agreed to pay IDT a low single-digit royalty on the net sales of products, subject to reductions in specified circumstances. The acquisition of the license was accounted for as an asset acquisition and as the acquired technology did not have an alternative use, the total consideration of $3.0 million was recorded as research and development expense in the statement of operations and comprehensive loss for the year ended December 31, 2021. During the nine months ended September 30, 2023, we have not recognized any research and development expense in connection with the IDT License Agreement. There are no milestones probable as of September 30, 2023; therefore, no milestone payments have been recognized in the nine months ended September 30, 2023.

The IDT License Agreement remains in effect on a country-by-country and product-by-product basis until the expiration of the royalty term for such product in such jurisdiction. We and IDT each have the right to terminate the IDT License Agreement for the other party's material breach of its obligations under the IDT License Agreement, subject to specified rights to cure. Additionally, we may terminate the IDT License Agreement for any reason upon written notice. As of September 30, 2023, we do not expect to incur any additional expenses associated with the IDT License Agreement.

Sale of Non-Genotoxic Targeted Conditioning Technology Assets

On August 1, 2023, we entered into an asset purchase agreement (the "APA") with a third party pursuant to which we sold to the counterparty, concurrently with the execution of the APA, certain assets related to our non-genotoxic conditioning technology in exchange for upfront consideration of $0.5 million. Additional consideration included certain contingent milestone payments totaling up to approximately $1.0 million in the aggregate as well as royalties on net sales by the acquirer of certain products incorporating the acquired technology, potential fees upon the completion of certain transactions by the acquirer. The APA also provided for reimbursement of certain research and development amounts incurred prior to closing of approximately $0.6 million.

The disposal of certain assets sold pursuant to the APA was accounted for as a deconsolidation of a subsidiary or group of assets in accordance with ASC 810. During the three and nine months ended September 30, 2023, we recognized a loss on disposal of $0.1

million, which was recorded in other income. We will record amounts related to the contingent milestone payments, royalties, and potential transaction fees when contingencies are resolved and amounts are due in accordance with ASC 450. No contingencies were resolved and recorded as of September 30, 2023.

License and Option to Acquire Nula-Cel Assets

On August 4, 2023, we entered into an LOA with a third party pursuant to which we exclusively licensed to the counterparty, and granted the counterparty, an option to acquire certain intellectual property and materials related to the Company's nula-cel program and related pre-clinical platform assets. Exercise of the option is contingent on the counterparty timely achieving a financing milestone, and all rights to the intellectual property and materials will revert to us if the milestone is not achieved or if the counterparty elects not to exercise the option. In return for this license and option, we received an equity interest in the counterparty representing 20% of all outstanding shares on a fully diluted basis. As a result of the 20% equity interest, we have the ability to exert significant influence over the counterparty and account for the interest as an equity method investment. We record our proportionate share of investee's equity in earnings or losses based on the most recently available financial information.

The 20% equity interest in the counterparty had minimal value upon execution of the LOA and we did not record any amount related to the equity interest as of September 30, 2023. As of September 30, 2023, the counterparty has not achieved the financial milestone and does not have the right to exercise the option.

Initial Public Offering

In June and July 2021, we completed an initial public offering of our common stock. As part of the IPO, we issued and sold 16,100,000 shares of our common stock at a public offering price of $17.00 per share. In June and July 2021, we received net proceeds of approximately $251.3 million from the IPO, after deducting underwriting discounts and commissions of $19.1 million and offering costs of approximately $3.2 million.

Components of Results of Operations

Operating Expenses

Research and Development

Research and development costs consist primarily of external and internal costs incurred for our research activities and the development of our gene editing platform and associated rights which we licensed in December 2020.

External costs include:

•costs incurred under agreements with third-party CROs, CMOs and other third parties that conduct preclinical and clinical activities on our behalf and manufacture our product candidates;

•costs associated with acquiring technology and intellectual property licenses that have no alternative future uses; and

•other costs associated with our research and development programs, including laboratory materials and supplies and consulting fees.

Internal costs include:

•employee-related costs, including salaries, benefits and stock-based compensation expense, for our research and development personnel; and

•facilities and other expenses incurred in connection with our research and development programs, including expenses for allocated rent and facilities maintenance, and depreciation and amortization.

Research and development costs are expensed as incurred. Since inception, we have not tracked our internal indirect costs and external research and development costs by program. The intellectual property we licensed in late 2020 is fundamental to our platform and we did not focus on any specific programs. In the future, we expect to track research and development costs on a program by program basis as we identify the specific programs and product candidates to develop.

During 2022 and 2021, we were eligible for a research and development tax credit. The tax incentive was available to us based on research and development activity within the United States and California during that year. These research and development tax incentives are recognized as a reduction to payroll tax expense when the right to receive has been attained and funds are collectible and are capped at $250.0 thousand per year.

The process of conducting preclinical research is costly and time-consuming. We are unable to determine the duration and completion costs of our research projects or if, when and to what extent they will lead to product candidates and enter into clinical research. If we resume any development of product candidates, our future research and development costs may vary significantly based on factors such as:

•the scope, rate of progress, expense and results of our clinical trials and our discovery and preclinical development activities;

•the costs and timing of our CMC activities, including fulfilling GMP-related standards and compliance, and identifying and qualifying suppliers;

•per patient clinical trial costs;

•the number and duration of clinical trials required for approval of our product candidates;

•the number of sites included in our clinical trials;

•the countries in which the trials are conducted;

•delays in adding a sufficient number of trial sites and recruiting suitable patients to participate in our clinical trials;

•the number of patients that participate in the trials;

•patient drop-out or discontinuation rates;

•potential partial reimbursement from governmental agencies for our clinical activities;

•potential additional safety monitoring requested by regulatory agencies;

•the duration of patient participation in the trials and follow-up;

•the cost and timing of manufacturing our product candidates;

•the phase of development of our product candidates;

•the efficacy and safety profile of our product candidates; the timing, receipt, and terms of any approvals from applicable regulatory authorities including the FDA and non-U.S. regulators;

•maintaining a continued acceptable safety profile of our product candidates following approval, if any, of our product candidates;

•significant and changing government regulation and regulatory guidance;

•changes in the standard of care on which a clinical development plan was based, which may require new or additional trials; and

•the extent to which we establish additional strategic collaborations or other arrangements.

General and Administrative Expenses

General and administrative expenses consist primarily of expenses related to employee-related costs, including salaries, benefits and stock-based compensation expense, for our executive, business development, finance and accounting, human resources and other administrative functions; legal services, including relating to intellectual property and corporate matters; accounting, auditing, consulting and tax services; insurance; and facility and other allocated costs not otherwise included in research and development expenses. We expect to continue to incur significant general and administrative expenses for the foreseeable future as we implement our restructuring plan, pursue potential strategic alternatives and conduct our operations generally. We also expect to continue to incur significant expenses associated with being a public company, including costs related to accounting, audit, legal, regulatory, and tax-related services associated with maintaining compliance with applicable Nasdaq and SEC requirements; director and officer insurance costs; and investor and public relations costs.

Restructuring and Impairment Costs

Restructuring and other charges consist primarily of costs incurred related to the corporate restructuring and the halting of research activities in the first quarter of 2023, including severance as well as lease termination, loss on disposal of property and equipment, and impairment of assets held for sale.

Other Income (Expense), Net

Interest and other income, net, consists of interest income and miscellaneous income and expense unrelated to our core operations.

Results of Operations

Three Months Ended September 30, 2023 and 2022

The following table summarizes our statements of operations and comprehensive loss for the respective periods (in thousands):

	Three Months Ended September 30,	
	2023	2022
Operating expenses:		
Research and development	$ 2,384	$ 18,302
General and administrative	11,294	7,852
Restructuring and impairment costs	11,349	—
Total operating expenses	25,027	26,154
Loss from operations	(25,027)	(26,154)
Other income (expense), net:		
Interest income, net	2,955	1,472
Other income, net	(413)	—
Total other income (expense), net	2,542	1,472
Net loss	$ (22,485)	$ (24,682)
Unrealized gain (loss) on investments	176	(563)
Comprehensive loss	$ (22,309)	$ (25,245)

Operating Expenses

Research and Development Expenses

Research and development expenses were $2.4 million for the three months ended September 30, 2023 compared to $18.3 million for the three months ended September 30, 2022, a decrease of $15.9 million. The decrease in research and development expenses was primarily attributable to a decrease of $8.6 million in clinical trial related activities and contract manufacturing activities for our clinical trials and drug supply, a decrease of $5.0 million in personnel costs, a decrease of $1.8 million in other research and development costs primarily related to facilities costs and lease expense, and a decrease of $0.5 million related to service agreements.

General and Administrative Expenses

General and administrative expenses were $11.3 million for the three months ended September 30, 2023 compared to $7.9 million for the three months ended September 30, 2022, an increase of $3.4 million. The increase in general and administrative expenses was comprised of an increase of $2.8 million related to facilities costs and lease expense, an increase of $0.3 million in personnel-related costs, including associated stock-based compensation expense, and an increase of $0.3 million in professional service agreements.

Restructuring and Impairment Costs

Restructuring and impairment costs for the three months ended September 30, 2023 consisted primarily of costs incurred related to the corporate restructuring, including $5.3 million related to the impairment and loss on disposal of property and equipment, $4.5 million related to severance expense incurred as part of the Restructuring Plan, and $1.4 million of non-cash impairment related to the decision not to utilize the South San Francisco lease.

Other Income (Expense), Net

The other income (expense), net for the three months ended September 30, 2023 and 2022 was comprised of income received from the asset purchase agreement, as well as interest income and income received from the sublease arrangement.

Nine Months Ended September 30, 2023 and 2022

The following table summarizes our statements of operations and comprehensive loss for the respective periods (in thousands):

	Nine Months Ended September 30,	
	2023	**2022**
Operating expenses:		
Research and development	$ 32,136	$ 54,325
General and administrative	26,372	24,563
Restructuring and impairment costs	51,128	-
Total operating expenses	109,636	78,888
Loss from operations	(109,636)	(78,888)
Other income (expense), net:		
Interest income, net	8,387	2,435
Loss on disposal of assets	(71)	-
Other income, net	(413)	-
Total other income (expense), net	7,903	2,435
Net loss	$ (101,733)	$ (76,453)
Unrealized gain (loss) on investments	953	(1,596)
Comprehensive loss	$ (100,780)	$ (78,049)

Operating Expenses

Research and Development Expenses

Research and development expenses were $32.1 million for the nine months ended September 30, 2023 compared to $54.3 million for the nine months ended September 30, 2022, a decrease of $22.2 million. The decrease in research and development expenses was primarily attributable to a decrease of $13.6 million in clinical trial related activities and contract manufacturing activities for our clinical trials and drug supply, a $6.4 million decrease in personnel costs, a $1.2 million decrease in other research and development costs related to service agreements, and $1.0 million decrease in facilities costs and associated lease expense.

General and Administrative Expenses

General and administrative expenses were $26.4 million for the nine months ended September 30, 2023 compared to $24.6 million for the nine months ended September 30, 2022, an increase of $1.8 million. The increase in general and administrative expense was comprised of an increase of $3.4 million in facilities costs, lease expense, and depreciation and amortization expense due to an increase in the allocation of general and administrative use of facilities and $0.7 million in personnel-related costs, including associated stock-based compensation expense. This was partially offset by a decrease of $2.3 million in professional service fees and expenses.

Restructuring and Impairment Costs

Restructuring and impairment costs for the nine months ended September 30, 2023 consisted primarily of costs incurred related to the corporate restructuring, including $35.0 million of non-cash impairment related to the decision not to utilize the Bayside Area Development lease, $7.9 million related to severance expense incurred as part of the Restructuring Plan, $6.8 million related to the impairment and loss on the disposal of property and equipment, and $1.4 million of non-cash impairment related to the decision not to utilize the South San Francisco lease.

Other Income (Expense), Net

The other income (expense), net for the nine months ended September 30, 2023 and 2022 was comprised of income received from the asset purchase agreement, as well as interest income and income received from the sublease arrangement.

Liquidity and Capital Resources

We have incurred losses since inception and have incurred negative cash flows from operations from inception through September 30, 2023. As of September 30, 2023, we had $234.0 million of cash, cash equivalents and marketable securities and our accumulated deficit was $344.1 million. In June and July 2021, we raised net proceeds of $251.3 million in our IPO, pursuant to which we sold an aggregate of 16,100,000 shares of common stock.

Prior to our IPO, we funded our operations primarily from the sale of redeemable convertible preferred stock and issuance of convertible promissory notes.

On July 21, 2022, we filed the 2022 Shelf with the SEC in relation to the registration of up to an aggregate offering price of $300.0 million of common stock, preferred stock, debt securities, warrants and units or any combination thereof. We also simultaneously entered into a Sales Agreement to provide for the offering, issuance and sale by us of up to an aggregate of $75.0 million of our common stock from time to time in “at-the-market” offerings under the 2022 Shelf and subject to the limitations thereof. We will pay to the Sales Agent

cash commissions of up to 3.0 percent of the gross proceeds of sales of common stock under the Sales Agreement. We have not issued any shares or received any proceeds from any offerings under the 2022 Shelf through November 13, 2023.

Future Funding Requirements

Historically, our primary uses of cash were to fund our operations, which consisted primarily of research and development expenditures related to our programs and, to a lesser extent, general and administrative expenditures. We anticipate that we will continue to incur significant general and administrative expenses for the foreseeable future as we pursue other strategic alternatives, advance potential product candidates, maintain our corporate infrastructure, including the costs associated with being a public company, scale our laboratory and manufacturing operations, and incur marketing costs associated with potential commercialization. We are subject to all of the risks typically related to the development of new drug candidates, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. We anticipate that we will need substantial additional funding in connection with our continuing operations.

Based upon our current operating plan, we believe that our existing cash, cash equivalents and marketable securities will enable us to fund our operating expenses and capital expenditure requirements for the next 12 months from the issuance date of this Form 10-Q. Until we can generate sufficient revenues from the commercialization of product candidates or from collaboration agreements with third parties, if ever, we expect to finance our future cash needs through public or private equity or debt financings, collaborations and other strategic alliances and licensing arrangements, or any combination of these approaches. The sale of equity or convertible debt securities may result in dilution to our stockholders and, in the case of preferred equity securities or convertible debt, those securities could provide for rights, preferences or privileges senior to those of our common stock. Debt financings may subject us to covenant limitations or restrictions on our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Our ability to raise additional funds may be adversely impacted by negative global economic conditions and any disruptions to and volatility in the credit and financial markets in the United States and worldwide that have resulted and may result from inflationary pressures or other factors. There can be no assurance that we will be successful in acquiring additional funding at levels sufficient to fund our operations or on terms favorable or acceptable to us. If we are unable to obtain adequate financing when needed or on terms favorable or acceptable to us, we may be forced to delay, reduce the scope of or eliminate one or more of our research and development programs.

Because our resource requirements could materially change depending on the outcome of our ongoing strategic alternative review process, we are unable to estimate the exact amount of our working capital requirements. In addition to factors related to the strategic alternative review process, our future capital requirements may depend on many other factors, including:

- the timing, scope, progress, results and costs of research and development, discovery, preclinical and non-clinical studies and clinical trials for our current and future product candidates;
- the number, scope and duration of clinical trials required for regulatory approval of our current and future product candidates;
- the outcome, timing and cost of seeking and obtaining regulatory approvals from the FDA and comparable foreign regulatory authorities for our product candidates, including any requirement to conduct more studies or generate additional data beyond that which we currently expect would be required to support a marketing application;
- the cost of manufacturing clinical and commercial supplies of our current and future product candidates;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing approval;
- our ability to maintain existing, and establish new, strategic collaborations, licensing or other arrangements and the financial terms of any such agreements, including the timing and amount of any future milestone, royalty or other payments due under any such agreement;
- any product liability or other lawsuits related to our products;
- the revenue, if any, received from commercial sales of any product candidates for which we may receive marketing approval;
- our ability to establish a commercially viable pricing structure and obtain approval for coverage and adequate reimbursement from third-party and government payers;
- the costs to establish, maintain, expand, enforce and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with licensing, preparing, filing, prosecuting, defending and enforcing our patents or other intellectual property rights;
- expenses needed to attract, hire and retain skilled personnel; and
- the costs of operating as a public company.

A change in the outcome of any of these or other variables could significantly change the costs and timing associated with the development of our product candidates. Furthermore, our operating plans may change in the future, and we may need additional funds to meet operational needs and capital requirements associated with such change.

Cash Flows

The following table summarizes our sources and uses of cash for the periods presented (in thousands):

	Nine Months Ended September 30,	
	2023	**2022**
Net cash used in operating activities	$ (44,130)	$ (65,551)
Net cash provided by (used in) investing activities	179,264	(255,387)
Net cash provided by financing activities	124	353
Net increase (decrease) in cash, cash equivalents and restricted cash	$ 135,258	$ (320,585)

Cash Used in Operating Activities

Net cash used in operating activities was $44.1 million for the nine months ended September 30, 2023, which was primarily attributable to our net loss of $101.7 million, adjusted for net non-cash charges of $54.4 million and net changes in operating assets and liabilities of $3.3 million. Non-cash charges included $43.3 million of impairment expense, $8.3 million in stock-based compensation expense, and $3.9 million in non-cash lease expense, which is partially offset by $1.1 million in depreciation and amortization expenses.

Net cash used in operating activities was $65.6 million for the nine months ended September 30, 2022, which was primarily attributable to our net loss of $76.5 million and net changes in operating assets and liabilities of $4.6 million, adjusted for net noncash charges of $15.6 million. Noncash charges included $9.9 million in stock-based compensation expense, $4.5 million in noncash lease expense, and $1.2 million in depreciation and amortization expense.

Cash Used in Investing Activities

Net cash provided by investing activities was $179.3 million for the nine months ended September 30, 2023, which was primarily attributable to cash received from the maturity of investments of $217.0 million and proceeds from sale of property and equipment of $1.2 million. This was partially offset by cash used the investment in current and non-current marketable securities of $28.1 million and the purchases of tenant improvements and lab equipment at our headquarters of $10.8 million.

Net cash used in investing activities was $255.4 million for the nine months ended September 30, 2022, which was primarily attributable to the investment in current and non-current marketable securities of $339.8 million and the purchases of lab equipment for use at our headquarters of $5.6 million. This was partially offset by cash received from the maturity of investments of $90.0 million.

Cash Provided by Financing Activities

Net cash provided by financing activities for the nine months ended September 30, 2023 was $0.1 million for the nine months ended September 30, 2023, which consisted primarily of proceeds from issuance of common stock related to the employee stock purchase plan and exercise of options. This was partially offset by repurchases of unvested early exercised stock options and RSAs.

Net cash provided by financing activities was $0.4 million for the nine months ended September 30, 2022, which consisted primarily of proceeds from issuance of common stock related to the employee stock purchase plan and stock grants.

Recently Adopted Accounting Pronouncements

For information on new accounting standards, see Note 2 to our condensed financial statements included elsewhere in this Quarterly Report.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, and expenses and the disclosure of contingent assets and liabilities in our financial statements. On an ongoing basis, we evaluate our estimates and judgments, including but not limited to those related to accrued research and development costs, the fair value of redeemable convertible preferred stock, investments in marketable securities, and common stock and stock-based compensation expense, the valuation of deferred tax assets, and uncertain income tax positions. We base our estimates on historical experience, known trends and events and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Other than the disclosures below, there have been no significant changes in our critical accounting policies and estimates as compared to the critical accounting policies and estimates disclosed in Management's Discussion and Analysis of Financial Condition and Operations included in our Annual Report on Form 10-K for the year ended December 31, 2022.

Leases

ASU No. 2016-02, Leases (Topic 842), or ASC 842, requires the recognition of the right-of-use assets and related operating and finance lease liabilities on the balance sheet. For contracts entered into on or after the effective date, at the inception of a contract, we assess whether the contract is, or contains, a lease. The assessment is based on: (1) whether the contract involves the use of a distinct identified asset, (2) whether we obtain the right to substantially all the economic benefit from the use of the asset throughout the period, and (3) whether we have the right to direct the use of the asset. At inception of a lease, we allocate the consideration in the contract to each lease component based on its relative stand-alone price to determine the lease payments.

Leases are classified as either finance leases or operating leases. A lease is classified as a finance lease if any one of the following criteria are met: the lease transfers ownership of the asset by the end of the lease term, the lease contains an option to purchase the asset that is reasonably certain to be exercised, the lease term is for a major part of the remaining useful life of the asset or the present value of the lease payments equals or exceeds substantially all of the fair value of the asset. A lease is classified as an operating lease if it does not meet any of these criteria.

For all leases at the lease commencement date, a right-of-use asset and a lease liability are recognized. The right-of-use asset represents the right to use the leased asset for the lease term. The lease liability represents the present value of the lease payments under the lease.

The right-of-use asset is initially measured at cost, which primarily comprises the initial amount of the lease liability, plus any initial direct costs incurred, if any, less any lease incentives received. All right-of-use assets are reviewed for impairment. The lease liability is initially measured at the present value of the lease payments, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, our secured incremental borrowing rate for the same term as the underlying lease. For real estate leases and other operating leases, we use our secured incremental borrowing rate. For finance leases, we use the rate implicit in the lease or our secured incremental borrowing rate if the implicit lease rate cannot be determined.

Lease payments included in the measurement of the lease liability comprise the following: the fixed noncancelable lease payments, payments for optional renewal periods where it is reasonably certain the renewal period will be exercised, and payments for early termination options unless it is reasonably certain the lease will not be terminated early.

Lease cost for operating leases consists of the lease payments plus any initial direct costs, primarily brokerage commissions and is recognized on a straight-line basis over the lease term. Included in lease cost are any variable lease payments incurred in the period that are not included in the initial lease liability and lease payments incurred in the period for any leases with an initial term of 12 months or less. Lease cost for finance leases consists of the amortization of the right-of-use asset on a straight-line basis over the lease term and interest expense determined on an amortized cost basis. The lease payments are allocated between a reduction of the lease liability and interest expense.

Leasehold improvements are not unique and are retained by the lessor at the end of the lease. However, we are the accounting owner of the leasehold improvements in the case of a space designed to be suitable for our specific real estate needs if we are also responsible for cost overruns.

We elected to make an accounting policy of the short-term leases exemption to leases with a remaining lease term of less than 12 months as at the date of initial adoption.

Impairment of Long-Lived Assets

We assess the impairment of long-lived assets whenever events or changes in business circumstances indicate that the carrying amounts of the assets may not be fully recoverable. In the case of property and equipment and right-of-use assets for our leases, we

determine whether there has been an impairment by comparing the carrying value of the asset to the anticipated undiscounted net cash flows associated with the asset. If such cash flows are less than the carrying value, we write down the asset to its fair value, which may be measured as anticipated discounted net cash flows associated with the asset.

As discussed in Note 11 to our condensed financial statements included elsewhere in this Quarterly Report, in connection with our Restructuring Plan, we have made the decision not to utilize the Bayside Area Development premises (the "Bayside lease"). We are currently seeking to sublease the vacated premises while still maintaining sufficient office and laboratory space for our normal operations. As a result, we reviewed the Bayside lease for impairment as of April 2023 when we received access to the premises and will subsequently review at each reporting date or as facts and circumstances changed. As part of our impairment evaluation of the Bayside lease, we separately compared the estimated undiscounted income to the net book value of the related long-term assets, which include right-of-use assets and certain property and equipment, primarily leasehold improvements. We estimated sublease income using market participant assumptions, including the length of time to enter into a sublease and sublease payments, which we evaluated using sublease negotiations or agreements where applicable, current real estate trends, and market conditions. If such income exceeded the net book value of the related assets, we did not record an impairment charge. Otherwise, we recorded an impairment charge by reducing the net book value of the assets to their estimated fair value, which we determined by discounting the estimated sublease cash flows using the estimated borrowing rate of a market participant subtenant. Determination of these key assumptions is complex and highly judgmental.

For certain impairment charges, we used the terms of active sublease negotiations or agreements to estimate sublease income. Our estimate of future cash flows on the remaining floors, including the time to enter into a sublease and the terms of sublease payments, including estimated free rent periods, are based on current real estate trends and market conditions. Accordingly, if our estimates for the time to enter the sublease and estimated free rent periods were longer (shorter), the impairment charge would be higher (lower), and if our estimates for the rental rates were lower (higher), the impairment charge would be higher (lower). Given the current office lease market rental conditions in the Bay Area, our estimates are subject to significant uncertainty. The ultimate amount of sublease income may be significantly lower or higher than the amounts used to record our impairment charges, and we may record additional impairment charges in future periods as our estimates change or when we enter into sublease negotiations or execute a sublease agreement.

Emerging Growth Company and Smaller Reporting Company Status

We are an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay the adoption of new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. Other exemptions and reduced reporting requirements under the JOBS Act for emerging growth companies include presentation of only two years of audited financial statements in a registration statement for an initial public offering, an exemption from the requirement to provide an auditor's report on internal controls over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, as amended, an exemption from any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation and less extensive disclosure about our executive compensation arrangements. We have elected to use the extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that (i) we are no longer an emerging growth company or (ii) we affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act.

However, as described in Note 2 to our condensed financial statements included elsewhere in this Quarterly Report, we early adopted certain accounting standards, as the JOBS Act does not preclude an emerging growth company from adopting a new or revised accounting standard earlier than the time that such standard applies to private companies to the extent early adoption is permitted. As a result, our financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

We will remain an emerging growth company until the earliest of (i) the last day of our first fiscal year in which we have total annual gross revenues of $1.235 billion or more, (ii) December 31, 2026, (iii) the date on which we are deemed to be a "large accelerated filer," under the rules of the SEC, which means the market value of equity securities that is held by non-affiliates exceeds $700.0 million as of the prior June 30th and (iv) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the prior three-year period.

If we are a "smaller reporting company" at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Under SEC rules and regulations, as a smaller reporting company, we are not required to provide the information required by this item.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer, who serves as our principal executive officer and our principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this Quarterly Report. Based upon that evaluation, our Chief Executive Officer has concluded that, as of September 30, 2023, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms and to provide reasonable assurance that such information is accumulated and communicated to our management, including our Chief Executive Officer, as appropriate, to allow timely decisions regarding required disclosure.

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) that occurred during the quarter ended September 30, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer, does not expect that our disclosure controls or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

We are not party to any material legal proceedings at this time. From time to time, we may become involved in various legal proceedings that arise in the ordinary course of our business.

Item 1A. Risk Factors.

This Form 10-Q contains forward-looking information based on our current expectations. Because our business is subject to many risks and our actual results may differ materially from any forward-looking statements made by or on behalf of us, the discussion of our business and operations in this Form 10-Q should be read together with the risk factors contained in Item 1A of our Annual Report on Form 10-K for year ended December 31, 2022 filed with the SEC on March 20, 2023 (as amended, the "Annual Report") and in subsequent periodic filings with the SEC, which describe various risks and uncertainties to which we are or may become subject. These risks and uncertainties have the potential to affect our business, financial condition, results of operations, cash flows, strategies, or prospects in a material and adverse manner. There are no material changes from the risk factors as previously disclosed in our Annual Report.

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

(a)**Recent Sales of Unregistered Equity Securities**

None.

(b)**Use of Proceeds from the Initial Public Offering of Common Stock**

On June 29, 2021, we completed our IPO and issued 14,000,000 shares of our common stock at an initial offering price of $17.00 per share. On July 2, 2021, we issued 2,100,000 shares of our common stock to the underwriters of the IPO pursuant to the exercise of their option to purchase additional shares at a price of $17.00 per share less underwriting discounts and commissions. We received net proceeds from the IPO of approximately $251.3 million, after deducting underwriting discounts and commissions of approximately $19.1 million and offering expenses of approximately $3.2 million. None of the expenses associated with the IPO were paid to directors, officers, persons owning 10% or more of any class of equity securities, or to their associates. Morgan Stanley & Co. LLC, BofA Securities, Inc., Cowen and Company, LLC and SVB Leerink, LLC acted as book-running managers for the IPO.

Shares of our common stock began trading on The Nasdaq Global Market on June 25, 2021. The offer and sale of the shares were registered under the Securities Act on a registration statement on Form S-1 (Registration No. 333-256838), which was declared effective on June 24, 2021.

As of September 30, 2023, we have used approximately $179.5 million of the net proceeds received in the IPO. Cash used since the IPO is described elsewhere in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of our periodic reports filed with the SEC. There has been no material change in the planned use of proceeds from our IPO as described in the registration statement on Form S-1. We invested the funds received in cash equivalents and other marketable securities in accordance with our investment policy.

(c)**Issuer Purchases of Equity Securities**

The following table provides stock repurchase activity during each of the months of the three months ended September 30, 2023:

	Total number of shares purchased[(1)]	Average price paid per share	Total number of shares purchased as part of publicly announced plans or programs	Maximum number of shares that may yet be purchased under the plans or programs
July 1, 2023 - July 31, 2023	15,087	$ 0.30	—	—
August 1, 2023 - August 31, 2023	7,282	0.30	—	—
September 1, 2023 - September 30, 2023	5,361	0.22	—	—
Total	27,730	$ 0.28	—	—

(1) Represents shares of unvested common stock that were repurchased by us from former employees upon termination of employment in accordance with the terms of the employees' stock option agreements. We purchased the shares from the former employees at the respective original exercise prices.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation, as currently in effect (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-40532) filed on June 30, 2021).
3.2	Amended and Restated Bylaws, as currently in effect (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-40532) filed on June 30, 2021)
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (File No. 333-256838) filed on June 11, 2021)
4.2	Amended and Restated Investors' Rights Agreement by and among the Registrant and certain of its stockholders, dated March 11, 2021 (incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-256838) filed on June 4, 2021)
10.1#	Employment offer letter, dated as of August 21, 2023, by and between the Registrant and Kimberlee C. Drapkin.
10.2	Separation and Release Agreement, dated as of September 7, 2023, by and between the Registrant and Josh Lehrer.
31	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32**	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.
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.
# Indicates a management contract or any compensatory plan, contract or arrangement.
** This certification will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent specifically incorporated by reference into such filing.

SIGNATURES

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

GRAPHITE BIO, INC.

Date: November 13, 2023

By: /s/ Kimberlee C. Drapkin
Kimberlee C. Drapkin
Chief Executive Officer
(Principal Executive Officer and Principal Accounting and Financial Officer)

August 18, 2023

Kim Drapkin
Via Electronic Delivery

Dear Kim:

It is my great pleasure to present this offer letter to you to join Graphite Bio, Inc. (the "Company") as our Chief Executive Officer. The entire board of directors of the Company (the "Board") and I are very excited to have you as a member of the Graphite Bio team. Your experiences and accomplishments are consistent with the impact we hope to have at Graphite Bio on science and on patients, and we look forward to your many contributions to the Company.

1. Position. Your initial title will be Chief Executive Officer, and you will initially report to the Board. This is a full-time position. While you render services to the Company, you will not engage in any other employment, consulting or other business activity (whether full-time or part-time) that would create a conflict of interest with the Company. By signing this letter agreement, you confirm to the Company that you have no contractual commitments or other legal obligations that would prohibit you from performing your duties for the Company.

2. Base Salary. The Company will pay you a starting salary at the rate of $550,000 per year, payable in accordance with the Company's standard payroll schedule and subject to applicable deductions and withholdings. This salary will be subject to periodic review and adjustments at the Company's discretion.

3. Employee Benefits. As a regular employee of the Company, you will be eligible to participate in a number of Company-sponsored benefits. In addition, you will be entitled to paid vacation in accordance with the Company's vacation policy, as in effect from time to time.

4. Severance Benefits. In the event your employment with the Company is terminated for any reason, the Company shall pay or provide you with any earned but unpaid salary, unpaid expense reimbursements in accordance with Company policy, accrued but unused vacation or leave entitlement, and any vested benefits you may have under any employee benefit plan of the Company in accordance with the terms and conditions of such employee benefit plan (collectively, the "Accrued Benefits"), within the time required by law but in no event more than sixty (60) days after the Date of Termination. For the avoidance of doubt, you will not be eligible to participate in the Company's Executive Severance Plan.

(a) Termination Following a Strategic Transaction. In the event a termination of your employment by the Company other than for Cause or death occurs upon or at any time within twelve (12) months after the closing of a Strategic Transaction, then in addition to the Accrued Benefits, subject to your execution and non-revocation of a separation agreement in a form and manner satisfactory to the Company containing, among other provisions, a general release of claims in favor of the Company and related persons and entities, confidentiality, return of property, non-disparagement and reaffirmation of your PIIA (the "Separation Agreement and Release") and the Separation Agreement and Release becoming irrevocable, all within the time period set forth in the Separation Agreement and Release, but in no event more than sixty (60) days after the Date of Termination, the Company shall pay you a lump sum amount equal to $400,000 plus, in the event a definitive agreement to effect a Strategic Transaction is executed within three months of the date hereof, an additional amount equal to $200,000, in each case subject to applicable deductions and withholdings, within sixty (60) days after the Date of Termination.

(b) Termination in Connection with a Liquidation Event. In the event a termination of your employment by the Company other than for Cause or death occurs at any time within 12 months after the Board has approved a plan of dissolution under Delaware law, then in addition to the Accrued Benefits, subject to your

execution and non-revocation of a Separation Agreement and Release and the Separation Agreement and Release becoming irrevocable, all within the time period set forth in the Separation Agreement and Release, but in no event more than sixty (60) days after the Date of Termination, the Company shall pay you a lump sum amount equal to $350,000, subject to applicable deductions and withholdings, within sixty (60) days after the Date of Termination.

(c) Definitions.

"*Date of Termination*" shall mean the date that your employment with the Company (or any successor) ends, which date shall be specified in a notice of termination. Notwithstanding the foregoing, your employment shall not be deemed to have been terminated solely as a result of your becoming an employee of any direct or indirect successor to the business or assets of the Company.

"*Cause*" shall mean, and shall be limited to, the occurrence of any one or more of the following events: (i) your unauthorized use or disclosure of the Company's confidential information or trade secrets; (ii) your material breach of any agreement between you and the Company; (iii) your material failure to comply with the Company's written policies or rules; (iv) your gross negligence or willful misconduct in connection with your performance of your duties to the Company; your continuing failure to perform assigned duties after receiving written notification of the failure from the Company and, if curable, a period of thirty (30) days to cure such failure; (vi) your conviction of, indictment for or plea of nolo contendere to a felony or a crime involving moral turpitude; or (vii) your failure to cooperate in good faith with a governmental or internal investigation of the Company or its directors, officers or employees, if the Company has requested your cooperation.

"*Strategic Transaction*" shall mean (i) a merger, reorganization or consolidation pursuant to which the holders of the Company's outstanding voting power and outstanding stock immediately prior to such transaction do not own a majority of the outstanding voting power and outstanding stock or other equity interests of the resulting or successor entity (or its ultimate parent, if applicable) immediately upon completion of such transaction, (ii) the sale of all or substantially all of the stock or assets of the Company to an unrelated person, entity or group thereof acting in concert, (iii) any other transaction in which the owners of the Company's outstanding voting power immediately prior to such transaction do not own at least a majority of the outstanding voting power of the Company or any successor entity immediately upon completion of the transaction other than as a result of the acquisition of securities directly from the Company, or (iv) any so-called "reverse merger" transaction in which the Company effects a business combination with an entity that is not a publicly traded or listed entity and a result of which, the Company remains a publicly traded entity with the equity holders of the other entity owning a substantial portion of the outststanding equity of the ongoing public entity.

8. Proprietary Information and Inventions Agreement. Like all Company employees, you will be required, as a condition of your employment with the Company, to sign the Company's standard Proprietary Information and Inventions Agreement (the "PIIA"), a copy of which is attached hereto as **Exhibit A**.

9. Employment Relationship. Employment with the Company is for no specific period of time. Your employment with the Company will be "at will," meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations that may have been made to you are superseded by this letter agreement. This is the full and complete agreement between you and the Company on this term. Although your job duties, title, compensation and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and a member of the Board.

10. Tax Matters.

(a) Withholding. All forms of compensation referred to in this letter agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law.

(b) Tax Advice. You are encouraged to obtain your own tax advice regarding your compensation from the Company. You agree that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities, and you will not make any claim against the Company or its Board of Directors related to tax liabilities arising from your compensation.

11. Interpretation, Amendment and Enforcement. This letter agreement and Exhibit A constitute the complete agreement between you and the Company, contain all of the terms of your employment with the Company and supersede any prior agreements, representations or understandings (whether written, oral or implied) between you and the Company. This letter agreement may not be amended or modified, except by an express written agreement signed by both you and a duly authorized officer of the Company. The terms of this letter agreement and the resolution of any disputes as to the meaning, effect, performance or validity of this letter agreement or arising out of, related to, or in any way connected with, this letter agreement, your employment with the Company or any other relationship between you and the Company (the "Disputes") will be governed by Massachusetts law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in Boston, Massachusetts, in connection with any Dispute or any claim related to any Dispute.

12. Conditions of Offer. As with all employees, the Company's offer of employment to you is also conditioned on your submission of satisfactory proof of your identity and your legal authorization to work in the United States and, if requested, your completion of a standard background check to the satisfaction of the Company. This offer is also conditioned on you signing and returning this agreement and the Proprietary Information and Inventions Agreement to the Company by close of business on August 21, 2023 and your starting work with the Company on or before August 21, 2023.

* * * * *

We hope that you will accept our offer to join the Company. You may indicate your agreement with these terms and accept this offer by signing and dating both the original of this letter agreement and the enclosed Proprietary Information and Inventions Agreement and returning them to me. This offer, if not accepted, will expire at the close of business on August 21, 2023. As required by law, your employment with the Company is contingent upon your providing legal proof of your identity and authorization to work in the United States. Your employment is also contingent upon your starting work with the Company on a date to be agreed upon by you and the Board (the "Start Date").

I very much look forward to receiving your signed offer letter. Most importantly, I look forward to partnering with you to build an outstanding company that will transform science and medicine and profoundly alter the lives of our patients and their families.

Sincerely,

Graphite Bio, Inc.

By: /s/ Perry Karsen

Title: Chairperson of the Board of Directors

I have read and accept this employment offer:

/s/ Kimberlee Drapkin
Signature of Employee

Dated: 8/23/2023

ATTACHMENT A TO EXECUTIVE EMPLOYMENT AGREEMENT

PROPRIETARY INFORMATION AND INVENTIONS AGREEMENT

(attached)

GRAPHITE BIO, INC.

September 5, 2023

PERSONAL AND CONFIDENTIAL

Josh Lehrer

Re: Separation Agreement and Release

Dear Josh:

This letter confirms our previous discussions concerning your employment with Graphite Bio, Inc. (the "Company"). On August 21, 2023 (the "Termination Date"), your employment with the Company shall end and your status with the Company shall change to no longer employed, and your consulting relationship will commence.

This letter also proposes an agreement (the "Agreement") between you and the Company regarding the terms of your separation from the Company. Whether or not you sign this Agreement, the Company will provide you with all compensation due to you on your last day of employment, but the Agreement the Company hereby proposes would provide you with additional severance to which you are not otherwise entitled.

It is customary in severance agreements for an employee to release the Company from any possible claims, even if the Company believes, as is the case here, that no such claims exist. By proposing and entering into this Agreement, the Company is not admitting in any way that it violated any legal obligation that it owed to you.

The Agreement is set forth on the following pages. If you agree to this Agreement, please return an original, signed copy of the agreement to me within five (5) business days. After receiving an executed version from you, I will sign on behalf of the Company and provide you with a set of documents signed by both parties.

Sincerely,

/s/ Perry Karsen

Perry Karsen
Chairperson of the Board of Directors

SEPARATION AGREEMENT AND RELEASE

This Separation Agreement and Release ("Agreement") is made by and between Josh Lehrer ("Employee") and Graphite Bio, Inc. (the "Company") (collectively referred to as the "Parties" or individually referred to as a "Party") as of the Effective Date (as defined below).

RECITALS

WHEREAS, Employee was employed by the Company;

WHEREAS, Employee was provided with an offer letter dated February 28, 2020 (the "Offer Letter") which Employee accepted, including the form of Proprietary Information and Inventions Agreement (the "Confidentiality Agreement");

WHEREAS, the Parties agreed that Employee's employment with the Company was terminated by the Company other than for Cause where no grounds for Cause were known to exist effective August 21, 2023 (the "Termination Date");

WHEREAS, the Parties wish to resolve any and all disputes, claims, complaints, grievances, charges, actions, petitions, and demands that the Employee may have against the Company and any of the Releasees as defined below, including, but not limited to, any and all claims arising out of or in any way related to Employee's employment with or separation from the Company;

NOW, THEREFORE, in consideration of the mutual promises made herein, the Company and Employee hereby agree as follows:

COVENANTS

1.Recitals; Termination of Executive Officer and Director Positions; Post-Termination Consulting Period.

a.The Recitals set forth above are expressly incorporated into this Agreement.

b.Employee hereby confirms his resignation of his offices as President and Chief Executive Officer of the Company and any other role as an officer of the Company, as well as his resignation as a member of the Company's Board of Directors, effective as of the Termination Date.

c.During the Post-Employment Consulting Period (defined below), Employee will provide consulting services to the Company on an as needed basis (the "Consulting Services") not to exceed eight (8) hours per week during the Post-Employment Consulting Period as reasonably requested by the Board of Directors (or designated executive officers of the Company), which services will not require Employee to come to the Company's offices. Employee will continue to have a service relationship with the Company for purposes of the Stock Agreements (as defined below) and will be entitled to the severance benefits set forth in Section 2 below during the Post-Employment Consulting Period but will not otherwise be entitled to additional compensation in

connection with performing the Consulting Services. The continuing obligations of Employee set forth in Sections 9 through 13 below, together with the Restrictive Covenants Agreement (as defined below) (collectively, the "Continuing Obligations") shall apply to the Employee with commencement thereof as of the Termination Date running concurrently with the applicable Post-Employment Consulting Period. For purposes of this Agreement, a "Strategic Transaction" shall mean (i) a merger, reorganization or consolidation pursuant to which the holders of the Company's outstanding voting power and outstanding stock immediately prior to such transaction do not own a majority of the outstanding voting power and outstanding stock or other equity interests of the resulting or successor entity (or its ultimate parent, if applicable) immediately upon completion of such transaction, (ii) the sale of all or substantially all of the stock or assets of the Company to an unrelated person, entity or group thereof acting in concert, (iii) any other transaction in which the owners of the Company's outstanding voting power immediately prior to such transaction do not own at least a majority of the outstanding voting power of the Company or any successor entity immediately upon completion of the transaction other than as a result of the acquisition of securities directly from the Company, (iv) any so-called "reverse merger" transaction in which the Company effects a business combination with an entity that is not a publicly traded or listed entity and a result of which, the Company remains a publicly traded entity with the equity holders of the other entity owning a substantial portion of the outstanding equity of the ongoing public entity, or (v) any Sale Event (as defined in the Graphite Bio, Inc. 2021 Stock Option and Incentive Plan, as in effect on the Termination Date). "Post-Employment Consulting Period" shall mean the period ending on the earlier of (x) twelve (12) months from the Termination Date and (y) the date of completion of a Strategic Transaction.

2.Consideration.

a. Severance Benefits. Subject to the execution of this Agreement, in consideration for the promises and agreements set forth herein, including Employee's compliance with the Continuing Obligations, the Company agrees to the following:

i.Separation Payment. The Company agrees to pay Employee at a rate of $47,666.67 per month, less applicable withholdings (such payment being the "Separation Payment"), for a period of twelve (12) months following the Termination Date. The Company shall commence the first monthly Separation Payment to Employee no earlier than within five (5) days following the Effective Date, in accordance with the Company's regular payroll practices.

ii.COBRA. The Company shall pay the COBRA administrator directly to cover the payments for Employee's COBRA coverage for a period of twelve (12) months following the Termination Date or until Employee has commenced other employment which provides for Employee's eligibility for health benefits, whichever occurs first, provided Employee timely elects and pays for continuation coverage

pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), within the time period prescribed pursuant to COBRA.

iii.Extension of Exercise Period. For the outstanding equity subject to the Stock Agreements (as defined herein), which for the avoidance of doubt has remained outstanding, the Employee shall have until the earlier of (i) the expiration of the twelve (12)-month period measured from the termination of his service relationship with the Company or (ii) the expiration date of the option term in which to exercise that option award.

iv.Acceleration of Shares. Upon the Effective Date of this Agreement, the Company shall accelerate the vesting of an aggregate of 50% of the shares subject to the option award issued to the Employee on February 9, 2023 (representing a 50% increase in the number of shares accelerated), which option award has remained outstanding (the "Acceleration Benefit").

v.Retention Bonus Payment. The Company shall pay Employee's retention bonus in the amount of $286,000, less applicable withholdings (the "Retention Bonus Payment"), which represents the amount equal to the retention bonus payment agreed upon pursuant to the March 21, 2023 Retention and Severance Agreement entered into between Employee and the Company. The Company shall pay the Retention Bonus Payment in cash within ten (10) days following the Effective Date.

vi.Change in Control Benefits. If a Strategic Transaction occurs within the three (3) months following the Termination Date (the "Transaction Window"), the Company will pay or provide Employee, without duplication for the foregoing, the cash and non-cash benefits and payments payable to a Tier 1 Executive in the Company's Executive Severance Plan (as in effect on the Termination Date) as if the termination of Employee's employment was a Qualified Termination Event that occurred within the Change in Control Period under such Executive Severance Plan (the "CIC Benefits"). The CIC Benefits will be separate payments in a series of separate payments for purposes of Section 409A and, which together with the foregoing, will be paid or provided in a manner that does not violate Section 409A (and for this purpose any equity awards outstanding immediately prior to the Termination Date will remain outstanding).

b. Supplemental Release. In consideration of Employee's execution of this Agreement and the Supplemental Release attached hereto as Exhibit B (the "Supplemental Release") and (ii) Employee's fulfillment of all of the terms and conditions in this Agreement and the Supplemental Release, the Company agrees to provide the following: Subject to Section 1.c hereof, in the event the Post-Termination Consulting Period ends upon the consummation of a Strategic Transaction prior to the date six (6) months after the Termination Date, the Company shall accelerate the vesting of a number of shares equal to the number of shares subject to the Stock Agreements set forth on Exhibit A that would otherwise have vested through the date six (6) months from the Termination Date had Employee's service relationship with the Company continued through such period (or such lesser amount then remaining unvested thereunder).

3.Stock. Exhibit A sets forth a summary of all of Employee's equity grants held as of the Termination Date and the equity of each grant that are vested and unvested as of the Termination Date, including the Acceleration Benefit, pursuant to the terms of the Company's stock plans and the corresponding grant agreements (collectively, the "Stock Agreements"). Employee acknowledges that, other than the vested awards listed on Exhibit A (and any shares or awards that shall vest during the Post-Employment Consulting Period subject to Section 1.c or Section 2.b., or as a result of the CIC Benefits in respect of the Transaction Window, or otherwise held or exercised by Employee), Employee has and will have no other equity or debt interest in the Company of any kind, including but not limited to, any interest in stock, stock options, or other form of profit participation. Employee agrees that the foregoing treatment is consistent with, and has honored any and all obligations of the Company to Employee, under the Stock Agreements.

EMPLOYEE UNDERSTANDS THAT NEITHER THIS AGREEMENT NOR THE COURSE OF EMPLOYEE'S EMPLOYMENT WITH THE COMPANY, OR ANY OTHER SERVICE TO THE COMPANY, GIVE OR GAVE EMPLOYEE ANY RIGHT, CONTINUING OR OTHERWISE, TO THE REVENUES AND/OR PROFITS OF THE COMPANY AND/OR ANY OTHER RELEASEE (AS DEFINED BELOW) OR ANY OTHER INTEREST, ECONOMIC OR OTHERWISE, IN THE COMPANY AND/OR ANY OTHER RELEASEE (AS DEFINED BELOW), EXCEPT TO THE EXTENT OF THE ACCELERATION BENEFIT AND AS SET FORTH IN SECTION 2.B OR THIS SECTION 3 OR IN RESPECT OF THE CIC BENEFITS.

4.Benefits. Employee agrees that Employee's participation in all benefits and incidents of employment, including, but not limited to, the accrual of bonuses, vacation, and paid time off, ceased as of the Termination Date, and the parties agree that Employee is eligible to vest in additional equity awards during the Post-Employment Consulting Period as described above and in respect of the CIC Benefits if any. Employee's health, dental and vision insurance benefits, if any, shall cease on the last day of August 2023, subject to Employee's right to continue Employee's coverage under COBRA.

5.Payment of Salary and Receipt of All Benefits. Employee acknowledges and represents that, other than the consideration set forth in this Agreement, the Company has paid or provided all salary, wages, bonuses, accrued vacation/paid time off, premiums, leaves, housing allowances, relocation costs, interest, severance, outplacement costs, fees, reimbursable expenses, commissions, stock, stock options, vesting, and any and all other benefits and compensation due to Employee. Employee specifically represents that Employee is not due to receive any commissions or other incentive compensation from the Company other than as set forth in this Agreement.

6.Release of Claims. Employee agrees that the foregoing consideration represents settlement in full of all outstanding obligations owed to Employee by the Company and its current and former officers, directors, employees, agents, investors, attorneys, shareholders, administrators, affiliates, benefit plans, plan administrators, insurers, trustees, divisions, and subsidiaries, and predecessor and successor corporations and assigns (collectively, the "Releasees"). Employee, on Employee's own behalf and on behalf of Employee's respective heirs, family members, executors, agents, and assigns, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, demand, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Employee may possess against any of the Releasees

arising from any omissions, acts, facts, or damages that have occurred up until and including the Effective Date of this Agreement, including, without limitation:

a. any and all claims relating to or arising from Employee's employment relationship with the Company and the termination of that relationship;

b. any and all claims relating to, or arising from, Employee's right to purchase, or actual purchase of shares of stock of the Company, including, without limitation, any claims for fraud, misrepresentation, breach of fiduciary duty, breach of duty under applicable state corporate law, and securities fraud under any state or federal law;

c. any and all claims for wrongful discharge of employment; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of covenant of good faith and fair dealing, both express and implied; commission payments; promissory estoppel; negligent or intentional infliction of emotional distress; fraud; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury; assault; battery; invasion of privacy; false imprisonment; conversion; and disability benefits;

d. any and all claims for violation of any federal, state, or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Equal Pay Act; the Fair Labor Standards Act; the Fair Credit Reporting Act; the Employee Retirement Income Security Act of 1974; the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act; the Sarbanes-Oxley Act of 2002; the Immigration Control and Reform Act; the California Family Rights Act; the California Labor Code; the California Workers' Compensation Act; the California Fair Employment and Housing Act; and any other similar statutes, regulations or laws;

e. any and all claims for violation of the federal or any state constitution;

f. any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

g. any claim for any loss, cost, damage, or expense arising out of any dispute over the nonwithholding or other tax treatment of any of the proceeds received by Employee as a result of this Agreement; and

h. any and all claims for attorneys' fees and costs.

Employee agrees that the release set forth in this section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not extend to any obligations incurred or rights afforded under this Agreement. This release does not release claims that cannot be released as a matter of law, or rights or claims of Employee relating to: (i) unemployment (which shall not to be contested, provided that the foregoing does not prohibit the Company from truthfully responding to any government or agency requests for information), (ii) indemnification, (iii) directors and officer insurance, (iv) contribution and exculpation, (v) vested

equity held by Employee as of the Termination Date or in which Employee vests hereafter consistent with this Agreement, (vi) Employee's equity rights continuing following the Termination Date consistent with this Agreement, (vii) vested employee benefits, and (viii) rights Employee may have (A) to receipt of payment in respect of any restricted stock or early exercised options as set forth in the applicable award agreements or applicable plan document, or (B) in respect of any CIC Benefits with respect to the Transaction Window. Employee represents that Employee has made no assignment or transfer of any right, claim, complaint, charge, duty, obligation, demand, cause of action, or other matter waived or released by this section.

After reasonable due inquiry, the Company represents that it is not currently aware of any claims it or its affiliates may have against Employee.

7.California Civil Code Section 1542. Employee acknowledges that Employee has been advised to consult with legal counsel and is familiar with the provisions of California Civil Code Section 1542, a statute that otherwise prohibits the release of unknown claims, which provides as follows:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY.

Employee, being aware of said code section, agrees to expressly waive any rights Employee may have thereunder, as well as under any other statute or common law principles of similar effect.

8.No Pending or Future Lawsuits. Employee represents that Employee has no lawsuits, claims, or actions pending in Employee's name, or on behalf of any other person or entity, against the Company or any of the other Releasees. Employee also represents that Employee does not intend to bring any claims on Employee's own behalf or on behalf of any other person or entity against the Company or any of the other Releasees.

9.Confidentiality. To the extent permitted by applicable law, Employee agrees to maintain in complete confidence the existence of this Agreement, the contents and terms of this Agreement, and the consideration for this Agreement (hereinafter collectively referred to as "Separation Information"). Except as required by law, Employee may disclose Separation Information only to Employee's immediate family members, the Court in any proceedings to enforce the terms of this Agreement, Employee's attorney(s), and Employee's accountant and any professional tax advisor to the extent that they need to know the Separation Information in order to provide advice on tax treatment or to prepare tax returns, and must prevent disclosure of any Separation Information to all other third parties.

10.Trade Secrets and Confidential Information/Company Property. Employee reaffirms and agrees to observe and abide by the terms of the Confidentiality Agreement, in the form attached as Exhibit C, specifically including the provisions therein regarding nondisclosure of the Company's trade secrets and confidential and proprietary information, and nonsolicitation of Company employees; *provided* that Employee hereby acknowledges receipt of the following notice

required pursuant to 18 U.S.C § 1833(b)(1): "An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that (A) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal." Without limitation to Employee's obligations under the Confidentiality Agreement, Employee acknowledges that during the course of Employee's employment with the Company Employee had access to a number of confidential materials, including trade secrets and other information which is commercially sensitive and is not in the public domain relating or belonging to the Company, including but not limited to information relating to the business methods, corporate plans, management systems, finances, new business opportunities, research and development projects, marketing or sales of any past, present or future product or service, secret forumlae, processes, inventions, designs, know-how discoveries, technical specifications and other technical information relating to the creation, production or supply of any past, present or future product or service of the Company, lists or details of clients, potential clients or suppliers or the arrangements made with any client or supplier and any information in respect of which the Company owes an obligation of confidentiality to any third party ("Confidential Information"), and Employee specifically represents that Employee shall refrain from using any such Confidential Information in the future. Employee affirms that Employee has returned all documents and other items provided to Employee by the Company, developed or obtained by Employee in connection with Employee's employment with the Company, or otherwise belonging to the Company (which for the avoidance of doubt shall not include Employee's contact list or Employee's personal files (which the Company will reasonably assist Employee in transferring to his personal device(s)).

11.Employee Inventions. During the course of Employee's employment with Company, Employee may have developed certain works and inventions intended to be owned by Company. Employee hereby irrevocably assigns and transfers to Company all right, title and interest (including all patent rights, copyrights, trade secret rights, mask work rights, sui generis database rights and all other intellectual property rights worldwide) relating to any and all inventions (whether or not patentable), works of authorship, mask works, designs, know-how, ideas and information made or conceived or reduced to practice, in whole or in part, by Employee during the term of Employee's employment with Company to the fullest extent allowed by California Labor Code Section 2870 (collectively "Inventions"). Employee shall assist Company, at Company's expense, to record and perfect such assignment, and to perfect, maintain and defend any rights assigned. Employee hereby irrevocably designates Company as Employee's agent and attorney-in-fact, to act for and in Employee's behalf to perform any lawfully permitted acts to further the purposes of the foregoing. Employee also hereby waives all claims to any moral rights or other special rights which Employee may have or accrue in any Inventions. Further, if any Invention cannot be fully exploited without using or violating any intellectual property or proprietary rights (not assigned hereunder) in which Employee has an interest, Employee hereby grants Company a perpetual, irrevocable, worldwide royalty-free, non-exclusive, sublicensable right and license to fully exploit all such intellectual property rights in connection with the Inventions.

12.No Cooperation. Employee agrees that Employee will not knowingly encourage, counsel, or assist any attorneys or their clients (other than Employee in respect of any claims Employee has that are not released hereby) in the presentation or prosecution of any disputes, differences, grievances, claims, charges, or complaints by any third party against any of the Releasees, unless under a subpoena or other court order to do so. Employee agrees both to

immediately notify the Company upon receipt of any such subpoena or court order, and to furnish, within three (3) business days of its receipt, a copy of such subpoena or other court order. If approached by anyone for counsel or assistance in the presentation or prosecution of any disputes, differences, grievances, claims, charges, or complaints against any of the Releasees, Employee shall state no more than that Employee cannot provide counsel or assistance.

13.Nondisparagement. Except as otherwise provided herein, Employee agrees to refrain from any disparagement, defamation, libel, or slander of any of the Releasees. Employee agrees to refrain from making, either directly or indirectly, any negative, damaging or otherwise disparaging communications concerning the Company or its services to any of the clients of the Company. Employee shall not use any Company information that is confidential either under applicable law or the Confidentiality Agreement to which Employee had access during the scope of Employee's employment with the Company in order to communicate with or solicit any of the Company's current or prospective clients. Employee shall direct any inquiries by potential future employers to the Company's human resources department, which shall use its best efforts to provide only the Employee's last position and dates of employment. The Company shall refrain, and shall cause its board of directors and its executive officers to refrain, from any disparagement, defamation, libel or slander of Employee and from making, either directly or indirectly, any negative, damaging or otherwise disparaging communications concerning Employee or his services. Employee understands that the Company's obligations under this Section 13 shall only apply to the Company's current executive officers and directors for as long as they are a current employee or director of the Company.

14.Protected Disclosure. Notwithstanding any other provision of this Agreement, nothing in this Agreement prevents Employee from: (i) filing a charge or complaint with any federal, state or local governmental agency or commission (a "Government Agency"); (ii) communicating with any Government Agency or otherwise participating in any investigation or proceeding that may be conducted by any Government Agency, including Employee's ability to provide documents or other information, without notice to the Company; (iii) providing truthful testimony in litigation; or (iv) discussing or disclosing information about sexual harassment, sexual assault, or unlawful acts in the workplace (including harassment, discrimination or other conduct Employee has reasonable cause to believe is unlawful). If Employee files any charge or complaint with any Government Agency and if the Government Agency pursues any claim on Employee's behalf, or if any other third party pursues any claim on Employee's behalf, Employee waives any right to monetary or other individualized relief (either individually, or as part of any collective or class action); *provided* that nothing in this Agreement limits any right Employee may have to receive a whistleblower award or bounty for information provided to the Securities and Exchange Commission.

15.Breach. In addition to the rights provided in the "Attorneys' Fees" section below, Employee acknowledges and agrees that any material breach of this Agreement, or of any provision of the Confidentiality Agreement, shall entitle the Company immediately to cease providing, and/or to the extent determined by a court of competent jurisdiction to recover the consideration provided to Employee under this Agreement and to seek to obtain damages, except as provided by law.

16.No Admission of Liability. Employee understands and acknowledges that this Agreement constitutes a compromise and settlement of any and all actual or potential disputed claims by Employee. No action taken by the Company hereto, either previously or in connection

with this Agreement, shall be deemed or construed to be (a) an admission of the truth or falsity of any actual or potential claims or (b) an acknowledgment or admission by the Company of any fault or liability whatsoever to Employee or to any third party.

17.Costs. The Parties shall each bear their own costs, attorneys' fees, and other fees incurred in connection with the preparation of this Agreement.

18.Tax Consequences. The Company makes no representations or warranties with respect to the tax consequences of the payments and any other consideration provided to Employee or made on Employee's behalf under the terms of this Agreement. Employee agrees and understands that Employee is responsible for payment, if any, of local, state, and/or federal taxes on the payments and any other consideration provided hereunder by the Company and any penalties or assessments thereon. Employee further agrees to indemnify and hold the Company harmless from any claims, demands, deficiencies, penalties, interest, assessments, executions, judgments, or recoveries by any government agency against the Company for any amounts claimed due on account of (a) Employee's failure to pay or delayed payment of federal or state taxes, or (b) damages sustained by the Company by reason of any such claims, including attorneys' fees and costs.

19.Authority; Successors. The Company represents and warrants that the undersigned has the authority to act on behalf of the Company and to bind the Company and all who may claim through it to the terms and conditions of this Agreement. Employee represents and warrants that Employee has the capacity to act on Employee's own behalf and on behalf of all who might claim through Employee to bind them to the terms and conditions of this Agreement. Each Party warrants and represents that there are no liens or claims of lien or assignments in law or equity or otherwise of or against any of the claims or causes of action released herein. This Agreement will be binding upon and inure to the benefit of successors and permitted assigns of the Company and Employee. This Agreement shall be assigned by the Company (to the extent not otherwise transferred by operation of law) to any entity succeeding to the business or assets of the Company by purchase, merger, consolidation or otherwise.

20.No Representations. Employee represents that Employee has had an opportunity to consult with an attorney, and has carefully read and understands the scope and effect of the provisions of this Agreement. Employee has not relied upon any representations or statements made by the Company that are not specifically set forth in this Agreement.

21.Severability. In the event that any provision or any portion of any provision hereof or any surviving agreement made a part hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable, or void, this Agreement shall continue in full force and effect without said provision or portion of provision.

22.Attorneys' Fees. In the event that either Party brings an action to enforce or effect its rights under this Agreement, the prevailing Party as determined by a court of competent jurisdiction shall be entitled to recover its costs and expenses, including the costs of mediation, litigation, court fees, and reasonable attorneys' fees incurred in connection with such an action.

23.Entire Agreement. This Agreement represents the entire agreement and understanding between the Company and Employee concerning the subject matter of this

Agreement and Employee's employment with and separation from the Company and the events leading thereto and associated therewith, and supersedes and replaces any and all prior agreements and understandings concerning the subject matter of this Agreement and Employee's relationship with the Company, with the exception of the Confidentiality Agreement and the Stock Awards, and the Executive Severance Plan as it relates to the CIC Benefits, if any, which continue subject to the terms of this Agreement.

24.No Oral Modification. This Agreement may only be amended in a writing signed by Employee and a duly authorized representative of the Company.

25.Governing Law. This Agreement shall be governed by the laws of the State of California, without regard for choice-of-law provisions. Employee consents to personal and exclusive jurisdiction and venue in the State of California.

26.Effective Date. Employee understands that this Agreement shall be null and void if not executed by Employee within 5 business days. This Agreement will become effective on the date it has been signed by both Parties and not revoked by either Party prior to such date (the "Effective Date").

27.Counterparts. This Agreement may be executed in counterparts and by facsimile, and each counterpart, PDF, and facsimile shall have the same force and effect as an original and shall constitute an effective, binding agreement on the part of each of the undersigned.

28.Voluntary Execution of Agreement. Employee understands and agrees that Employee executed this Agreement voluntarily, without any duress or undue influence on the part or behalf of the Company or any third party, with the full intent of releasing all of Employee's claims against the Company and any of the other Releasees. Employee acknowledges that:

() Employee has read this Agreement;

() Employee has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of Employee's own choice or has elected not to retain legal counsel;

() Employee understands the terms and consequences of this Agreement and of the releases it contains; and

() Employee is fully aware of the legal and binding effect of this Agreement.

[Signature page follows; Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the Parties have executed this Agreement on the respective dates set forth below.

JOSH LEHRER, an individual

Dated: September 7, 2023 /s/ Josh Lehrer
Josh Lehrer

GRAPHITE BIO, INC.

Dated: September 7, 2023 By /s/ Perry Karsen
Name: Perry Karsen
Its: Chairperson of the Board of Directors

EXHIBIT A
SUMMARY OF STOCK AGREEMENTS

The table below summarizes the equity grants made to the Employee under the Stock Agreements, with vesting information measured as of the Termination Date.

Type of Grant	Grant Number	Grant/Issue Date	Total Shares Granted	Total Shares Vested as of Termination Date	Total Shares Unvested as of Termination Date
RSA	00000159	28-Apr-20	670,397	558,664	111,733
RSA	00000160	20-May-20	109,134	90,945	18,189
NQSO (early exercised into restricted stock)	00000028	13-Jan-21	374,013	311,677	62,336
NQSO	00000079	17-Mar-21	340,798	205,898	134,900
NQSO*	00000386	21-Feb-23	600,000	87,500	512,500
NQSO	00000211	16-Feb-22	650,000	257,291	392,709
ISO	00000053	17-Mar-21	81,830	49,098	32,732
NQSO	00000054	17-Mar-21	713,366	431,332	282,034

* The vesting of an additional 300,000 shares will accelerate as of the Termination Date pursuant to Section 2(d) of the Agreement, such that an aggregate of 387,500 shares will be deemed vested as of the Termination Date.

EXHIBIT B – SUPPLEMENTAL RELEASE

This Supplemental Release ("Supplemental Release") is made by and between Josh Lehrer ("Consultant") and Graphite Bio, Inc. (the "Company") (collectively referred to as the "Parties" or individually referred to as a "Party") as of the Supplemental Release Effective Date (defined below).

1.Supplemental Release Effective Date. Consultant understands that Consultant has had more than twenty-one (21) days to consider this Supplemental Release since first receiving it with the Separation Agreement and Release (the "Agreement") to which it was attached as Exhibit B. To accept this Supplemental Release, Consultant must sign it no earlier than the last day of the Post-Employment Consulting Period (as defined in the Agreement) and then return the signed copy to the Company no later than five business days following the last day of the Post-Employment Consulting Period, and this Supplemental Release shall be null and void if Consultant fails to do so. This Supplemental Release will become effective on the eighth (8th) day after Consultant signs this Supplemental Release, so long as it has been signed by the Company and has not been revoked by either Party before that date (the "Supplemental Release Effective Date").

2.Supplemental Consideration. Consultant acknowledges that without this Supplemental Release becoming effective (along with other conditions specified in paragraph 2(b) of the Agreement), Consultant is otherwise not entitled to the Supplemental Consideration described in paragraph 2(b) of the Agreement.

3.Payment of Salary and Receipt of All Benefits. Consultant acknowledges and represents that the Company has paid or provided all salary, wages, bonuses, accrued vacation/paid time off, premiums, reimbursement for health care, leaves, housing allowances, relocation costs, interest, severance, outplacement costs, fees, reimbursable expenses, commissions, stock, stock options, vesting, and any and all other benefits and compensation due to Consultant through the last day of the Post-Employment Consulting Period.

4.Release of Claims. Consultant agrees that the Supplemental Consideration represents settlement in full of all outstanding obligations owed to Consultant by the Company and its current and former officers, directors, employees, agents, investors, attorneys, shareholders, administrators, affiliates, benefit plans, plan administrators, insurers, trustees, parents, divisions, and subsidiaries, and predecessor and successor corporations and assigns (collectively, the "Releasees"). Consultant, on his own behalf and on behalf of his respective heirs, family members, executors, agents, and assigns, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Consultant may possess against any of the Releasees arising from any omissions, acts, facts, or damages that may have occurred up until and including the Supplemental Release Effective Date, including, without limitation:

a. any and all claims relating to or arising from Consultant's service relationship with the Company and the termination of that relationship;

b. any and all claims relating to, or arising from, Consultant's right to purchase, or actual purchase of shares of stock of the Company, including, without limitation, any claims for fraud,

misrepresentation, breach of fiduciary duty, breach of duty under applicable state corporate law, and securities fraud under any state or federal law;

c. any and all claims for wrongful discharge of employment; constructive discharge; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of covenant of good faith and fair dealing, both express and implied; promissory estoppel; negligent or intentional infliction of emotional distress; fraud; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury; assault; battery; invasion of privacy; false imprisonment; conversion; and disability benefits;

d. any and all claims for violation of any federal, state, or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Rehabilitation Act of 1973; the Age Discrimination in Employment Act of 1967; the Americans with Disabilities Act of 1990; the Equal Pay Act; the Fair Labor Standards Act; the Fair Credit Reporting Act; the Employee Retirement Income Security Act of 1974; the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act; the Sarbanes-Oxley Act of 2002; the Immigration Control and Reform Act; the California Family Rights Act; the California Labor Code; the California Workers' Compensation Act; the California Fair Employment and Housing Act; and any other similar statutes, regulations or laws;

e. any and all claims for violation of the federal or any state constitution;

f. any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

g. any claim for any loss, cost, damage, or expense arising out of any dispute over the non-withholding or other tax treatment of any of the proceeds received by Consultant as a result of this Supplemental Release; and

h. any and all claims for attorneys' fees and costs.

Consultant agrees that the release set forth in this section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not extend to any obligations incurred under this Supplemental Release or rights to enforce or claims pursuant to the Agreement (including, without limitation, with respect to the CIC Benefits, if any). This release does not release claims that cannot be released as a matter of law, or rights or claims of Consultant relating to: (i) unemployment (which shall not to be contested, provided that the foregoing does not prohibit the Company from truthfully responding to any government or agency requests for information), (ii) indemnification, (iii) directors and officer insurance, (iv) contribution and exculpation, (v) vested equity held by Consultant as of the signing date hereof or in which Consultant vests consistent with the Agreement (including, without limitation, with respect to the CIC Benefits, if any), (vi) Consultant's equity rights continuing following the Termination Date consistent with the Agreement, (vii) vested employee benefits, and (viii) rights Consultant may have to receipt of payment in respect of any restricted stock or early exercised options as set forth in the applicable award agreements or applicable plan document.

After reasonable due inquiry, the Company represents that it is not currently aware of any claims it or its affiliates may have against Consultant.

5.Acknowledgment of Waiver of Claims under ADEA. Consultant acknowledges that he/she is waiving and releasing any rights he/she may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Consultant agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the Supplemental Release Effective Date. Consultant acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Consultant was already entitled. Consultant further acknowledges that he/she has been advised by this writing that: (a) he/she should consult with an attorney prior to executing this Supplemental Release; (b) he/she has twenty-one (21) days within which to consider this Supplemental Release; (c) he/she has seven (7) days following his/her execution of this Supplemental Release to revoke this Supplemental Release; (d) this Supplemental Release shall not be effective until after the revocation period has expired; and (e) nothing in this Supplemental Release prevents or precludes Consultant from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law. In the event Consultant signs this Supplemental Release and returns it to the Company in less than the 21-day period identified above, Consultant hereby acknowledges that he/she has freely and voluntarily chosen to waive the time period allotted for considering this Supplemental Release. Consultant acknowledges and understands that revocation must be accomplished by a written notification to the person executing this Supplemental Release on the Company's behalf that is received prior to the Supplemental Release Effective Date. The parties agree that changes, whether material or immaterial, do not restart the running of the 21-day period.

6.California Civil Code Section 1542. Consultant acknowledges that Consultant has been advised to consult with legal counsel and is familiar with the provisions of California Civil Code Section 1542, a statute that otherwise prohibits the release of unknown claims, which provides as follows:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY.

Consultant, being aware of said code section, agrees to expressly waive any rights Consultant may have thereunder, as well as under any other statute or common law principles of similar effect.

7.No Pending or Future Lawsuits. Consultant represents that Consultant has no lawsuits, claims, or actions pending in his name, or on behalf of any other person or entity, against the Company or any of the other Releasees. Consultant also represents that Consultant does not intend to bring any other claims on his own behalf or on behalf of any other person or entity against the Company or any of the other Releasees.

8.Confidentiality. Consultant agrees to maintain in complete confidence the existence of this Supplemental Release, the contents and terms of this Supplemental Release, and the consideration for this Supplemental Release (hereinafter collectively referred to as "Separation Information"). Except as required by law, Consultant may disclose Separation Information only to his immediate family members, the Court in any proceedings to enforce the terms of this Supplemental Release, Consultant's counsel, and Consultant's accountant and any professional tax advisor to the extent that they need to know the Separation Information in order to provide advice on tax treatment or to prepare tax returns, and must prevent disclosure of any Separation Information to all other third parties. Consultant agrees that Consultant will not publicize, directly or indirectly, any Separation Information.

9.Breach. In addition to the rights provided below (the "Attorneys' Fees" section), Consultant acknowledges and agrees that any material breach of this Supplemental Release shall entitle the Company immediately to cease providing and/or to the extent determined by a court of competent jurisdiction recover the consideration provided to Consultant under this Supplemental Release and the Agreement conditioned on this Supplemental Release and to seek to obtain damages, except as provided by law.

10.No Admission of Liability. Consultant understands and acknowledges that this Supplemental Release constitutes a compromise and settlement of any and all actual or potential disputed claims by Consultant. No action taken by the Company hereto, either previously or in connection with this Supplemental Release, shall be deemed or construed to be (a) an admission of the truth or falsity of any actual or potential claims or (b) an acknowledgment or admission by the Company of any fault or liability whatsoever to Consultant or to any third party.

11.Attorneys' Fees. In the event that either Party brings an action to enforce or effect its rights under this Supplemental Release, the prevailing Party as determined by a court of competent jurisdiction shall be entitled to recover its costs and expenses, including the costs of mediation, arbitration, litigation, court fees, and reasonable attorneys' fees incurred in connection with such an action.

12.Protected Disclosure. Notwithstanding any other provision of this Supplemental Release, nothing in this Supplemental Release prevents Consultant from: (i) filing a charge or complaint with any federal, state or local governmental agency or commission (a "Government Agency"); (ii) communicating with any Government Agency or otherwise participating in any investigation or proceeding that may be conducted by any Government Agency, including Consultant's ability to provide documents or other information, without notice to the Company; (iii) providing truthful testimony in litigation; or (iv) discussing or disclosing information about sexual harassment, sexual assault, or unlawful acts in the workplace (including harassment, discrimination or other conduct Consultant has reason to believe is unlawful). If Consultant files any charge or complaint with any Government Agency and if the Government Agency pursues any claim on Consultant's behalf, or if any other third party pursues any claim on Consultant's behalf, Consultant waives any right to monetary or other individualized relief (either individually, or as part of any collective or class action).

13.Entire Agreement; Successors. This Supplemental Release and the Agreement represents the entire agreement and understanding between the Company and Consultant concerning the subject matter of this Supplemental Release and the Agreement and Consultant's services with and separation from the Company and the events leading thereto and associated

therewith, and supersedes and replaces any and all prior agreements and understandings concerning the subject matter of this Supplemental Release and the Agreement, with the exception of the Confidentiality Agreement and the Stock Agreements described in the Agreement, and the Executive Severance Plan as it relates to the CIC Benefits, if any. This Supplemental Release and the Agreement will be binding upon and inure to the benefit of successors and permitted assigns of the Company and Employee. This Supplemental Release and the Agreement shall be assigned by the Company (to the extent not otherwise transferred by operation of law) to any entity succeeding to the business or assets of the Company by purchase, merger, consolidation or otherwise.

14.No Oral Modification. This Supplemental Release may only be amended in a writing signed by Consultant and a duly authorized representative of the Company.

15.Governing Law. This Supplemental Release shall be governed by the laws of the State of California, without regard for choice-of-law provisions. Consultant consents to personal and exclusive jurisdiction and venue in the State of California.

16.Counterparts. This Supplemental Release may be executed in counterparts and by facsimile, and each counterpart, PDF, and facsimile shall have the same force and effect as an original and shall constitute an effective, binding agreement on the part of each of the undersigned.

17.Voluntary Execution of Supplemental Release. Consultant understands and agrees that Consultant executed this Supplemental Release voluntarily, without any duress or undue influence on the part or behalf of the Company or any third party, with the full intent of releasing all of his claims against the Company and any of the other Releasees. Consultant acknowledges that:

a. Consultant has read this Supplemental Release;

b. Consultant has been represented in the preparation, negotiation, and execution of this Supplemental Release by legal counsel of his own choice or has elected not to retain legal counsel;

c. Consultant understands the terms and consequences of this Supplemental Release and of the releases it contains; and

d. Consultant is fully aware of the legal and binding effect of this Supplemental Release.

[Signature page follows; Remainder of page intentionally left blank]

Josh Lehrer, an individual

Dated: 9/7/2023 /s/ Josh Lehrer
Josh Lehrer

Graphite Bio, Inc.

Dated: 9/7/2023 By /s/ Perry Karsen
Name: Perry Karsen
Its: Chairperson of the Board of Directors

Exhibit 31

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Kim Drapkin, certify that:

1.I have reviewed this Quarterly Report on Form 10-Q of Graphite Bio, 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(s) 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(s) 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.

Date: November 13, 2023 By: /s/ Kimberlee C. Drapkin

Kimberlee C. Drapkin
(Principal Executive Officer and Principal Accounting and Financial Officer)

Exhibit 32

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 of Graphite Bio, Inc. (the "Company") on Form 10-Q for the period ending September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1)The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2)The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 13, 2023

By: /s/ Kimberlee C. Drapkin
Kimberlee C. Drapkin
(Principal Executive Officer and Principal Accounting and Financial Officer)