

**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 June 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: 001-40708

ELIEM THERAPEUTICS, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

23515 NE Novelty Hill Road

Suite B221 #125

Redmond, WA

(Address of principal executive offices)

83-2273741

(I.R.S. Employer
Identification No.)

98053

(Zip Code)

Registrant's telephone number, including area code: 1-877-ELIEMTX (354-3689)

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 \$0.0001 per share	ELYM	The Nasdaq Stock Market LLC (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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes No

As of August 8, 2023, the registrant had 27,089,240 shares of common stock, \$0.0001 par value per share, outstanding.

Table of Contents

	<u>Page</u>
PART I.	
<u>FINANCIAL INFORMATION</u>	1
Item 1.	
<u>Condensed Consolidated Financial Statements (unaudited)</u>	1
<u>Condensed Consolidated Balance Sheets</u>	1
<u>Condensed Consolidated Statements of Operations and Comprehensive Loss</u>	2
<u>Condensed Consolidated Statements of Stockholders' Equity</u>	3
<u>Condensed Consolidated Statements of Cash Flows</u>	4
<u>Notes to Unaudited Condensed Consolidated Financial Statements</u>	5
Item 2.	
<u>Management's Discussion and Analysis of Financial Condition and Results and Operations</u>	16
Item 3.	
<u>Quantitative and Qualitative Disclosures About Market Risk</u>	23
Item 4.	
<u>Controls and Procedures</u>	23
PART II.	
<u>OTHER INFORMATION</u>	25
Item 1.	
<u>Legal Proceedings</u>	25
Item 1A.	
<u>Risk Factors</u>	25
Item 2.	
<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	64
Item 3.	
<u>Defaults Upon Senior Securities</u>	64
Item 4.	
<u>Mine Safety Disclosures</u>	64
Item 5.	
<u>Other Information</u>	64
Item 6.	
<u>Exhibits</u>	65
<u>Signatures</u>	66

PART I - FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements (unaudited)

Eliem Therapeutics, Inc.
Condensed Consolidated Balance Sheets
(In thousands, except share and per share amounts)
(unaudited)

Assets	June 30, 2023	December 31, 2022
Current assets:		
Cash and cash equivalents	\$ 25,294	\$ 43,585
Short-term marketable securities	77,339	79,981
Prepaid expenses and other current assets	11,611	10,827
Total current assets	\$ 114,244	\$ 134,393
Operating lease right-of-use assets	372	471
Other long-term assets	1,658	128
Total assets	\$ 116,274	\$ 134,992
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	878	750
Accrued expenses	2,255	5,047
Operating lease liabilities	485	300
Total current liabilities	\$ 3,618	\$ 6,097
Operating lease liabilities, net of current portion	100	180
Other long-term liabilities	55	—
Total liabilities	\$ 3,773	\$ 6,277
Commitments and contingencies (Note 4)		
Stockholders' equity		
Common stock, \$0.0001 par value per share, 250,000,000 shares authorized; 26,994,988 and 26,567,681 shares issued and outstanding at June 30, 2023 and December 31, 2022, respectively	3	3
Additional paid-in capital	260,903	249,930
Accumulated other comprehensive loss	(35)	(358)
Accumulated deficit	(148,370)	(120,860)
Total stockholders' equity	\$ 112,501	\$ 128,715
Total liabilities and stockholders' equity	\$ 116,274	\$ 134,992

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

Eliem Therapeutics, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(In thousands, except share and per share amounts)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Operating expenses:				
Research and development	\$ 3,688	\$ 8,769	\$ 9,408	\$ 17,029
General and administrative	3,026	4,932	20,744	9,804
Total operating expenses	6,714	13,701	30,152	26,833
Loss from operations	(6,714)	(13,701)	(30,152)	(26,833)
Other income (expense):				
Foreign currency gain (loss)	384	(1,042)	632	(1,199)
Interest income, net	1,110	147	2,010	232
Total other income (expense)	1,494	(895)	2,642	(967)
Net loss	\$ (5,220)	\$ (14,596)	\$ (27,510)	\$ (27,800)
Net loss per share, basic and diluted	\$ (0.19)	\$ (0.56)	\$ (1.03)	\$ (1.06)
Weighted-average number of shares outstanding used to compute net loss per share, basic and diluted	26,840,555	26,296,560	26,667,458	26,267,914
Comprehensive loss:				
Net loss	\$ (5,220)	\$ (14,596)	\$ (27,510)	\$ (27,800)
Other comprehensive loss:				
Unrealized gain (loss) on investments, net of tax of \$0	60	(83)	323	(481)
Comprehensive loss	\$ (5,160)	\$ (14,679)	\$ (27,187)	\$ (28,281)

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

Eliem Therapeutics, Inc.
Condensed Consolidated Statements of Stockholders' Equity
(In thousands, except share amounts)
(unaudited)

<u>Common Stock</u>							Total Stockholders' Equity
<u>Shares</u>	<u>Amount</u>	<u>Additional Paid-in Capital</u>	<u>Accumulated Other Comprehensive Loss</u>	<u>Accumulated Deficit</u>			
Balance as of December 31, 2022	26,390,186	\$ 3	\$ 249,930	\$ (358)	\$ (120,860)	\$ 128,715	
Vesting of restricted stock awards	19,608	—	—	—	—	—	
Exercise of stock options	406,194	—	1	—	—	1	
Stock-based compensation	—	—	10,171	—	—	10,171	
Other comprehensive income	—	—	—	263	—	263	
Net loss	—	—	—	—	(22,290)	(22,290)	
Balance as of March 31, 2023	26,815,988	\$ 3	\$ 260,102	\$ (95)	\$ (143,150)	\$ 116,860	
Vesting of restricted stock awards and units	44,038	—	—	—	—	—	
Exercise of stock options	23,526	—	24	—	—	24	
Stock-based compensation	—	—	777	—	—	777	
Other comprehensive income	—	—	—	60	—	60	
Net loss	—	—	—	—	(5,220)	(5,220)	
Balance as of June 30, 2023	26,883,552	\$ 3	\$ 260,903	\$ (35)	\$ (148,370)	\$ 112,501	

<u>Common Stock</u>							Total Stockholders' Equity
<u>Shares</u>	<u>Amount</u>	<u>Additional Paid-in Capital</u>	<u>Accumulated Other Comprehensive Loss</u>	<u>Accumulated Deficit</u>			
Balance as of December 31, 2021	26,235,317	\$ 3	\$ 242,939	\$ (123)	\$ (75,616)	\$ 167,203	
Vesting of restricted stock awards	9,451	—	—	—	—	—	
Stock-based compensation	—	—	1,541	—	—	1,541	
Other comprehensive loss	—	—	—	(398)	—	(398)	
Net loss	—	—	—	—	(13,204)	(13,204)	
Balance as of June 30, 2022	26,244,768	\$ 3	\$ 244,480	\$ (521)	\$ (88,820)	\$ 155,142	
Vesting of restricted stock awards	82,633	—	—	—	—	—	
Exercise of stock options	—	—	—	—	—	—	
Stock-based compensation	—	—	1,772	—	—	1,772	
Other comprehensive loss	—	—	—	(83)	—	(83)	
Net loss	—	—	—	—	(14,596)	(14,596)	
Balance as of June 30, 2022	26,327,401	\$ 3	\$ 246,252	\$ (604)	\$ (103,416)	\$ 142,235	

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

Eliem Therapeutics, Inc.
Condensed Consolidated Statements of Cash Flows
(In thousands)
(unaudited)

	Six Months Ended June 30,	
	2023	2022
Cash flows from operating activities:		
Net loss	\$ (27,510)	\$ (27,800)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	10,948	3,313
Right-of-use asset impairment	180	—
Non-cash operating lease expense	232	217
Accretion of discounts and amortization of premiums on investments, net	(1,232)	293
Foreign currency (gain) loss from remeasurement	(630)	1,228
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(784)	1,646
Long-term assets	(1,528)	(4,561)
Accounts payable	128	(322)
Accrued liabilities	(2,792)	1,472
Operating lease liabilities	(209)	(231)
Long-term liabilities	55	—
Net cash used in operating activities	\$ (23,142)	\$ (24,745)
Cash flows from investing activities:		
Purchase of marketable securities	(55,985)	(34,507)
Proceeds from maturities of marketable securities	60,181	46,160
Net cash provided by investing activities	\$ 4,196	\$ 11,653
Cash flows from financing activities:		
Proceeds from the exercise of stock options	25	—
Net cash provided by financing activities	\$ 25	\$ —
Effect of exchange rate changes on cash and cash equivalents	630	(1,228)
Net change in cash and cash equivalents	\$ (18,291)	\$ (14,320)
Cash and cash equivalents at beginning of period	43,585	46,922
Cash and cash equivalents at end of period	\$ 25,294	\$ 32,602
Supplemental disclosure of cash operating activities:		
Cash paid for leases included in operating cash outflows	\$ 244	\$ 227
Supplemental disclosure of non-cash investing and financing activities:		
Right-of-use assets obtained in exchange for lease liabilities	\$ 313	\$ 915

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

Eliem Therapeutics, Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

1. Description of Organization and Summary of Significant Accounting Policies

Organization

Eliem Therapeutics, Inc. (the Company) is a biotechnology company focused on developing novel therapies for neuronal excitability disorders to address unmet needs in psychiatry, epilepsy, chronic pain, and other disorders of the peripheral and central nervous systems. Headquartered in Redmond, Washington, the Company was incorporated on October 18, 2018 as a Delaware corporation.

On February 7, 2023, the Company's board of directors approved a restructuring plan (the Restructuring Plan) to conserve financial resources and better align the Company's workforce with current business needs, as a result of the decision to pause development of ETX-155 and focus on the Company's preclinical Kv7 program. As part of the Restructuring Plan, the Company's workforce was reduced by approximately 55%, with substantially all of the reduction in personnel completed in the first half of 2023.

On July 20, 2023, the Company announced that it made the determination to conduct a comprehensive exploration of strategic alternatives focused on maximizing stockholder value. As part of that effort, the Company has paused further development of its Kv7 program, while continuing ongoing preclinical studies and exploring options for both Kv7 and ETX-155.

Basis of Presentation and Principles of Consolidation

The accompanying interim condensed consolidated financial statements of the Company and its wholly owned subsidiary have been prepared in conformity with accounting principles generally accepted in the United States (U.S. GAAP). All intercompany transactions and balances have been eliminated in consolidation.

The accompanying condensed consolidated balance sheet as of June 30, 2023, and condensed consolidated statements of operations and comprehensive loss, condensed consolidated statements of cash flows, and condensed consolidated statements of stockholders' equity for the three and six months ended June 30, 2023 and 2022, are unaudited. The consolidated balance sheet as of December 31, 2022 was derived from the audited financial statements as of and for the year ended December 31, 2022, but does not include all disclosures required by U.S. GAAP. The unaudited interim condensed financial statements have been prepared on a basis consistent with the audited annual financial statements as of and for the year ended December 31, 2022, and, in the opinion of management, reflect all adjustments, consisting solely of normal recurring adjustments, necessary for the fair statement of the Company's financial position as of June 30, 2023, the condensed results of its operations as of the three and six months ended June 30, 2023 and 2022, and its cash flows for the six months ended June 30, 2023 and 2022. The financial data and other information disclosed in these notes related to the three and six months ended June 30, 2023 and 2022 are also unaudited. The condensed results of operations for the three and six months ended June 30, 2023 are not necessarily indicative of the results to be expected for the full year ending December 31, 2023 or any other period. These interim condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on March 6, 2023.

Liquidity

Since inception, the Company has experienced recurring losses from operations and generated negative cash flows from operations. The Company has an accumulated deficit of \$148.4 million as of June 30, 2023 and expects to incur additional losses from operations in the future. The Company estimates the available cash, cash equivalents, and marketable securities of \$102.6 million as of June 30, 2023 will be sufficient to meet its projected operating requirements for at least the next twelve months from the filing date of these unaudited condensed consolidated financial statements and the Company anticipates that it will need to raise substantial financing in the future to fund its operations.

The Company may finance future cash needs through equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing and distribution arrangements. In addition, the Company may continue to rely on capital markets, and to a lesser extent, United Kingdom (U.K.) research and development tax credits and incentives for funding. There are no assurances that the Company will be able to raise sufficient amounts of funding in the future on acceptable terms, or at all.

Use of Estimates

The preparation of the interim condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect reported amounts and disclosures. Accordingly, actual results could differ from those estimates. Key management estimates include those related to the accrual of research and development expenses, recoverable research and development tax credits, and the valuation of stock-based awards. The Company evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors and adjusts those estimates and assumptions when facts and circumstances dictate. Actual results could differ from those estimates.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents, and marketable securities. The Company's cash is held by two financial institutions in the United States (U.S.) and two financial institutions in the U.K. The Company does not believe that it is subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships. The Company's deposits held in the U.S. and U.K. may exceed the Federal Depository Insurance Corporation and Financial Services Compensation Scheme, respectively, insured limits. The Company has diversified investments in money market funds, U.S. Treasury and government agency debt securities, commercial paper, and corporate bonds with high-quality accredited financial institutions, which are held in a segregated account at a third-party custodian. The Company has established guidelines relative to credit ratings and maturities intended to safeguard principal balances and maintain liquidity. Through June 30, 2023, and the date of this filing, the Company has not experienced any losses on such deposits.

Risks and Uncertainties

The Company is subject to risks and uncertainties common to early-stage companies in the biotechnology industry, including, but not limited to, development by competitors of new technological innovations, protection of proprietary technology, dependence on key personnel, reliance on single-source vendors and collaborators, availability of raw materials, patentability of the Company's products and processes and clinical efficacy and safety of the Company's products under development, compliance with government regulations and the need to obtain additional financing to fund operations. Any product candidates the Company may develop in the future will require significant additional research and development efforts, including extensive preclinical studies, clinical trials, and regulatory approval, prior to commercialization. These efforts will require significant amounts of additional capital, adequate personnel infrastructure and extensive compliance and reporting.

There can be no assurance that any future research and development will be successfully completed, that adequate protection for the Company's intellectual property will be obtained or maintained, that any products developed will obtain necessary government regulatory approval or that any approved products will be commercially viable. Even if any future product development efforts are successful, it is uncertain when, if ever, the Company will generate revenue from product sales. The Company operates in an environment of rapid technological change and substantial competition from other pharmaceutical and biotechnology companies. In addition, the Company is dependent upon the services of its employees, consultants and other third parties.

Segments

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker (the CODM). The Company's CODM is its executive chairman who reviews financial information together with certain operating metrics principally to make decisions about how to allocate resources and to measure the Company's performance. Management has determined that the Company operates as a single operating and reportable segment. The Company's CODM evaluates financial information on a consolidated basis. As the Company operates as one operating segment, all required segment financial information is found in the interim condensed consolidated financial statements.

Fair Value Measurement

Assets and liabilities recorded at fair value on a recurring basis in the balance sheet are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Fair value is defined as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The Company measures fair value based on a three-tier hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value as follows:

Level 1—Observable inputs such as unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2—Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the assets or liabilities. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.

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

In determining fair value, the Company utilizes quoted market prices, or valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible as well as considers counterparty credit risk in its assessment of fair value.

There were no transfers into or out of Level 3 for any of the periods presented.

The Company's fair value measurements as of June 30, 2023 and December 31, 2022 was as follows (in thousands):

	June 30, 2023			Balance
	Level 1	Level 2	Level 3	
Assets:				
Cash equivalents:				
Money market funds	\$ 22,406	\$ —	\$ —	\$ 22,406
Marketable securities:				
U.S. Treasury securities	54,681	—	—	54,681
Commercial paper	—	6,648	—	6,648
Corporate bonds	—	5,497	—	5,497
U.S. government agency debt securities	—	10,513	—	10,513
Total marketable securities	54,681	22,658	—	77,339
Total assets	\$ 77,087	\$ 22,658	\$ —	\$ 99,745

	December 31, 2022			Balance
	Level 1	Level 2	Level 3	
Assets:				
Cash equivalents:				
Money market funds	\$ 27,472	\$ —	\$ —	\$ 27,472
Marketable securities:				
U.S. Treasury securities	30,451	—	—	30,451
Commercial paper	—	29,543	—	29,543
Corporate bonds	—	16,626	—	16,626
U.S. government agency debt securities	—	3,361	—	3,361
Total marketable securities	30,451	49,530	—	79,981
Total assets	\$ 57,923	\$ 49,530	\$ —	\$ 107,453

Summary of Significant Accounting Policies

There have been no material revisions in the Company's significant accounting policies described in Note 2 to the consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2022.

Recently Adopted Accounting Pronouncements

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. The standard changes how entities will measure credit losses for most financial assets, including accounts and notes receivables. The standard will replace today’s “incurred loss” approach with an “expected loss” model, under which companies will recognize allowances based on expected rather than incurred losses. Entities will apply the standard’s provisions as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. The effective date of this update for non-public companies is for fiscal years beginning after December 15, 2022 and interim periods therein. The Company adopted ASU 2016-13 on January 1, 2023, which did not have a material impact on its condensed consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

In August 2020, the FASB issued ASU 2020-06, Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity’s Own Equity (Subtopic 815-40)—Accounting For Convertible Instruments and Contracts in an Entity’s Own Equity. The standard simplifies accounting for convertible instruments by removing major separation models required under current GAAP. Consequently, more convertible debt instruments will be reported as a single liability instrument with no separate accounting for embedded conversion features. ASU 2020-06 removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exception, which will permit more equity contracts to qualify for it. The standard also simplifies the diluted net income per share calculation in certain areas. The effective date of this update for non-public companies is for fiscal years beginning after December 15, 2023, including interim periods therein. Early adoption is permitted for fiscal years beginning after December 15, 2020 and interim periods therein. The Company estimates that adoption will not have a material impact on its consolidated financial statements.

There were no other significant updates to the recently issued accounting standards other than as disclosed herewith for the six months ended June 30, 2023. Although there are several other new accounting pronouncements issued or proposed by the FASB, the Company does not believe any of those accounting pronouncements have had or will have a material impact on its financial position or operating results.

2. Investments

Investments consists of available-for-sale securities as follows (in thousands):

	June 30, 2023			Estimated Fair Value
	Amortized Cost	Unrealized Gain	Unrealized Loss	
Short-term marketable securities:				
U.S. Treasury securities	\$ 54,710	\$ —	\$ (29)	\$ 54,681
Commercial paper	6,648	—	—	6,648
Corporate bonds	5,499	—	(2)	5,497
U.S. government agency debt securities	10,517	—	(4)	10,513
Total short-term marketable securities	<u>\$ 77,374</u>	<u>\$ —</u>	<u>\$ (35)</u>	<u>\$ 77,339</u>
	December 31, 2022			Estimated Fair Value
	Amortized Cost	Unrealized Gain	Unrealized Loss	
Short-term marketable securities:				
U.S. Treasury securities	\$ 30,628	\$ —	\$ (177)	\$ 30,451
Commercial paper	29,543	—	—	29,543
Corporate bonds	16,815	—	(189)	16,626
U.S. government agency debt securities	3,353	8	—	3,361
Total short-term marketable securities	<u>\$ 80,339</u>	<u>\$ 8</u>	<u>\$ (366)</u>	<u>\$ 79,981</u>

All the U.S. Treasury securities, commercial paper, corporate bonds, and U.S. government agency debt securities designated as short-term marketable securities have a contractual maturity date that is equal to or less than one year from the respective balance sheet date.

Prior to 2023, the Company followed the guidance in ASC 320 *Investments—Debt and Equity Securities* in determining whether unrealized losses were other than temporary. The Company adopted Topic 326 on January 1, 2023, and now considers whether unrealized losses have resulted from a credit loss or other factors. The unrealized losses on the Company's available-for-sale securities as of June 30, 2023 and December 31, 2022 were caused by fluctuations in market value and interest rates as a result of the economic environment. The Company concluded that an allowance for credit losses was unnecessary as of June 30, 2023 and that there were no impairments as of December 31, 2022 considered as other-than-temporary because the decline in the market value was attributable to changes in market conditions and not credit quality, and that it is neither management's intention to sell nor is it more likely than not that the Company will be required to sell these investments prior to recovery of their cost basis or recovery of fair value. There was no material realized gain or loss on available-for-sale securities in the periods presented.

The Company elected the practical expedient to exclude accrued interest from both the fair value and the amortized cost basis of the available-for-sale debt securities for the purposes of identifying and measuring an impairment and to not measure an allowance for expected credit losses for accrued interest receivables. Accrued interest receivable is written off through net realized investment gains (losses) at the time the issuer of the bond defaults or is expected to default on payment. The Company made an accounting policy election to present the accrued interest receivable balance as part of prepaid expenses and other current assets in the condensed consolidated balance sheets. Accrued interest receivable related to marketable securities was \$0.1 million and \$0.1 million as of June 30, 2023 and December 31, 2022, respectively.

Investments in a continual unrealized loss position for less than 12 months consist of the following (in thousands):

	<u>June 30, 2023</u>	<u>December 31, 2022</u>
	<u>Fair Value</u>	<u>Fair Value</u>
U.S. Treasury securities	\$ 43,845	\$ 26,506
Corporate bonds	1,998	1,977
U.S. government agency debt securities	5,380	—
Total available-for-sale securities	<u>\$ 51,223</u>	<u>\$ 28,483</u>

Investments in a continual unrealized loss position for greater than 12 months consist of the following (in thousands):

	<u>June 30, 2023</u>	<u>December 31, 2022</u>
	<u>Fair Value</u>	<u>Fair Value</u>
Corporate bonds	\$ 3,499	\$ 14,649
U.S. Treasury securities	—	3,945
Total available-for-sale securities	<u>\$ 3,499</u>	<u>\$ 18,594</u>

3. Certain Balance Sheet Accounts

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following (in thousands):

	<u>June 30, 2023</u>	<u>December 31, 2022</u>
Recoverable research and development tax credits	\$ 6,865	\$ 6,492
Prepaid research and development expenses and deposits	2,994	2,549
Prepaid expenses	1,123	1,330
Other current assets	629	456
Total prepaid expenses and other current assets	<u>\$ 11,611</u>	<u>\$ 10,827</u>

Other Long-Term Assets

Other long-term assets consist of the following (in thousands):

	June 30, 2023	December 31, 2022
Recoverable research and development tax credits	\$ 1,643	\$ —
Other long-term assets	15	128
Total other long-term assets	\$ 1,658	\$ 128

Accrued Expenses

Accrued expenses consist of the following (in thousands):

	June 30, 2023	December 31, 2022
Accrued payroll	\$ 778	\$ 2,900
Restructuring liability	712	—
Accrued research and development expenses	651	1,902
Other accrued expenses	114	245
Total accrued expenses	\$ 2,255	\$ 5,047

4. Commitments and Contingencies

Facility Leases

The Company leases office space in the U.S. and U.K. under non-cancelable operating leases.

In May 2021, the Company entered into an agreement for office space in Cambridge, U.K. The term of this lease is for a period of 24 months, which commenced on July 1, 2021. In March 2023, the Company entered into an agreement to extend this lease until June 30, 2024. This extension was accounted for as a lease modification under ASC 842 - *Leases* and the right-of-use (ROU) asset and lease liability were remeasured at the modification date. The remeasurement of the lease resulted in an increase in both the operating right-of-use asset and the operating lease liability of approximately \$0.3 million.

In November 2021, the Company entered into an agreement to lease approximately 5,000 square feet of office space in Bellevue, Washington. The term of this lease is for a period of 39 months, which commenced on November 1, 2021. The lease contains rent escalation clauses and an option to extend the term of the lease for an additional 3-year period at a market rate determined according to the lease. At the inception of the lease and as of June 30, 2023, the Company was not reasonably certain that it will exercise its option to extend the lease, therefore, the period covered by this option is not included within the lease term.

In July 2023, the Company entered into a non-cancellable sublease agreement for the Bellevue office space, under the terms of which the Company is entitled to receive \$0.2 million in lease payments over the term of the sublease, which commenced in July 2023 and ends concurrently with the original lease in January 2025.

In advance of the sublease, the Company ceased use of and vacated the Bellevue office space in June 2023. The Company considered these circumstances to be an indicator of impairment and recorded an ROU asset impairment loss during the three and six months ended June 30, 2023 of \$0.2 million, which was the amount by which the carrying value of the lease ROU asset exceeded the fair value. The fair value is based on the discounted cash flows of anticipated net rental income for the office space subleased. The ROU asset impairment loss is included in "General and administrative" expense on the condensed consolidated statements of operations.

As of June 30, 2023, the remaining weighted-average lease term was 1.3 years and the weighted-average incremental borrowing rate used to determine the operating lease liability was 7.5%.

For each of the three months ended June 30, 2023 and 2022, the Company incurred \$0.1 million in rent expense. For each of the six months ended June 30, 2023 and 2022, the Company incurred \$0.2 million in rent expense.

As of June 30, 2023, the annual future minimum lease payments due under the Company's non-cancelable operating leases are as follows (in thousands):

	Amount
2023 (remaining 6 months)	\$ 254
2024	342
2025	15
Total undiscounted lease payments	\$ 611
Present value adjustment	(26)
Total operating lease liabilities	\$ 585

Legal Proceedings

From time to time, the Company may have certain contingent liabilities that arise in the ordinary course of its business activities. The Company accrues a liability for such matters when it is probable that future expenditures will be made and that such expenditures can be reasonably estimated. Significant judgment is required to determine both probability and the estimated amount. As of the date of these condensed consolidated financial statements, the Company is not party to any material legal matters or claims.

Indemnification

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. Pursuant to such agreements, the Company may indemnify, hold harmless, and defend an indemnified party for losses suffered or incurred by the indemnified party. Some of the provisions will limit losses to those arising from third-party actions. In some cases, the indemnification will continue after the termination of the agreement. The maximum potential amount of future payments the Company could be required to make under these provisions is not determinable. The Company has never incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. The Company intends to enter into indemnification agreements with its directors and officers that may require the Company to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers to the fullest extent permitted by Delaware corporate law. The Company currently has directors' and officers' insurance coverage that reduces its exposure and enables the Company to recover a portion of any future amounts paid. The Company believes the estimated fair value of these indemnification agreements in excess of applicable insurance coverage is immaterial.

5. Stock-Based Compensation

2019 Plan

In 2019, the Company adopted the 2019 Equity Incentive Plan (the 2019 Plan). The 2019 Plan provides for the Company to grant qualified stock options, non-qualified stock options, and restricted stock awards to employees, non-employee directors and consultants of the Company under terms and provisions established by the Company's board of directors. Under the terms of the 2019 Plan, options are granted at an exercise price no less than fair value of the Company's common stock on the grant date, except in certain cases related to employees outside of the U.S. Option awards granted typically have 10-year terms measured from the option grant date. While no shares are available for future issuance under the 2019 Plan, it continues to govern outstanding equity awards granted thereunder.

2021 Plan and ESPP

The compensation committee of the Company's board of directors adopted and the Company's stockholders approved the 2021 Equity Incentive Plan (the 2021 Plan) and the 2021 Employee Stock Purchase Plan (the ESPP), which became effective immediately prior to the effectiveness of the Company's initial public offering (IPO). The 2021 Plan provides for the grant of incentive stock options, non-statutory stock options, restricted stock awards, restricted stock units, stock appreciation rights and other stock-based awards. The Company's employees, officers, directors and consultants are eligible to receive awards under the 2021 Plan. Under the terms of the 2021 Plan, options are granted at an exercise price no less than fair value of the Company's common stock on the grant date, except in certain cases related to significant corporate transactions. Option awards granted typically have 10-year terms measured from the option grant date. In addition, the number of shares of common stock reserved for issuance under the 2021 Plan will automatically increase on January 1 of each year, beginning on January 1, 2022, and continuing through and including January 1, 2031, by 5% of the total number of shares of common stock outstanding on December 31 of the immediately preceding calendar year, or a lesser number of shares determined by the Company's board of directors prior to the applicable January 1st. As of June 30, 2023, the total number of shares authorized for issuance under the 2021 Plan was 5,215,558.

The ESPP allows employees, including executive officers, to contribute up to 15% of their earnings, subject to certain limitations, for the purchase of the Company's common stock at a price per share equal to the lower of (a) 85% of the fair market value of a share of common stock on the first day of the offering period, or (b) 85% of the fair market value of a share of common stock on the last day of the offering period. As of June 30, 2023, there were 787,231 shares of common stock reserved for future issuance under the ESPP. The number of shares of common stock reserved for issuance under the ESPP will automatically increase on January 1 of each calendar year, beginning on January 1, 2022 and continuing through and including January 1, 2031, by the lesser of (1) 1% of the total number of shares of the Company's common stock outstanding on December 31 of the preceding calendar year or (2) a number of shares determined by the Company's board of directors. Shares subject to purchase rights granted under the ESPP that terminate without having been exercised in full will not reduce the number of shares available for issuance under the ESPP.

As of June 30, 2023, no shares have been granted or purchased under the ESPP.

Stock Options

Awards with vesting conditions under both plans typically include either: (i) vesting 25% on the first anniversary of the grant date with the remainder vesting monthly over the following three years or (ii) monthly vesting over four years.

The activity for stock options is as follows:

	Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Contract Terms (in years)	Aggregate Intrinsic Values (in thousands)
Balance as of December 31, 2022	5,988,271	\$ 4.70	8.83	\$ 5,699
Options granted	50,000	3.00		
Options cancelled and forfeited	(253,933)	8.09		
Options exercised	(429,720)	0.06		1,272
Balance as of June 30, 2023	5,354,618	\$ 4.90	3.20	\$ 2,232
Vested and expected to vest, June 30, 2023	5,354,618	\$ 4.90	3.20	\$ 2,232
Options exercisable as of June 30, 2023	4,367,037	\$ 4.82	1.93	\$ 1,925

The aggregate intrinsic value disclosed in the above table is based on the difference between the exercise price of the stock option and the fair value of the Company's common stock as of the respective period-end dates. The weighted-average grant date fair value of stock options granted during the six months ended June 30, 2023 and 2022 was \$2.25 per share and \$5.32 per share, respectively.

The Black-Scholes option pricing model for employee and nonemployee stock options incorporates the following assumptions:

- *Fair Value of Common Stock* — The fair value of each share of common stock is based on the closing price of the Company's common stock on the date of grant as reported on the Nasdaq Global Market.
- *Volatility* — The expected stock price volatilities are estimated based on the historical and implied volatilities of comparable publicly traded companies as the Company does not have sufficient history of trading its common stock.
- *Risk-free Interest Rate* — The risk-free interest rates are based on US Treasury yields in effect at the grant date for notes with comparable terms as the awards.
- *Expected Term* — The expected term represents the period that the Company's stock options are expected to be outstanding and is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term).
- *Dividend Yield* — The expected dividend yield assumption is based on the Company's current expectations about its anticipated dividend policy.

The fair value of the Company's stock option awards was estimated at the date of grant using a Black-Scholes option pricing model with the following assumptions for the six months ended June 30, 2023 and 2022:

	Six Months Ended June 30,	
	2023	2022
Expected term (in years)	5.50	5.50 - 6.50
Expected volatility	92.90%	77.33% - 80.37%
Risk-free interest rate	3.69%	1.69% - 3.03%
Expected dividend yield	0.00%	0.00%

Restricted Stock

The Company has: (i) restricted stock awards with service conditions that vest 25% on the first anniversary of the grant date and the remainder vesting monthly over the following three years and (ii) restricted stock units that vest quarterly over a two and a half year period. The restricted stock awards are subject to repurchase by the Company at the original purchase price in the event that the award recipient's employment or relationship is terminated prior to the shares vesting.

The activity for restricted stock awards and units is as follows:

	Number of Shares	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2022	177,495	\$ 8.32
Granted	113,333	3.64
Vested	(63,646)	7.32
Forfeited	(13,746)	8.17
Unvested at June 30, 2023	213,436	\$ 6.15

Modifications & Accelerations

Certain equity awards are subject to provisions in which the vesting of these awards is automatically accelerated upon the occurrence of events such as an involuntary termination in connection with a reduction in force. Further, in connection with the Restructuring Plan, the Company modified the terms of certain equity awards for impacted employees including partial or full acceleration of vesting of stock options and restricted stock awards upon separation and extension of exercise periods for stock options post-separation.

As a result of: (i) the contractual acceleration and (ii) the discretionary modification of equity awards in connection with the Restructuring Plan, the Company recorded incremental stock-based compensation expense of \$9.2 million for six months ended June, 2023, of which \$0.5 million and \$8.7 million is included in research and development expense and general and administrative expense, respectively.

Stock-Based Compensation

The following table sets forth stock-based compensation for stock options, restricted stock awards, and restricted stock units included in the Company's condensed consolidated statements of operations and comprehensive loss (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Research and development expense	\$ 427	\$ 628	\$ 1,459	\$ 1,175
General and administrative expense	350	1,144	9,489	2,138
Total stock-based compensation expense	\$ 777	\$ 1,772	\$ 10,948	\$ 3,313

As of June 30, 2023, there was \$3.9 million of total unrecognized compensation cost related to unvested stock options and \$1.3 million of unrecognized compensation cost related to unvested restricted stock awards and units, which is expected to be recognized over a weighted average period of 2.38 years and 1.92 years, respectively.

6. Net Loss Per Share

The following table shows the computation of basic and diluted net loss per share (in thousands, except share and per share data):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Net loss	\$ (5,220)	\$ (14,596)	\$ (27,510)	\$ (27,800)
Weighted-average number of shares outstanding used to compute net loss per share, basic and diluted	26,840,555	26,296,560	26,667,458	26,267,914
Net loss per share, basic and diluted	\$ (0.19)	\$ (0.56)	\$ (1.03)	\$ (1.06)

The following outstanding shares of potentially dilutive securities were excluded from the computation of diluted net loss per share for the periods presented because their effect would have been anti-dilutive:

	Three and Six Months Ended June 30,	
	2023	2022
Common stock options	5,354,618	4,574,917
Unvested restricted stock awards and units	213,436	240,280
Total potentially dilutive shares	5,568,054	4,815,197

7. Restructuring Plan

During the three months ended June 30, 2023, the Company incurred \$0.7 million of termination costs associated with the Restructuring Plan, primarily related to severance payments, healthcare benefits and stock-based compensation. These costs also included non-cash expenses of \$0.2 million related to a loss on impairment of the Company's ROU assets associated with ceasing use of its Bellevue office space, which is discussed further in Note 4.

A summary of the restructuring costs recorded in the condensed consolidated statements of operations and comprehensive loss for the three and six months ended June 30, 2023 is as follows (in thousands):

	Three Months Ended June 30, 2023			
	ROU Asset Impairment	Severance and Benefits Costs	Stock-based Compensation	Total Restructuring Cost Recorded
General and administrative expense	\$ 180	\$ 399	154	\$ 733
Research and development expense	—	—	—	—
Total restructuring costs	\$ 180	\$ 399	\$ 154	\$ 733

	Six Months Ended June 30, 2023			
	ROU Asset Impairment	Severance and Benefits Costs	Stock-based Compensation	Total Restructuring Cost Recorded
General and administrative expense	\$ 180	\$ 5,836	\$ 8,674	\$ 14,690
Research and development expense	—	1,342	488	1,830
Total restructuring costs	\$ 180	\$ 7,178	\$ 9,162	\$ 16,520

Employees affected by the reduction in workforce under the 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 had no requirement to provide future service beyond a minimum retention period, the Company recognized the liability for the full termination benefits at fair value in the first quarter of 2023. For employees who are required to provide services beyond a minimum retention period to receive their termination benefits, the Company recognizes the termination benefits ratably over their future service periods. The service periods began in February 2023 and primarily end at various dates through the third quarter of 2023.

The activity in the restructuring liability is as follows (in thousands):

	Restructuring Liability 2023
Restructuring liability as of December 31, 2022	\$ —
Severance costs incurred during the three months ended March 31, 2023	6,779
Severance costs paid during the three months ended March 31, 2023	(5,492)
Restructuring liability as of March 31, 2023	1,287
Severance costs incurred during the three months ended June 30, 2023	399
Severance costs paid during the three months ended June 30, 2023	(919)
Restructuring liability as of June 30, 2023	\$ 767

The restructuring liability balance as of June 30, 2023 includes approximately \$0.1 million of estimated payments related to the continuation of healthcare coverage for periods greater than twelve months, which is included in other long-term liabilities on the balance sheet.

The Company expects to incur aggregate costs of approximately \$16.9 million in connection with the Restructuring Plan. The remaining accrued restructuring liability is subject to assumptions, and actual amounts may differ. The Company may also incur additional costs not currently contemplated due to events that may occur as a result of, or that are associated with, the Restructuring Plan. The actions associated with the Restructuring Plan are expected to be substantially complete by the third quarter of 2023.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and related notes included in this Quarterly Report on Form 10-Q and the audited financial statements and notes thereto as of and for the year ended December 31, 2022 and the related Management’s Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K filed with the SEC on March 6, 2023. Unless the context requires otherwise, references in this Quarterly Report on Form 10-Q to “we,” “us” and “our” refer to Eliem Therapeutics, Inc. and its wholly owned subsidiary.

Forward-Looking Statements

The following discussion of our financial condition and results of operations contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements are based on our management’s beliefs and assumptions and on information currently available to our management. All statements other than statements of historical facts are “forward-looking statements” for purposes of these provisions, including those relating to future events or our future financial performance and financial guidance. In some cases, you can identify forward-looking statements by terminology such as “may,” “might,” “will,” “should,” “expect,” “plan,” “anticipate,” “project,” “believe,” “estimate,” “predict,” “potential,” “intend” or “continue,” the negative of terms like these or other comparable terminology, and other words or terms of similar meaning in connection with any discussion of future operating or financial performance. These statements are only predictions.

All forward-looking statements included in this document are based on information available to us on the date hereof, and we assume no obligation to update any such forward-looking statements. Any or all of our forward-looking statements in this document may turn out to be wrong. Actual events or results may differ materially. Our forward-looking statements can be affected by inaccurate assumptions we might make or by known or unknown risks, uncertainties and other factors. In evaluating these statements, you should specifically consider various factors, including the risks outlined under the caption “Risk Factors” set forth in Item 1A of Part II of this Quarterly Report on Form 10-Q, as well as those contained from time to time in our other filings with the SEC. We caution investors that our business and financial performance are subject to substantial risks and uncertainties.

Overview

We are a biotechnology company focused on developing novel therapies for neuronal excitability disorders to address unmet needs in psychiatry, epilepsy, chronic pain, and other disorders of the peripheral and central nervous systems.

Prior to July 2023, our lead program was ETX-123, a Kv7.2/3 potassium channel opener. Kv7.2/3 has been clinically validated as a therapeutic target for both epilepsy and pain, with further encouraging clinical data in depression. The first generation Kv7 channel opener, ezogabine (Potiga), was approved for refractory focal onset seizures in 2011 in both the United States and in Europe (where it was known as retigabine, or Trobalt). Flupirtine (Katadolon) was another first generation Kv7.2/3 opener that provided clinical validation and was used in Europe as a treatment for acute pain. These molecules showed clinical efficacy but subsequently had to be withdrawn from the market due to safety issues. ETX-123 is a new chemical entity (NCE) designed to harness the efficacy of the Kv7.2/3 channel mechanism while attempting to improve the safety and tolerability relative to earlier molecules, based on our insights into the mechanisms of toxicity and the potency and selectivity profile.

In July 2023, we made the determination to conduct a comprehensive exploration of strategic alternatives focused on maximizing stockholder value. As part of that effort, we have paused further development of our Kv7 program, while continuing ongoing preclinical studies and exploring options for both Kv7 and ETX-155. Despite devoting significant effort to identifying and evaluating potential strategic alternatives, there can be no assurance that this strategic review process will result in us pursuing any transaction or that any transaction, if pursued, will be completed on attractive terms or at all. We have not set a timetable for completion of this strategic review process, and our board of directors has not approved a definitive course of action. Additionally, there can be no assurances that any particular course of action, business arrangement or transaction, or series of transactions, will be pursued, successfully consummated or lead to increased stockholder value or that we will make any additional cash distributions to our stockholders.

In February 2023, we paused further investment in the development of our clinical-stage program, ETX-155. Based on our preclinical and clinical work to date, ETX-155 has the potential to be pursued for the treatment of major depressive disorder (MDD), epilepsy and anxiety disorders. We have received clearance of our IND application filed with the psychiatry division of the FDA to support a potential Phase 2 clinical trial in MDD that may be conducted in the future by Eliem or a strategic partner.

We have incurred significant operating losses since inception, as we have devoted substantially all of our resources to organizing and staffing our company, identifying potential product candidates, business planning, raising capital, undertaking research, executing preclinical studies and clinical development trials, and providing general and administrative support for business activities. We incurred net losses of \$5.2 million and \$14.6 million for the three months ended June 30, 2023 and 2022, respectively, and \$27.5 million and \$27.8 million for the six months ended June 30, 2023 and 2022, respectively. We had an accumulated deficit of \$148.4 million and \$120.9 million as of June 30, 2023 and December 31, 2022, respectively.

Since our inception, we have funded our operations with an aggregate of \$208.3 million in net proceeds from the sale and issuance of shares of our redeemable convertible preferred stock and our initial public offering of our common stock. We had cash, cash equivalents, and marketable securities of \$102.6 million and \$123.6 million as of June 30, 2023 and December 31, 2022, respectively. Based on our current operating plan, we estimate that our cash, cash equivalents and marketable securities will be sufficient to fund our planned operations through at least 12 months following the filing date of this Form 10-Q.

We anticipate that our expenses and operating losses will decrease over the foreseeable future as a result of the decision to pause the development of our Kv7 program and explore strategic alternatives, as well as lower personnel costs related to the substantial completion of the restructuring announced in February 2023.

We do not have any products approved for sale and have not generated any revenue from product sales since our inception. To the extent we continue to pursue clinical development of any future product candidate, our ability to generate product revenue will depend on the successful development, regulatory approval and eventual commercialization of one or more of our product candidates, if approved. We cannot assure you that we will ever be profitable or generate positive cash flow from operating activities.

If a strategic transaction is not consummated and/or if product development is resumed, we will require substantial additional funding to support our continuing operations. Until such time as we can generate significant revenue from product sales, if ever, we may finance our operations through the sale of equity, debt financings or other capital sources, which could include income from collaborations, strategic partnerships or other strategic arrangements. To a lesser extent, we also may continue to rely on U.K. research and development tax credits and incentives for funding. Adequate funding may not be available when needed or on terms acceptable to us, or at all. If we are unable to raise additional capital as needed, we may have to significantly delay, scale back or discontinue development of our product candidates. Our ability to raise additional funds may be adversely impacted by potential worsening global economic conditions and the recent disruptions to, and volatility in, the credit and financial markets in the United States and worldwide, resulting from increased volatility in the trading prices for shares in the biopharmaceutical industry, the ongoing pandemic, or otherwise. In addition, our ability to continue to benefit from research and development tax credits and incentives will depend on our ability to continue meet the applicable requirements for them. If we fail to obtain necessary capital when needed on acceptable terms, or at all, it could force us to delay, limit, reduce or terminate our product development programs, commercialization efforts or other operations. Insufficient liquidity may also require us to relinquish rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose.

Restructuring Plan

On February 7, 2023, our board of directors approved a restructuring plan (the Restructuring Plan) to conserve financial resources and better align our workforce with current business needs, as a result of the decision to pause development of ETX-155 and focus on our preclinical Kv7.2/3 program. As part of the Restructuring Plan, our workforce was reduced by approximately 55%, with substantially all of the reduction in personnel completed in the first half of 2023.

During the three and six months ended June 30, 2023, we recorded restructuring costs of \$0.7 million and \$16.5 million, respectively. These costs are primarily related to severance payments, healthcare benefits and stock-based compensation. We expect to incur aggregate costs of approximately \$16.9 million in connection with the Restructuring Plan. The remaining costs of \$0.4 million are expected to be substantially recognized by the third quarter of 2023.

Recent Developments

Process to Evaluate Strategic Alternatives

On July 20, 2023, we announced that we made the determination to conduct a comprehensive exploration of strategic alternatives focused on maximizing stockholder value. As part of that effort, we have paused further development of our Kv7 program, while continuing ongoing preclinical studies and exploring options for both Kv7 and ETX-155. We have engaged Leerink Partners to act as an advisor in the process to explore strategic alternatives.

As part of this process, we will explore potential strategic alternatives that may include, but are not limited to, an acquisition, merger, business combination, or other transaction. There can be no assurance that this exploration will result in the pursuit of a transaction or that any transaction, if pursued, will be completed on attractive terms, if at all. We have not set a timetable for completion of this evaluation process and do not intend to disclose further developments unless and until it is determined that further disclosure is appropriate or necessary.

Components of Operating Results

Operating Expenses

Our operating expenses consist of (i) research and development expenses and (ii) general and administrative expenses.

Research and Development

Our research and development expenses consist primarily of direct and indirect costs incurred in connection with our discovery efforts, preclinical studies, and clinical trial activities related to our pipeline, including our recently paused product candidates ETX-123 and ETX-155, as well as our discontinued product candidate ETX-810, which was being developed for the treatment of diabetic peripheral neuropathic pain and lumbosacral radicular pain.

Our direct research and development costs include:

- expenses incurred in connection with research, laboratory consumables and preclinical and clinical trial activities;
- the cost to manufacture drug products for use in our preclinical studies and clinical trials; and
- consulting fees.

Our indirect research and development costs include:

- personnel-related expenses, such as salaries, bonuses, benefits, and stock-based compensation expense, for our scientific personnel performing research and development activities; and
- facility rent.

Total direct costs and indirect costs are as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Direct costs	\$ 2,216	\$ 8,909	\$ 4,811	\$ 17,524
Indirect costs	2,002	2,191	6,179	4,036
Research and development tax credits	(530)	(2,331)	(1,582)	(4,531)
Total research and development expenses	<u>\$ 3,688</u>	<u>\$ 8,769</u>	<u>\$ 9,408</u>	<u>\$ 17,029</u>

We expense research and development costs as incurred. Non-refundable advance payments for goods and services that will be used over time for research and development are capitalized and recognized as goods are delivered or as the related services are performed.

We categorize costs by stage of development clinical or preclinical. Given our stage of development and the utilization of our resources across our various programs, we have not historically tracked our research and development costs by program. Research and development expenses are presented net of refundable research and development tax credits from the U.K. government.

Research and development costs by stage of development are as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Clinical	\$ 1,962	\$ 8,237	\$ 4,550	\$ 16,098
Preclinical	2,256	2,863	4,610	5,462
Restructuring costs	—	—	1,830	—
Research and development tax credits	(530)	(2,331)	(1,582)	(4,531)
Total research and development expenses	\$ 3,688	\$ 8,769	\$ 9,408	\$ 17,029

General and Administrative

Our general and administrative expenses consist primarily of personnel-related expenses such as salaries, bonuses, benefits, and stock-based compensation, for our personnel in executive, finance and accounting, human resources, business development and other administrative functions. Other significant general and administrative expenses include legal fees relating to intellectual property and corporate matters, professional fees for accounting, audit, regulatory, tax and consulting services, insurance costs, as well as investor and public relations costs.

Other Income (Expense)

Foreign Currency Gain (Loss)

Our foreign currency gain (loss) consists of gains and losses resulting from (i) remeasurement of our British Pound denominated monetary assets and liabilities, primarily our recoverable research and development tax credits and (ii) foreign currency transactions between the British Pound and the U.S. Dollar.

Interest Income, net

Our interest income consists of interest earned on our cash, cash equivalents and marketable securities and adjustments related to amortization of purchase premiums and accretion of discounts of marketable securities.

Results of Operations

Comparison of the Three Months Ended June 30, 2023 and June 30, 2022

The following table sets forth our results of operations (dollars in thousands):

	Three Months Ended June 30,		Change	
	2023	2022	\$	%
Operating expenses:				
Research and development	\$ 3,688	\$ 8,769	\$ (5,081)	(57.9)%
General and administrative	3,026	4,932	(1,906)	(38.6)%
Total operating expenses	6,714	13,701	(6,987)	(51.0)%
Loss from operations	(6,714)	(13,701)	6,987	(51.0)%
Other income (expense):				
Foreign currency gain (loss)	384	(1,042)	1,426	(136.9)%
Interest income, net	1,110	147	963	655.1%
Total other income (expense)	1,494	(895)	2,389	(266.9)%
Net loss	\$ (5,220)	\$ (14,596)	\$ 9,376	(64.2)%

Operating Expenses

Research and Development

Research and development expenses decreased by 57.9% from \$8.8 million for the three months ended June 30, 2022 to \$3.7 million for the three months ended June 30, 2023. The decrease was driven by (i) a \$6.7 million decrease in clinical and preclinical expenses, primarily due to the pause of ETX-155 in February 2023 and the discontinuation of ETX-810 in August 2022, and (ii) a \$0.2 million decrease in personnel-related expenses, largely due to reduced headcount. This decrease was partially offset by a \$1.8 million decrease in the refundable research and development tax credits from the U.K. generated due to (i) the overall decrease in qualifying research and development expenses and (ii) a reduction in tax credit rates that took effect in the current period as a result of changes to the research and development tax credit program by the U.K. government.

General and Administrative

General and administrative expenses decreased by 38.6% from \$4.9 million for the three months ended June 30, 2022 to \$3.0 million for the three months ended June 30, 2023. This decrease was driven by (i) a \$1.8 million decrease in personnel-related expenses from reduced headcount and (ii) a \$0.8 million overall decrease in other general and administrative expenses, largely due to a reduction in consulting fees, legal expenses, and human resource costs. This decrease was partially offset by a \$0.7 million increase related to restructuring costs.

Other Income (Expense)

Foreign Currency Gain (Loss)

Foreign currency gain increased from a \$1.0 million loss for the three months ended June 30, 2022 to a \$0.4 million gain for the three months ended June 30, 2023. The increase was driven by favorable changes in foreign currency exchange rates between the British Pound and the U.S. Dollar in the current period. These changes affect the remeasurement of our British Pound denominated monetary assets and liabilities, primarily our recoverable research and development tax credits.

Interest Income net

Interest income, net increased from \$0.1 million for the three months ended June 30, 2022 to \$1.1 million for the three months ended June 30, 2023, which was driven by an increase in investment income. The increase was due to greater rates of return on our investments as a result of higher interest rates in the current period.

Comparison of the Six Months Ended June 30, 2023 and June 30, 2022

The following table sets forth our results of operations (dollars in thousands):

	Six Months Ended June 30,		Change	
	2023	2022	\$	%
Operating expenses:				
Research and development	\$ 9,408	\$ 17,029	\$ (7,621)	(44.8)%
General and administrative	20,744	9,804	10,940	111.6%
Total operating expenses	30,152	26,833	3,319	12.4%
Loss from operations	(30,152)	(26,833)	(3,319)	12.4%
Other income (expense):				
Foreign currency gain (loss)	632	(1,199)	1,831	(152.7)%
Interest income, net	2,010	232	1,778	766.4%
Total other income (expense)	2,642	(967)	3,609	(373.2)%
Net loss	\$ (27,510)	\$ (27,800)	\$ 290	(1.0)%

Operating Expenses

Research and Development

Research and development expenses decreased by 44.8% from \$17.0 million for the six months ended June 30, 2022 to \$9.4 million for the six months ended June 30, 2023. The decrease was driven by (i) a \$12.7 million decrease in clinical and preclinical expenses, primarily due to the pause of ETX-155 in February 2023 and the discontinuation of ETX-810 in August 2022. This decrease was partially offset by (i) a \$2.1 million increase in personnel-related expenses, primarily related to restructuring costs of \$1.8 million and (ii) a \$2.9 million decrease in the refundable research and development tax credits from the U.K. generated due to (i) the overall reduction in qualifying research and development expenses and (ii) a reduction in tax credit rates that took effect in the current period as a result of changes to the research and development tax credit program by the U.K. government.

General and Administrative

General and administrative expenses increased by 111.6% from \$9.8 million for the six months ended June 30, 2022 to \$20.7 million for the six months ended June 30, 2023. This increase was driven by restructuring costs of \$14.5 million, partially offset by (i) a decrease of \$2.6 million in personnel-related expenses from reduced headcount and (ii) a \$1.0 million overall decrease in other general and administrative expense, largely due to a reduction in consulting fees, legal expenses, and human resource costs.

Other Income (Expense)

Foreign Currency Gain (Loss)

Foreign currency gain increased from a \$1.2 million loss for the six months ended June 30, 2022 to a \$0.6 million gain for the six months ended June 30, 2023. The increase was driven by favorable changes in foreign currency exchange rates between the British Pound and the U.S. Dollar in the current period. These changes affect the remeasurement of our British Pound denominated monetary assets and liabilities, primarily our recoverable research and development tax credits.

Interest Income net

Interest income, net increased from \$0.2 million for the six months ended June 30, 2022 to \$2.0 million for the six months ended June 30, 2023, which was driven by an increase in investment income. The increase was due to greater rates of return on our investments as a result of higher interest rates in the current period.

Liquidity and Capital Resources

Sources of Liquidity

We primarily generate cash and cash equivalents from the sale of our equity securities, including common stock and redeemable convertible preferred stock, and to a lesser extent from cash received pursuant to U.K. research and development tax credits and incentives. From our inception to June 30, 2023, we raised aggregate proceeds of \$208.3 million from the issuance of shares of our redeemable convertible preferred stock and from our initial public offering of our common stock. We have not generated any revenue from product sales or otherwise. We have incurred net losses from operations since our inception and anticipate we will continue to incur net losses for the foreseeable future. As of June 30, 2023 and December 31, 2022, we had cash, cash equivalents, and marketable securities of \$102.6 million and \$123.6 million and an accumulated deficit of \$148.4 million and \$120.9 million, respectively.

Funding Requirements

We have experienced recurring net losses since inception and we expect to continue to incur losses for the foreseeable future. We believe our cash, cash equivalents, and marketable securities of \$102.6 million as of June 30, 2023 will be sufficient to meet our projected operating requirements for at least the next twelve months. Continued cash generation is highly dependent on our ability to finance our operations through the sale of equity, debt financings or other capital sources, including potential collaborations with other companies or other strategic transactions. However, our resource requirements could materially change depending on the outcome of our ongoing strategic alternative review process, including to the extent we identify and enter into any potential strategic transaction.

Cash Flows

The following table summarizes our cash flows (in thousands):

	Six Months Ended June 30,	
	2023	2022
Net cash used in operating activities	\$ (23,142)	\$ (24,745)
Net cash provided by investing activities	4,196	11,653
Net cash provided by financing activities	25	—

Operating activities

For the six months ended June 30, 2023, net cash used in operating activities was \$23.1 million. This consisted primarily of net loss of \$27.5 million and changes in our operating assets and liabilities that resulted in a net decrease in cash of \$5.1 million, primarily related to personnel and research and development activities. The decrease in cash was partially offset by total non-cash adjustments of \$9.5 million that consisted of stock-based compensation expense of \$10.9 million, ROU asset impairment expense of \$0.2 million, and non-cash lease expense of \$0.2 million, partially offset by accretion of discounts on investments of \$1.2 million, and foreign currency gain on remeasurement of \$0.6 million.

For the six months ended June 30, 2022, net cash used in operating activities was \$24.7 million. This consisted primarily of net loss of \$27.8 million and changes in our operating assets and liabilities that resulted in a net decrease of \$2.0 million, primarily related to research and development activities, which was partially offset by non-cash charges of \$5.1 million that included stock-based compensation of \$3.3 million and a foreign currency loss of \$1.2 million resulting from remeasurement.

Investing activities

For the six months ended June 30, 2023, net cash provided by investing activities was \$4.2 million. This consisted of \$60.2 million in proceeds received from maturities of marketable securities, primarily offset by purchases of \$56.0 million of marketable securities.

For the six months ended June 30, 2022, net cash provided by investing activities was \$11.7 million. This consisted of \$46.2 million of proceeds received from maturities of investments in marketable securities, partially offset by purchases of \$34.5 million of investments in marketable securities.

Contractual Commitments and Obligations

In the normal course of business, we enter into contracts with contract research organizations (CROs), contract development and manufacturing organizations (CDMOs), and other third parties for preclinical studies and clinical trials, research and development supplies, and other testing and manufacturing services. These contracts do not contain material minimum purchase commitments and generally provide us with the option to cancel, reschedule and adjust our requirements based on our business needs, prior to the delivery of goods or performance of services. However, it is not possible to predict the maximum potential amount of future payments under these agreements due to the conditional nature of our obligations and the unique facts and circumstances involved in each agreement.

As part of the Restructuring Plan, we estimate we will incur additional cash payments up to approximately \$1.1 million for termination benefits, which is largely expected to be paid by the third quarter of 2023.

Off Balance Sheet Arrangements

We did not have any off-balance sheet arrangements as of June 30, 2023 and December 31, 2022.

Critical Accounting Policies and Estimates

This management's discussion and analysis of our financial condition and results of operations is based on our audited consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of our condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and notes to the condensed consolidated financial statements. Some of those judgments can be subjective and complex, and therefore, actual results could differ materially from those estimates under different assumptions and conditions.

A summary of our critical accounting policies is presented in our audited consolidated financial statements and notes thereto as of and for the year ended December 31, 2022 included in our Annual Report on Form 10-K. There were no material changes to our critical accounting policies during the six months ended June 30, 2023.

Recent Accounting Pronouncements

See Note 1 in our condensed consolidated financial statements included herein and see Note 2 to our annual consolidated financial statements included in our Annual Report on Form 10-K.

Emerging Growth Company Status

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act (JOBS Act). Under the JOBS Act, emerging growth companies can delay adopting 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 audited consolidated financial statements in a registration statement for an IPO, an exemption from the requirement to provide an auditor's report on internal controls over financial reporting pursuant to the Sarbanes-Oxley Act, 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.

As a result, our consolidated 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 under the JOBS Act until the earliest of (i) the last day of our first fiscal year in which we have total annual gross revenue of \$1.24 billion or more, (ii) the date on which we have issued more than \$1.0 billion of non-convertible debt instruments during the previous three fiscal years, (iii) the date on which we are deemed a "large accelerated filer" under the rules of the SEC with at least \$700.0 million of outstanding equity securities held by non-affiliates, or (iv) December 31, 2026.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

As a smaller reporting company, we are not required to provide the information requested by this item pursuant to Item 305(e) of Regulation S-K.

Item 4. Controls and Procedures

Disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) under the Exchange Act) are designed to ensure that information required to be disclosed by us in 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 that such information is accumulated and communicated to our management, including our executive chairman (who is our principal executive and financial officer) or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Based on our evaluation, our executive chairman has concluded that the Company's disclosure controls and procedures (as such term is defined in Rule(s) 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) were not effective as of June 30, 2023 because of the material weaknesses in our internal control over financial reporting described below.

Notwithstanding the material weaknesses, management believes the condensed consolidated financial statements as included in Part I of this Quarterly Report on Form 10-Q present fairly, in all material respects, the Company's financial condition, results of operations and cash flows as of and for the periods presented in accordance with generally accepted accounting principles in the United States.

Material Weaknesses in Internal Control Over Financial Reporting

Management identified material weaknesses in our internal control over financial reporting. A material weakness is a deficiency or combination of deficiencies in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim consolidated financial statements will not be prevented or detected on a timely basis. The material weaknesses are as follows:

- We did not design or maintain an effective control environment. Specifically, we lacked a sufficient number of professionals with an appropriate level of accounting knowledge, training and experience to appropriately analyze, record and disclose accounting matters commensurate with accounting and reporting requirements. The lack of personnel contributed to the following material weakness.
- We did not design and maintain formal accounting policies, procedures and controls to achieve complete, accurate and timely financial accounting, reporting and disclosures, including segregation of duties and controls over the preparation and review of journal entries, account reconciliations and consolidation.

These material weaknesses did not result in a misstatement to the condensed consolidated financial statements. However, these material weaknesses could result in a misstatement of our account balances or disclosures that would result in a material misstatement of our annual or interim consolidated financial statements that would not be prevented or detected.

Remediation Efforts to Address Material Weaknesses

Management has concluded that the material weaknesses in internal control over financial reporting were due to the fact that we were a private company with limited resources when the material weaknesses were identified and did not have the necessary business processes and related internal controls formally designed and implemented, coupled with the appropriate resources with the appropriate level of experience and technical expertise, to oversee our business processes and controls.

We have implemented measures designed to improve internal control over financial reporting to remediate the control deficiencies that led to our material weaknesses. The remediation measures we have taken include:

- Hired qualified personnel with appropriate expertise to perform specific functions and ensure adequate segregation of key duties and responsibilities;
- Designed and implemented improved policies, processes, and internal controls, including senior management review and audit committee oversight, to achieve complete, accurate and timely financial accounting, reporting and disclosures;
- Implemented and formalized policies, processes, and internal controls to identify and assess complex accounting transactions and other technical accounting and financial reporting matters;
- Implemented new financial systems to improve segregation of duties and controls and reliability of system generated data; and
- Engaged third-party professionals to perform testing over the design and operating effectiveness of controls.

We believe we have made substantial progress toward achieving the effectiveness of our internal control over financial reporting and disclosure controls and procedures. The actions that have been taken are subject to continued review and testing by management as well as oversight by the audit committee of our board of directors. We will not be able to conclude whether the steps we have taken will fully remediate these material weaknesses in our internal control over financial reporting until we have completed our remediation efforts and subsequent evaluation of their effectiveness.

Changes in Internal Control over Financial Reporting

Other than in connection with the implementation of the remedial measures described above, there have not been any changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter to which this Report relates that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

Item 1. Legal Proceedings.

From time to time, in the ordinary course of business, we may be involved in various claims, lawsuits and other proceedings. As of the date of filing of this Quarterly Report on Form 10-Q, we were not involved in any material legal proceedings.

Item 1A. Risk Factors.

RISK FACTORS

The following information sets forth risk factors that could cause our actual results to differ materially from those contained in forward-looking statements we have made in this Quarterly Report on Form 10-Q and those we may make from time to time. You should carefully consider the risks described below, in addition to the other information contained in this Quarterly Report on Form 10-Q and our other public filings. Our business, financial condition or results of operations could be harmed by any of these risks. The risks and uncertainties described below are not the only ones we face. Additional risks not presently known to us or other factors not perceived by us to present significant risks to our business at this time also may impair our business operations.

Risk Factor Summary

Our business is subject to numerous risks and uncertainties, including those risks discussed in further detail below. These risks include, among others, the following:

- We may not be successful in identifying and implementing any strategic transaction and any strategic transactions that we may consummate in the future may not be successful. If we are able to complete any such transaction, it may not result in additional value to stockholders and may present additional challenges. We may also elect to pursue a dissolution and liquidation of the Company instead of a strategic transaction, which may impact the timing and amount of payments to our stockholders.
- We have incurred significant losses since our inception, anticipate that we will incur substantial losses for the foreseeable future, and may never achieve or maintain profitability. We had an accumulated deficit of \$148.4 million as of June 30, 2023.
- If we are unable to access capital when needed, it could force us to delay, reduce or terminate our product development programs, commercialization efforts, or other operations.
- We currently have no source of product revenue, and we may never become profitable.
- Our future success is dependent primarily on regulatory approval and commercialization of our future product candidates.
- Even if our future product candidates receive regulatory approval, they may still face future development and regulatory difficulties.
- Preclinical and clinical development involves a lengthy, complex and expensive process with an uncertain outcome. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and the results of any future clinical trials may not satisfy the requirements of the Food and Drug Administration (FDA) or comparable foreign regulatory authorities.
- We have never commercialized a product candidate and we may lack the necessary expertise, personnel and resources to successfully commercialize any of our products that receive regulatory approval on our own or together with collaborators.
- We face significant competition from other pharmaceutical and biotechnology companies and other research organizations and our operating results will suffer if we fail to compete effectively.
- We rely, and expect to continue to rely, on third parties to conduct, supervise and monitor our preclinical studies and clinical trials, and those third parties may not perform satisfactorily, including by failing to meet deadlines for the completion of such trials or failing to comply with regulatory requirements.
- We rely, and expect to continue to rely, on third parties to manufacture our clinical and ultimately commercial product supply. Those third parties may not perform satisfactorily, including by failing to meet product specifications, required demand or cost-efficient scale levels.

- If we are unable to obtain, maintain and protect sufficient patent and other intellectual property rights for our product candidates and technology, or if the scope of patent and other intellectual property rights obtained is not sufficiently broad, we may not be able to compete effectively in our market.
- We have identified material weaknesses in our internal control over financial reporting. If we are unable to remediate these material weaknesses, or if we identify additional material weaknesses in the future or otherwise fail to maintain effective internal control over financial reporting, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect our business.

Risks Related to Strategic Process and Potential Strategic Transaction

We may not be successful in identifying and implementing any strategic transaction and any strategic transactions that we may consummate in the future may not be successful.

In July 2023, we made the strategic decision to pause further development of our Kv7 program and to conduct a comprehensive exploration of strategic alternatives focused on maximizing stockholder value. As part of this process, we expect to explore potential strategic alternatives that may include, but are not limited to, an acquisition, merger, business combination, or other transaction. However, there can be no assurance that we will be able to successfully consummate any particular strategic transaction. The process of continuing to evaluate these strategic options may be very costly, time-consuming and complex and we may incur significant costs related to this continued evaluation. We may also incur additional unanticipated expenses in connection with this process. A considerable portion of these costs will be incurred regardless of whether any such course of action is implemented, or transaction is completed. Any such expenses will decrease the remaining cash available for use in our business and may diminish or delay any future distributions to our stockholders. In addition, we may not be able to adequately limit or avoid future liabilities, including future costs relating to the lease on our headquarters, which may impair the value of any potential transaction or present additional challenges to completing a strategic transaction.

There can be no assurances that any particular course of action, business arrangement or 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 reduce or delay any future distributions to our stockholders.

We may not realize any additional value in a strategic transaction.

The market capitalization of our company is below the value of our current cash, cash equivalents and marketable securities. Potential counterparties in a strategic transaction involving our company may place minimal or no value on our assets, including ETX-123 and ETX-155. Further, the development and any potential commercialization of our product candidates would require substantial additional cash to fund the costs associated with conducting the necessary preclinical and clinical testing and obtaining regulatory approval. Consequently, any potential counterparty in a strategic transaction involving our company may choose not to spend the additional resources necessary to continue developing our product candidates and may attribute little or no value, in such a transaction, to those product candidates.

If we are successful in completing a strategic transaction, we may be exposed to other operational and financial risks.

Although there can be no assurance that a strategic transaction will result from the process we have undertaken to assess strategic options, the negotiation and consummation of any such transaction will require significant time on the part of our management, and the diversion of management's attention may disrupt the orderly operation of our company. The negotiation and consummation of any such transaction may also require more time or greater cash resources than we anticipate and expose us to other operational and financial risks, including:

- increased near-term and long-term expenditures;
- exposure to unknown liabilities;
- higher than expected acquisition, disposition or integration costs;
- incurrence of substantial debt or dilutive issuances of equity securities to fund future operations;
- write-downs of assets or incurrence of non-recurring, impairment or other charges;
- difficulty and cost in combining the operations and personnel of any acquired business with our operations and personnel;
- impairment of relationships with key suppliers or customers of any acquired business due to changes in management and ownership;

- inability to retain key employees of our company or any acquired business; and
- possibility of future litigation.

Our Board may decide to pursue a dissolution and liquidation. In such an event, the amount of cash available for distribution to our stockholders will depend heavily on the timing of such liquidation as well as the amount of cash that will need to be reserved for commitments and contingent liabilities.

There can be no assurance that a strategic transaction will be completed and, whether or not such strategic transaction is completed, our Board may decide to pursue a dissolution and liquidation. In such an event, the amount of cash available for distribution to our stockholders will depend heavily on the timing of such decision and, as with the passage of time the amount of cash available for distribution will be reduced as we continue to fund our operations. In addition, if our Board were to approve and recommend, and our stockholders were to approve, a dissolution and liquidation, we would be required under Delaware corporate law to pay our outstanding obligations, as well as to make reasonable provision for contingent and unknown obligations, prior to making any distributions in liquidation to our stockholders. As a result of this requirement, a portion of our assets may need to be reserved pending the resolution of such obligations and the timing of any such resolution is uncertain. In addition, we may be subject to litigation or other claims related to a dissolution and liquidation. If a dissolution and liquidation were pursued, our Board, in consultation with our advisors, would need to evaluate these matters and make a determination about a reasonable amount to reserve. Accordingly, holders of our common stock could lose all or a significant portion of their investment in the event of a liquidation, dissolution or winding up.

We may become involved in securities class action litigation that could divert management's attention and harm our business, and insurance coverage may not be sufficient to cover all costs and damages.

In the past, securities class action litigation has often followed certain significant business transactions, such as the sale of a company or announcement of any other strategic transaction, or the announcement of negative events, such as negative results from clinical trials. These events may also result in or be concurrent with investigations by the SEC. We may be exposed to such litigation or investigation even if no wrongdoing occurred. Litigation and investigations are usually expensive and divert management's attention and resources, which could adversely affect our business and cash resources and our ability to consummate a potential strategic transaction or the ultimate value our stockholders receive in any such transaction.

Risks Related to our Financial Position and Need for Additional Capital

We have incurred significant losses since our inception, anticipate that we will incur substantial losses for the foreseeable future and may never achieve or maintain profitability.

We are a biotechnology company with a limited operating history. Our efforts have focused primarily on developing novel therapies for neuronal excitability disorders to address unmet needs in psychiatry, epilepsy, chronic pain, and other disorders of the peripheral and central nervous system. To date, we have not received regulatory approvals for any of our product candidates or generated any revenue from the sale of products, and we do not expect to generate any revenue in the foreseeable future. All of our product candidates are in early stages of research and development and we have paused further development of our programs while we focus on evaluating strategic alternatives. As a result, we are not profitable and we have incurred significant operating losses since inception. Our net losses were \$27.5 million, \$27.8 million and \$45.2 million for the six months ended June 30, 2023 and June 30, 2022 and the year ended December 31, 2022, respectively. We had an accumulated deficit of \$148.4 million as of June 30, 2023.

While we have taken measures to reduce our expenses in the near term, we continue to incur significant expenses related to our ongoing operations, including expenses relating to the wind down of ETX-123 and ETX-155 and expenses related to our ongoing corporate restructuring, and are not currently moving any of our existing product candidates toward commercialization. We therefore expect to continue to have operating losses for the foreseeable future. If we are able to complete a strategic transaction that will allow us to continue development of our programs, we may resume our work to identify, acquire, and conduct research and development of future product candidates, and potentially begin to commercialize any future products that may achieve regulatory approval. We may encounter unforeseen expenses, difficulties, complications, delays, and other unknown factors that may adversely affect our financial condition. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenues. Our prior losses and expected future losses have had, and will continue to have, an adverse effect on our financial condition. If we are unable to bring any of our product candidates or future product candidates through full clinical trials for any reason, or if such product candidates or future product candidates do not gain regulatory approval, or if approved, fail to achieve market acceptance, we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods.

If we are unable to access capital when needed, it could force us to delay, reduce or terminate our product development programs, commercialization efforts, or other operations.

We had cash, cash equivalents, and marketable securities of \$102.6 million at June 30, 2023 and \$123.6 million at December 31, 2022.

We have spent a significant amount of money on our operations to date, including research and development, preclinical and clinical studies. We announced in July 2023 that we have paused further development of our programs that we can focus on reviewing strategic alternatives, which may include a sale, merger, divestiture of assets, licensing or other strategic alternative, with the intention of improving stockholder value. We will continue to incur costs related to our recently paused ETX-123 and ETX-155 programs. Based on our current operating plan, we believe that our available cash, cash equivalents, marketable securities will be sufficient to fund our planned operations through at least 12 months following the filing date of this Form 10-Q.

While we expect to have adequate capital to fund our operations through this process, our future capital requirements and the period during which we expect to complete this strategic process may vary significantly from what we expect, and we may have to seek an alternate resolution to the process. In addition, even if we are successful in completing a strategic transaction, we may still need to raise additional funds for any research and development or clinical programs we may choose to pursue in the future. Because the length of time and activities associated with successful research and development of our product candidates is highly uncertain, and because we have paused further development of our programs while we pursue strategic alternatives, we are unable to estimate the actual funds we will require for development and any marketing and commercialization activities for any product candidates that ultimately may be approved for sale. Our future funding requirements, both near and long-term, will depend on many factors, including, but not limited to:

- our ability to complete a strategic transaction in a timely manner and on acceptable terms;
- the timing, cost and progress of research and preclinical, and clinical development activities;
- the number and scope of development, preclinical and clinical programs we decide to pursue;
- the terms of any collaborations and/or research and development agreements we may enter into, which may impact the cost, timing and development plans of one or more of our product candidate programs;
- the costs involved in prosecuting and enforcing patent and other intellectual property claims;
- the costs of manufacturing our product candidates by third parties;

- the cost of regulatory requirements, regulatory submissions and timing of regulatory approvals;
- the potential delays in our preclinical studies, our development programs and our ongoing and planned clinical trial activities due to the effects of global events, including macroeconomic conditions and continued supply chain disruptions;
- the impact of inflationary pressures on salaries and wages, and costs of goods and transportation expenses, among other things;
- the cost of commercialization activities if any future product candidates are approved for sale, including marketing, sales and distribution costs; and
- our efforts to enhance operational systems and hire personnel to support development of any future product candidates.

If we are unable to obtain funding on a timely basis or on acceptable terms, we may have to pursue less advantageous strategic opportunities, limit future research and development, or dissolve the Company and liquidate our assets. We do not expect to realize revenue from sales of commercial products or royalties from licensed products in the foreseeable future, if at all, and, in no event would we recognize such revenues before any future product candidates are clinically tested, approved for commercialization, and successfully marketed.

We may seek the additional funding we will need to continue operating in the future through collaborations and/or licensing agreements, public or private equity offerings or debt financings, credit or loan facilities, or a combination of one or more of these funding sources. If we raise additional funds by issuing equity securities, our stockholders will suffer dilution and the terms of any financing may adversely affect the rights of our stockholders. In addition, as a condition to providing additional funds to us, future investors may demand, and may be granted, rights superior to those of existing stockholders. If we are able to raise additional funds through future debt financings, the terms of such financings are likely to involve restrictive covenants limiting our flexibility in conducting future business activities, and, in the event of insolvency, debt holders would be repaid before holders of our equity securities received any distribution of our corporate assets. If we raise additional funds through licensing or collaboration arrangements with third parties, we may have to relinquish valuable rights to our product candidates or grant licenses on terms that are not favorable to us. We also could be required to seek collaborators for product candidates at an earlier stage than otherwise would be desirable or relinquish some or all of our rights to certain product candidates or technologies that we otherwise would seek to develop or commercialize ourselves. Failure to obtain capital when needed on acceptable terms may force us to delay, limit or terminate our product development and commercialization of our current or future product candidates, which could have a material and adverse effect on our business, financial condition, results of operations, and prospects.

If we are unable to successfully develop and commercialize product candidates or experience significant delays in doing so, our business may be harmed.

Drug development is a highly uncertain undertaking and involves a substantial degree of risk. For example, we have paused or discontinued the development of all of our remaining product candidates, which are still in drug discovery stages, and we may not ever obtain regulatory approval for any future product candidates.

To date, we have not initiated or completed a pivotal clinical trial, obtained marketing approval for any product candidates, manufactured a commercial scale product or arranged for a third party to do so on our behalf, or conducted sales and marketing activities necessary for successful product commercialization. Our short operating history as a company makes any assessment of our future success and viability subject to significant uncertainty. We will encounter risks and difficulties frequently experienced by early-stage biotechnology companies in rapidly evolving fields, and we have not yet demonstrated an ability to successfully overcome such risks and difficulties. If we do not address these risks and difficulties successfully, our business may be harmed.

We currently have no source of product revenue and may never become profitable.

We have paused further development of our programs and to date, we have not generated any revenues from commercial product sales, or otherwise. Our ability to generate revenue from product sales and achieve profitability will depend upon our ability, alone or with any future collaborators, to successfully commercialize any products that we may develop, in-license or acquire in the future. Even if we are able to successfully achieve regulatory approval for any future product candidates, we do not know when any of these products will generate revenue from product sales for us, if at all. Our ability to generate revenue from any of our future product candidates also depends on a number of additional factors, including our or any future collaborators' ability to:

- complete development activities, including the necessary clinical trials;
- complete and submit new drug applications, or NDAs, to the U.S. Food and Drug Administration, or FDA, and obtain regulatory approval for indications for which there is a commercial market;
- complete and submit applications to, and obtain regulatory approval from, foreign regulatory authorities;

- set a commercially viable price for our products;
- establish and maintain supply and manufacturing relationships with third parties, and ensure adequate and legally compliant manufacturing of bulk drug substances and drug products to maintain that supply;
- develop a commercial organization capable of sales, marketing and distribution for any products for which we obtain marketing approval and intend to sell ourselves in the markets in which we choose to commercialize on our own;
- find suitable distribution partners to help us market, sell and distribute our approved products in other markets;
- obtain coverage and adequate reimbursement from third-party payors, including government and private payors;
- achieve market acceptance for our products, if any;
- establish, maintain and protect our intellectual property rights; and
- attract, hire and retain qualified personnel.

In addition, because of the numerous risks and uncertainties associated with pharmaceutical product development, any future product candidates may not advance through development or achieve the endpoints of applicable clinical trials, 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. In addition, our expenses could increase beyond expectations if we decide, or are required by the FDA or foreign regulatory authorities, to perform studies or trials in addition to those that we currently anticipate. Even if we are able to complete the development and regulatory process for any future product candidates, we anticipate incurring significant costs associated with commercializing these products.

Even if we are able to generate revenues from the sale of any future product candidates that may be approved, we may not become profitable and may need to obtain additional funding to continue operations. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce our operations.

Risks Related to our Business and the Development of our Product Candidates

Our future success is dependent primarily on the regulatory approval and commercialization of our future product candidates.

We do not have any products that have gained regulatory approval. As a result, our prospects, including our ability to finance our operations and generate revenue, are substantially dependent on our ability to obtain regulatory approval for, and, if approved, to successfully commercialize any future product candidates. We cannot commercialize our future product candidates in the United States without first obtaining regulatory approval for the product from the FDA; similarly, we cannot commercialize our future product candidates outside of the United States without obtaining regulatory approval from comparable foreign regulatory authorities. The FDA review process for an NDA typically takes more than a year to complete and approval is never guaranteed. Before obtaining regulatory approvals for the commercial sale of our future product candidates for a target indication, we must demonstrate with substantial evidence gathered in preclinical and well-controlled clinical trials, generally including at least two well-controlled Phase 3 trials, and, with respect to approval in the United States, to the satisfaction of the FDA, that the product candidate is safe and effective for use for that target indication and that the manufacturing facilities, processes and controls are adequate. Obtaining regulatory approval for marketing of our future product candidates in one country does not ensure we will be able to obtain regulatory approval in other countries but a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in other countries.

Even if our future product candidates were to successfully obtain approval from the FDA and comparable foreign regulatory authorities, any approval might contain significant limitations related to use restrictions for specified age groups, gender or subpopulation of target indication, warnings, precautions or contraindications, or may be subject to burdensome post-approval study or risk management requirements. If we are unable to obtain regulatory approval for one or more jurisdictions, or any approval contains significant limitations, we may not be able to obtain sufficient funding or generate sufficient revenue to continue the development of any of our future product candidate that we may discover, in-license, develop or acquire in the future. Also, any regulatory approval of any of our future product candidates, once obtained, may be withdrawn. Furthermore, even if we obtain regulatory approval for any of our future product candidates, their commercial success will depend on a number of factors, including the following:

- development of a commercial organization or establishment of a commercial collaboration with a commercial infrastructure;
- establishment of commercially viable pricing and adequate reimbursement from third-party and government payors;
- the ability of our third-party manufacturers to manufacture quantities of our products in commercially sufficient processes and at a scale sufficient to meet anticipated demand and enable us to reduce our cost of manufacturing;

- our success in educating physicians and patients about the benefits, administration and use of our products;
- the availability, perceived advantages, relative cost, relative safety and relative efficacy of alternative and competing treatments;
- the effectiveness of our own or our potential strategic collaborators' marketing, sales and distribution strategy and operations;
- acceptance of our products as safe and effective by patients and the medical community; and
- a continued acceptable safety profile of our products following approval.

Many of these factors are beyond our control. If we, or our potential commercialization collaborators, are unable to successfully commercialize our product candidates, we may not be able to earn sufficient revenues to continue our business.

Even if our future product candidates receive regulatory approval, they may still face future development and regulatory difficulties.

Even if we obtain regulatory approval for a future product candidate, it would be subject to ongoing requirements by the FDA and comparable foreign regulatory authorities governing the manufacture, quality control, further development, labeling, packaging, storage, distribution, safety surveillance, import, export, advertising, promotion, recordkeeping and reporting of safety and other post-market information. The safety profile of any product will continue to be closely monitored by the FDA and comparable foreign regulatory authorities after approval. If the FDA or comparable foreign regulatory authorities become aware of new safety information after approval of any future product candidate, they may require labeling changes or establishment of a Risk Evaluation and Mitigation Strategy (REMS) or similar strategy, impose significant restrictions on a product's indicated uses or marketing, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance.

In addition, manufacturers of drug products and their facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with current good manufacturing practice (cGMP), requirements and other regulations. If we or a regulatory agency discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. If we, our product candidates or the manufacturing facilities for our product candidates, fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue warning letters or untitled letters;
- impose restrictions on the marketing or manufacturing of the product candidates;
- mandate modifications to promotional materials or require us to provide corrective information to healthcare practitioners;
- require us or any future collaborator to enter into a consent decree, which can include imposition of various fines, reimbursements for inspection costs, required due dates for specific remediation actions and penalties for noncompliance;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve pending applications or supplements to applications filed by us;
- suspend or impose restrictions on operations, including costly new manufacturing requirements; or
- seize or detain products, refuse to permit the import or export of products, or require us to initiate a product recall.

The occurrence of any event or penalty described above may inhibit our ability to commercialize any future product candidates and generate revenue.

The FDA strictly regulates the advertising and promotion of drug products, and drug products may only be marketed or promoted for their FDA approved uses, consistent with the product's approved labeling. Advertising and promotion of any product candidate that obtains approval in the United States will be heavily scrutinized by the FDA, the DOJ, the Office of Inspector General of the Department of Health and Human Services, state attorneys general, members of Congress and the public. Violations, including promotion of our products for unapproved or off-label uses, are subject to enforcement letters, inquiries and investigations, and civil, criminal and/or administrative sanctions by the FDA and other enforcement authorities. Additionally, advertising and promotion of any product candidate that obtains approval outside of the United States will be heavily scrutinized by relevant foreign regulatory authorities.

In the United States, engaging in impermissible promotion of our future products for off-label uses can also subject us to false claims litigation under federal and state statutes, which can lead to numerous actions, including civil, criminal and/or administrative penalties and fines and agreements that materially restrict the manner in which we promote or distribute our drug products. These false claims statutes include the federal False Claims Act, which allows the federal government, or any individual relator or whistleblower on behalf of the federal government to bring a lawsuit against a pharmaceutical company alleging submission of false or fraudulent claims, or causing to present such false or fraudulent claims, for payment by a federal program such as Medicare or Medicaid. If the government prevails in the lawsuit, the individual relator may share in any fines or settlement funds. Since 2004, these False Claims Act lawsuits against pharmaceutical companies have increased significantly in volume and breadth, leading to several substantial civil and criminal settlements based on certain sales practices promoting off-label drug uses. This growth in litigation has increased the risk that a pharmaceutical company will have to defend a false claim action, pay settlement fines or restitution, agree to comply with burdensome reporting and compliance obligations, and be excluded from the Medicare, Medicaid and other federal and state healthcare programs. If we do not lawfully promote our products once they have received regulatory approval, we may become subject to such litigation and, if we are not successful in defending against such actions, those actions could have a material adverse effect on our business, results of operations, financial condition and cash flows and future prospects.

Existing government regulations may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of any future product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and/or be subject to fines or enhanced government oversight and reporting obligations, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

Preclinical and clinical development involves a lengthy, complex and expensive process with an uncertain outcome. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and the results of our clinical trials may not satisfy the requirements of the FDA or comparable foreign regulatory authorities.

To obtain the requisite regulatory approvals to commercialize any future product candidates, we must demonstrate through extensive preclinical studies and clinical trials that our product candidates are safe and effective in humans to the satisfaction of FDA. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. In particular, in the United States, the general approach for FDA approval of a new drug is dispositive data from two well-controlled, Phase 3 clinical trials of the relevant drug in the relevant patient population. Phase 3 clinical trials typically involve hundreds to thousands of patients, have significant costs and take years to complete. A product candidate can fail at any stage of testing, even after observing promising signs of activity in earlier preclinical studies or clinical trials, as demonstrated by the failure of ETX-810 to achieve statistically significant separation from placebo on the primary endpoint in either of our Phase 2a clinical trials in DPNP and LSRP, respectively. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. For example, preclinical models evaluating product candidates for pain are notoriously unreliable and, as such, the therapies face substantial translational risk. In addition, initial success in clinical trials may not be indicative of results obtained when such trials are completed. There is typically an extremely high rate of attrition from the failure of product candidates proceeding through clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biotechnology industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or emergence of unacceptable safety issues, notwithstanding promising results in earlier trials. Most product candidates that commence clinical trials are never approved and there can be no assurance that any of our future clinical trials will ultimately be successful or support further preclinical or clinical development of ETX-123 or any of our other product candidates. The commencement and rate of completion of preclinical studies and clinical trials may be delayed by many factors, including:

- inability to generate sufficient preclinical or other in vivo or in vitro data to support the initiation of clinical studies;
- preclinical studies or clinical trials may show the product candidates to be less effective than expected (e.g., a clinical trial could fail to meet its primary endpoint(s)) or to have unacceptable side effects or toxicities;
- failure to establish clinical endpoints that applicable regulatory authorities would consider clinically meaningful;
- delays in reaching agreement on acceptable terms with prospective CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- delays in identifying, recruiting and training suitable clinical investigators;
- differences in trial design between early-stage clinical trials and later-stage clinical trials make it difficult to extrapolate the results of earlier clinical trials to later clinical trials (e.g., we based our therapeutic hypothesis for ETX-810 on studies conducted in the academic setting and the results from the academic studies were not replicated in our Phase 2a clinical trials of ETX-810);

- delays in recruiting suitable patients to participate in our clinical trials;
- delays in manufacturing, testing, releasing, validating or importing/exporting sufficient stable quantities of our product candidates for use in clinical trials or the inability to do any of the foregoing;
- insufficient or inadequate supply or quality of product candidates or other materials necessary for use in clinical trials, or delays in sufficiently developing, characterizing or controlling a manufacturing process suitable for clinical trials;
- imposition of a temporary or permanent clinical hold by regulatory authorities;
- developments on trials conducted by competitors for related technology that raises FDA or foreign regulatory authority concerns about risk to patients of the technology broadly, or if the FDA or a foreign regulatory authority finds that the investigational protocol or plan is clearly deficient to meet its stated objectives;
- delays in recruiting, screening and enrolling patients and delays caused by patients withdrawing from clinical trials or failing to return for post-treatment follow-up;
- difficulty collaborating with patient groups and investigators;
- failure by our CROs, other third parties or us to adhere to clinical trial protocols;
- failure to perform in accordance with the FDA's or any other regulatory authority's good clinical practice requirements (GCPs) or applicable regulatory guidelines in other countries;
- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits, or occurrence of adverse events in trial of the same class of agents conducted by other companies;
- the cost of clinical trials of our product candidates being greater than we anticipate;
- clinical trials of our product candidates producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon development of such product candidates;
- transfer of manufacturing processes to larger-scale facilities operated by a third-party contract development and manufacturing organization (CDMO) and delays or failure by our CDMOs or us to make any necessary changes to such manufacturing process; and
- third parties being unwilling or unable to satisfy their contractual obligations to us.

Any inability to successfully initiate or complete preclinical studies or clinical trials could result in additional costs to us or impair our ability to generate revenue from product sales. In addition, if we make manufacturing or formulation changes to our product candidates, we may be required to or we may elect to conduct additional studies to bridge our modified product candidates to earlier versions. Clinical trial delays could also shorten any periods during which our products have patent protection and may allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may seriously harm our business.

Further, clinical trials that we may undertake in the future will likely contain endpoints that require subjective assessments and subject us to a substantial risk of "placebo effect" which is a well-known risk in clinical trials evaluating therapeutics for pain as well as depression. While a product candidate may show clinical activity or therapeutic benefit, a high placebo effect in a clinical trial will make it difficult to ascertain that benefit or to show statistically significant effect of the product candidate as compared to the control arm and may ultimately cause a clinical trial to fail. For example, in both of our Phase 2a clinical trials in DPNP and LSRP respectively, ETX-810 did not achieve statistically significant separation from placebo on the trial's primary endpoint.

Moreover, principal investigators for our future clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to the FDA or comparable foreign regulatory authorities. The FDA or comparable foreign regulatory authority may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected interpretation of the study. The FDA or comparable foreign regulatory authority may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA or comparable foreign regulatory authority, as the case may be, and may ultimately lead to the denial of marketing approval of one or more of our product candidates.

Delays in the completion of any preclinical studies or clinical trials of our product candidates will increase our costs, slow down our product candidate development and approval process and delay or potentially jeopardize our ability to commence product sales and generate product revenue. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates. Any delays to our preclinical studies or clinical trials that occur as a result could shorten any period during which we may have the exclusive right to commercialize our product candidates and our competitors may be able to bring products to market before we do, and the commercial viability of our product candidates could be significantly reduced. Any of these occurrences may harm our business, financial condition and prospects significantly.

If we seek to conduct clinical trials in foreign countries or pursue marketing approvals in foreign jurisdictions, we must comply with numerous foreign regulatory requirements governing, among other things, the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-party reimbursement. The foreign regulatory approval process varies among countries and jurisdictions and may include all of the risks associated with FDA approval described above as well as risks attributable to the satisfaction of local regulations in foreign jurisdictions. Moreover, the time required to obtain approval may differ jurisdiction-to-jurisdiction from that required to obtain FDA approval. Approval by foreign regulatory authorities does not ensure approval by the FDA and, similarly, approval by the FDA does not ensure approval by regulatory authorities outside the United States.

Successful completion of clinical trials is a prerequisite to submitting a marketing application to foreign regulatory authorities or the FDA, for each product candidate and, consequently, the ultimate approval and commercial marketing of any product candidates. We may experience negative or inconclusive results, or regulators may be unwilling to accept preclinical or clinical data obtained in foreign jurisdictions, which may result in our deciding, or our being required by regulators, to conduct additional clinical studies or trials or abandon some or all of our product development programs, which could harm our business.

Public health crises such as pandemics or similar outbreaks could materially and adversely affect preclinical studies and clinical trials, business, financial condition and results of operations.

As a result of the COVID-19 pandemic, or similar pandemics, and related public health guidance measures, we have and may in the future experience disruptions that could materially and adversely impact our clinical trials, business, financial condition and results of operations. Potential disruptions include but are not limited to:

- delays or difficulties in enrolling patients in our clinical trials;
- delays or difficulties in initiating or expanding clinical trials, including delays or difficulties with clinical site initiation and recruiting clinical site investigators and clinical site staff;
- increased rates of patients withdrawing from our clinical trials following enrollment as a result of contracting COVID-19 or other health conditions or being forced to quarantine;
- interruption of key clinical trial activities, such as clinical trial site data monitoring and efficacy, safety and translational data collection, processing and analyses, due to limitations on travel imposed or recommended by federal, state or local governments, employers and others or interruption of clinical trial subject visits, which may impact the collection and integrity of subject data and clinical study endpoints;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- delays or disruptions in preclinical experiments and IND-enabling studies due to restrictions of on-site staff and unforeseen circumstances at CROs and vendors;
- interruption or delays in the operations of the FDA and comparable foreign regulatory agencies;
- interruption of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems;
- delays in receiving approval from local regulatory authorities to initiate our planned clinical trials;
- limitations on employee or other resources that would otherwise be focused on the conduct of our clinical trials and preclinical work, including because of sickness of employees or their families, the desire of employees to avoid travel or contact with large groups of people, an increased reliance on working from home, school closures or mass transit disruptions;
- changes in regulations, for example the response to the COVID-19 pandemic, or similar pandemics, which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or to discontinue the clinical trials altogether;

- delays in necessary interactions with regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government or contractor personnel; and
- refusal of the FDA to accept data from clinical trials in affected geographies outside the U.S.

In addition, our business could be materially adversely affected by other business disruptions to us or our third-party providers that could materially adversely affect our potential future revenue and financial condition and increase our costs and expenses. Our operations, and those of our CROs, CDMOs and other contractors, consultants and third parties could be subject to other global pandemics, earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics, geopolitical developments, and other natural or man-made disasters or business interruptions, for which we are predominantly self-insured. For example, war between Russia and Ukraine and the resulting sanctions by U.S. and European governments, together with any additional future sanctions or other actions by them, could have a larger impact that expands into other markets where we do business. Further, the conflict and resulting sanctions or other actions may adversely impact macroeconomic conditions and increase volatility in and affect our ability to access capital markets and external financing sources, as well as have other unforeseen adverse impacts on our business. The occurrence of any of these business disruptions could materially adversely affect our operations and financial condition and increase our costs and expenses. We rely on third-party manufacturers to produce and process our product candidates. Our ability to obtain clinical supplies of our product candidates could be disrupted if the operations of these suppliers are affected by a man-made or natural disaster or other business interruption.

Disruptions at the FDA, the SEC and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal business functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory and policy changes. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities, is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, in recent years, including in 2018 and 2019, the U.S. government shut down several times and certain regulatory agencies, such as the FDA and the SEC, had to furlough critical employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Further, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

Our future product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following any marketing approval.

Undesirable side effects caused by our future product candidates could cause us or regulatory authorities to interrupt, delay or pause clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign regulatory authority. If undesirable side effects do occur in our future clinical trials they could cause delay or even discontinuance of further development of future product candidates, which would impair our ability to generate revenues and would have a material adverse effect on our business, results of operations, financial condition and cash flows and future prospects.

As a result of undesirable side effects or further safety issues that we may experience in our clinical trials in the future, we may not receive approval to market any future product candidates, which could prevent us from ever generating revenues or achieving profitability. Results of our trials could reveal an unacceptably high severity and prevalence of side effects. In such an event, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of, or deny approval of, our product candidates for any or all targeted indications. The drug-related side effects could affect patient recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Any of these occurrences may have a material adverse effect on our business, results of operations, financial condition and cash flows and future prospects.

Additionally, if any of our future product candidates receives marketing approval, and we, or others, later identify undesirable side effects caused by such product, a number of potentially significant negative consequences could result, including:

- we may be forced to suspend marketing of such product;
- regulatory authorities may withdraw their approvals of such product;
- regulatory authorities may require additional warnings on the label that could diminish the usage or otherwise limit the commercial success of such products;
- the FDA or other regulatory bodies may issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings about such product;
- the FDA may require the establishment or modification of a REMS or a comparable foreign regulatory authority may require the establishment or modification of a similar strategy that may, for instance, restrict distribution of our products and impose burdensome implementation requirements on us;
- we may be required to change the way the product is administered or conduct additional clinical trials;
- we could be sued and held liable for harm caused to subjects or patients;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved.

If we encounter difficulties enrolling and/or retaining patients in our future clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

If we are able to move any of our product candidates to the clinical trial stage, we may not be able to initiate or continue our planned clinical trials on a timely basis or at all for our product candidates if we are unable to recruit and enroll a sufficient number of eligible patients to participate in these trials through completion of such trials as required by the FDA or other comparable foreign regulatory authorities. Patient enrollment is a significant factor in the timing of clinical trials. Our ability to enroll eligible patients may be limited or may result in slower enrollment than we anticipate. There may be limited patient pools from which to draw for clinical studies. The eligibility criteria of our clinical studies will further limit the pool of available study participants as we will require that patients have specific characteristics that we can measure or to assure their disease is either severe enough or not too advanced to include them in a study. Patient enrollment for our current or any future clinical trials may be affected by other factors, including:

- the patient eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- the proximity of patients to trial sites;
- the design of the trial;
- the availability and efficacy of approved drugs for the disease under investigation;
- perceived risks and benefits of the product candidate under study;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- competing clinical trials and clinicians' and patients' perceptions as to the potential advantages and risks of the product candidate being studied in relation to other available therapies, including any new drugs that may be approved for the indications that we are investigating;
- clinicians' willingness to screen their patients for biomarkers to indicate which patients may be eligible for enrollment in our clinical trials;
- the impacts of the COVID-19 pandemic on clinical trial sites, personnel and patient travel;
- our ability to obtain and maintain patient consents;
- patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment;

- proximity and availability of clinical trial sites for prospective patients; and
- the risk that patients enrolled in clinical trials will drop out of the trials before completion.

In addition, our clinical trials may compete with other clinical trials for product candidates that are in the same therapeutic areas as our product candidates, and this competition would reduce the number and types of patients available to us, because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. Since the number of qualified clinical investigators is limited, we expect to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials in such clinical trial site.

Our inability to enroll a sufficient number of patients for our clinical trials would result in significant delays or might require us to abandon one or more clinical trials altogether. Delays in patient enrollment may result in increased costs, affect the timing or outcome of the planned clinical trials, product candidate development and approval process and jeopardize our ability to seek and obtain the regulatory approval required to commence product sales and generate revenue, which could prevent completion of these trials, adversely affect our ability to advance the development of our product candidates, cause the value of our company to decline and limit our ability to obtain additional financing if needed. Furthermore, even if we are able to enroll a sufficient number of patients for our clinical trials, we may have difficulty maintaining participation in our clinical trials through the treatment and any follow-up periods.

We are also required to register certain clinical trials and post the results of completed clinical trials on a government-sponsored database, such as www.ClinicalTrials.gov in the United States, within certain time frames. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Due to the significant resources required for the development of our future product candidates, and depending on our ability to access capital, we must prioritize development of certain product candidates. Moreover, we may fail to expend our limited resources on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Due to the significant resources required for the development of our product candidates, we must focus on specific diseases and disease pathways and decide which product candidates to pursue and advance and the amount of resources to allocate to each. Our decisions concerning the allocation of research, development, collaboration, management, and financial resources toward particular product candidates or therapeutic areas may not lead to the development of any viable commercial product and may divert resources away from better opportunities; for example, in 2022, we discontinued further development of ETX-810, which did not achieve statistically significant separation from placebo on the primary endpoint in either of two Phase 2a clinical trials, and in 2023, we paused further development of ETX-155 and ETX-123 due to capital market conditions and investor sentiment around the opportunity. If we make incorrect determinations regarding the viability or market potential of any of our product candidates or misread trends in the biotechnology industry, in particular for disorders of the peripheral and central nervous systems, our business may be harmed. As a result, we may fail to capitalize on viable commercial products or profitable market opportunities, be required to forego or delay pursuit of opportunities with other product candidates or other diseases and disease pathways that may later prove to have greater commercial potential than those we choose to pursue, or relinquish valuable rights to such product candidates through collaboration, licensing, or other royalty arrangements in cases in which it would have been advantageous for us to invest additional resources to retain sole development and commercialization rights.

We could be subject to product liability lawsuits based on the use of our product candidates in clinical testing or, if obtained, following our products' marketing approval and commercialization. Product liability lawsuits brought against us or any of our future collaborators could divert our resources and attention, require us to cease clinical testing, cause us to incur substantial liabilities or limit commercialization of our product candidates.

We are exposed to potential product liability and professional indemnity risks that are inherent in the research, development, manufacturing, marketing and use of biotechnology products. Currently, we have no products that have been approved for commercial sale; however, the use of our product candidates by us and any collaborators in clinical trials may expose us to liability claims. We will face an even greater risk if product candidates are approved by regulatory authorities and introduced commercially. Product liability claims may be brought against us or our partners if any product candidate we develop allegedly causes injury or is found to be otherwise unsuitable for human use during product testing, manufacturing, marketing or sale. Any such product liability claim may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability and a breach of warranties. Claims could also be asserted under state consumer protection acts. Such claims could be made by participants enrolled in our clinical trials, patients, health care providers, biotechnology companies, our collaborators or others using, administering or selling any of our future approved products. If we cannot successfully defend ourselves against any such claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense would require significant financial and management resources.

Regardless of the merits or eventual outcome, product liability claims may result in:

- decreased demand for any of our future approved products;
- injury to our reputation;
- withdrawal of clinical trial participants;
- termination of clinical trial sites or entire trial programs;
- significant litigation costs;
- substantial monetary awards to, or costly settlements with, patients or other claimants;
- product recalls or a change in the indications for which any approved drug products may be used;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize our product candidates.

Although the clinical trial process is designed to identify and assess potential side effects, clinical development does not always fully characterize the safety and efficacy profile of a new medicine, and it is always possible that a drug, even after regulatory approval, may exhibit unforeseen side effects. If our product candidates were to cause adverse side effects during clinical trials or after approval, we may be exposed to substantial liabilities. Physicians and patients may not comply with any warnings that identify known potential adverse effects and patients who should not use our product candidates. If any of our product candidates are approved for commercial sale, we will be highly dependent upon consumer perceptions of us and the safety and quality of our products. We could be adversely affected if we are subject to negative publicity associated with illness or other adverse effects resulting from physicians' or patients' use or misuse of our products or any similar products distributed by other companies.

Although we maintain product liability insurance coverage including clinical trial liability, this insurance may not fully cover potential liabilities that we may incur. The cost of any product liability litigation or other proceeding, even if resolved in our favor, could be substantial. We will need to increase our insurance coverage if we commercialize any product that receives regulatory approval. In addition, insurance coverage is becoming increasingly expensive. If we are unable to maintain sufficient insurance coverage at an acceptable cost or to otherwise protect against potential product liability claims, it could prevent or inhibit the development and commercial production and sale of our product candidates, which could harm our business.

Risks Related to Legal and Regulatory Compliance

Enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval and commercialize our product candidates and may affect the prices we may charge for such product candidates.

The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product for which we obtain marketing approval.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively, the Affordable Care Act (ACA), was enacted, which includes measures that have significantly changed the way health care is financed by both governmental and private insurers. There have been executive, judicial and congressional challenges to certain aspects of the ACA. For example, on June 17, 2021, the U.S. Supreme Court dismissed a judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. Further, on August 16, 2022, President Biden signed the Inflation Reduction Act of 2022 (IRA) into law, which among other things, extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. The IRA also eliminates the "donut hole" under the Medicare Part D program beginning in 2025 by significantly lowering the beneficiary maximum out-of-pocket cost and through a newly established manufacturer discount program. It is unclear how any additional challenges or future healthcare reform measures of the Biden administration will impact the ACA.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. For example, in August 2011, the Budget Control Act of 2011 was signed into law, which, among other things, included aggregate reductions to Medicare payments to providers of, on average, 2% per fiscal year, effective April 1, 2013, which, due to subsequent legislative amendments including the Infrastructure Investment and Jobs Act and the Consolidated Appropriations Act of 2023, will stay in effect until 2032 unless Congress takes additional action.

Recently, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. presidential executive orders, congressional inquiries and legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs and reform government program reimbursement methodologies for drugs. At the federal level, the Biden administration used several means to propose or implement drug pricing reform, including through executive orders and policy initiatives. For example, in July 2021, the Biden administration released an executive order, “Promoting Competition in the American Economy,” with multiple provisions aimed at prescription drugs. In response to Biden’s executive order, on September 9, 2021, U.S. Department of Health and Human Services (HHS) released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform and sets out a variety of potential legislative policies that Congress could pursue to advance these principles. In addition, the IRA, among other things, (1) directs HHS to negotiate the price of certain single-source drugs and biologics covered under Medicare Part B and Part D that have been approved by the FDA for at least 7 years for drugs, and 11 years for biologics; and (2) imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation. Drugs and biologics are selected for negotiation two years prior to the negotiated price taking effect. Therefore, if selected for price negotiations, small-molecule drug manufacturers and biologic manufacturers are afforded at least 9 years and 13 years, respectively, before they must sell their product at the negotiated price under Medicare Part B and Part D, as applicable. The IRA permits HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. HHS has and will continue to issue and update guidance as these programs are implemented. These provisions will take effect progressively starting in fiscal year 2023, although the Medicare drug price negotiation program is currently subject to legal challenges. Further, in response to the Biden administration’s October 2022 executive order, on February 14, 2023, HHS released a report outlining three new models for testing by the Centers for Medicare & Medicaid Services (CMS) Innovation Center which will be evaluated on their ability to lower the cost of drugs, promote accessibility, and improve quality of care. It is unclear whether the models will be utilized in any health reform measures in the future. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control costs for pharmaceutical and biological products.

We expect that the healthcare reform measures that have been adopted and may be adopted in the future may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product and could seriously harm our future revenues. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our products.

Our business operations and current and future relationships with investigators, health care professionals, consultants, third-party payors and customers will be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws and other healthcare laws and regulations. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

Healthcare providers and others play a primary role in the recommendation and prescription of any products for which we obtain marketing approval. Although we do not currently have any products on the market, our operations may be, directly or indirectly through our prescribers, customers and third-party payors, subject to various U.S. federal and state healthcare laws and regulations. These laws may impact, among other things, our current business operations, including our clinical research activities and proposed sales, marketing and education programs and constrain the business of financial arrangements and relationships with healthcare providers and other parties through which we may market, sell and distribute our products for which we obtain marketing approval. In addition, we may be subject to additional healthcare, statutory and regulatory requirements and enforcement by foreign regulatory authorities in jurisdictions in which we conduct our business. The laws that may affect our ability to operate include:

- the U.S. federal Anti-Kickback Statute, which makes it illegal for any person or entity, including a prescription drug manufacturer (or a party acting on its behalf), to knowingly and willfully solicit, receive, offer or pay any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual, or the purchase, lease, order, arrangement, or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the U.S. federal civil and criminal false claims laws, including the False Claims Act (FCA), which can be enforced through “qui tam” or “whistleblower” actions, and civil monetary penalty law, which impose criminal and civil penalties against individuals or entities for, among other things, knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other federal health care programs that are false, fictitious or fraudulent; knowingly making, using, or causing to be made or used, a false record or statement material to a false, fictitious or fraudulent claim or an obligation to pay or transmit money or property to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing or concealing such an obligation to pay money to the federal government. In addition, a claim that includes items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim under the FCA;

- the U.S. federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), which created additional federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false, fictitious or fraudulent statement or representation, or making or using any false writing or document knowing the same to contain any materially false fictitious or fraudulent statement or entry in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity can be found guilty of violating HIPAA fraud provisions without actual knowledge of the statute or specific intent to violate it;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and their implementing regulations, also imposes obligations, including mandatory contractual terms, on “covered entities,” including certain healthcare providers, health plans, healthcare clearinghouses, and their respective “business associates” that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity as well as their covered subcontractors, with respect to safeguarding the privacy, security and transmission of individually identifiable health information, as well as analogous state and foreign laws that govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.
- the U.S. federal Physician Payments Sunshine Act and its implementing regulations, which require certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program to report annually to the CMS, an agency within the HHS under the Open Payments Program, information related to direct or indirect payments and other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), other health care professionals (such as physician assistants and nurse practitioners), and teaching hospitals, as well as information regarding ownership and investment interests held by physicians and their immediate family members;
- U.S. federal and state consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;
- analogous U.S. state laws and regulations, including state anti-kickback and false claims laws that may apply to items or services reimbursed by any third-party payor, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and other relevant compliance guidance promulgated by the federal government that otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to file reports with states regarding pricing and marketing information, such as the tracking and reporting of gifts, compensations and other remuneration and items of value provided to healthcare professionals and entities; and state and local laws requiring the registration of pharmaceutical sales representatives; and
- European and other foreign law equivalents of each of the laws, including reporting requirements detailing interactions with and payments to healthcare providers.

Ensuring that our internal operations and future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of the laws described above or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, exclusion from U.S. government funded healthcare programs, such as Medicare and Medicaid, or similar programs in other countries or jurisdictions, disgorgement, imprisonment, contractual damages, reputational harm, diminished profits, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws and the delay, reduction, termination or restructuring of our operations. Further, defending against any such actions can be costly and time-consuming, and may require significant financial and personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired. If any of the physicians or other providers or entities with whom we expect to do business is found to not be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs and imprisonment. If any of the above occur, it could adversely affect our ability to operate our business and our results of operations.

We are subject to stringent and changing obligations related to data privacy and security. Our actual or perceived failure to comply with such obligations could lead to regulatory investigations or actions; litigation; fines and penalties; disruptions of our business operations; reputational harm; loss of revenue or profits; loss of customers or sales; and other adverse business consequences.

We process personal data and other sensitive data (including health data we collect about study or trial participants in connection with our preclinical studies or clinical trials); proprietary and confidential business data; trade secrets; intellectual property; and sensitive third-party data. Our data processing activities subject us to numerous data privacy and security obligations, such as various laws, regulations, guidance, industry standards, external and internal privacy and security policies, contracts, and other obligations that govern the processing of personal data by us and on our behalf.

In the United States, federal, state, and local governments have enacted numerous data privacy and security laws, including data breach notification laws, personal data privacy laws, and consumer protection laws. These privacy laws include, without limitation, the following laws and regulations: Section 5 of the Federal Trade Commission Act, HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (HITECH) (which imposes specific requirements relating to the privacy, security and transmission of individually identifiable health information) and the California Consumer Privacy Act of 2018 (CCPA). The CCPA applies to personal information of consumers, business representatives, and employees, and requires businesses to provide specific disclosures in privacy notices and honor requests of California residents to exercise certain privacy rights. The CCPA provides for civil penalties of up to \$7,500 per violation and allows private litigants affected by certain data breaches to recover significant statutory damages. Although the CCPA exempts some data processed in the context of clinical trials, the CCPA increases compliance costs and potential liability with respect to other personal data we maintain about California residents. In addition, the CPRA amended the CCPA and expanded the CCPA's requirements, including by adding a new right for individuals to correct their personal information and establishing a new regulatory agency to implement and enforce the law. Other states, such as Virginia and Colorado, have also passed comprehensive privacy laws, and similar laws are being considered in several other states, as well as at the federal and local levels. While these states, like the CCPA, also exempt some data processed in the context of clinical trials, these developments further complicate compliance efforts, and increase legal risk and compliance costs for us and the third parties upon whom we rely. If we are or were to become subject to these laws and/or new or amended data privacy laws, the risk of enforcement actions against us could increase because we may be subject to obligations under applicable regulatory frameworks and the number of individuals or entities that could initiate actions against us may increase (including individuals via a private right of action), in addition to further complicating our compliance efforts.

Outside the United States, an increasing number of laws, regulations, and industry standards apply to data privacy and security. For example, the European Union's General Data Protection Regulation (EU GDPR) and the equivalent law in the U.K. (UK GDPR) impose strict requirements for processing the personal data of individuals, including sensitive data that we may process such as health data. For example, under the EU GDPR, government regulators may impose temporary or definitive bans on data processing, as well as fines of up to 20 million euros or 4% of annual global revenue, whichever is greater. Similar processing penalties and fines exist under the UK GDPR. Further, individuals may initiate litigation related to our processing of their personal data. Additionally, under various privacy laws and other obligations, we may be required to obtain certain consents to process personal data. Our inability or failure to do so could result in adverse consequences.

In the ordinary course of business, we may transfer personal data from Europe and other jurisdictions to the United States or other countries. Europe, the U.K. and certain jurisdictions have enacted data localization laws and cross-border personal data transfer laws. In particular, the EEA and the U.K. have significantly restricted the transfer of personal data to the United States and other countries whose privacy laws it believes are inadequate. Other jurisdictions may adopt similarly stringent interpretations of their data localization and cross-border data transfer laws. Although there are currently various mechanisms that may be used to transfer personal data from the EEA and U.K. to the United States in compliance with law, such as the EEA standard contractual clauses and the U.K. International Data Transfer Agreement, these mechanisms are subject to legal challenges, and there is no assurance that we can satisfy or rely on these measures to lawfully transfer personal data to the United States. If there is no lawful manner for us to transfer personal data from the EEA, the U.K. or other jurisdictions to the United States, or if the requirements for a legally-compliant transfer are too onerous, we could face significant adverse consequences, including the interruption or degradation of our operations, the need to relocate part of or all of our business or data processing activities to other jurisdictions at significant expense, increased exposure to regulatory actions, substantial fines and penalties, the inability to transfer data and work with partners, vendors and other third parties, and injunctions against our processing or transferring of personal data necessary to operate our business. Additionally, companies that transfer personal data out of the EEA and U.K. to other jurisdictions, particularly to the United States, are subject to increased scrutiny from regulators, individual litigants, and activist groups. Some European regulators have ordered certain companies to suspend or permanently cease certain transfers out of Europe for allegedly violating the EU GDPR's cross-border data transfer limitations.

We are also bound by contractual obligations related to data privacy and security, and our efforts to comply with such obligations may not be successful. For example, certain privacy laws, such as the GDPR and the CCPA, require our customers to impose specific contractual restrictions on their service providers. We publish privacy policies, marketing materials and other statements, such as compliance with certain certifications or self-regulatory principles, regarding data privacy and security. If these policies, materials or statements are found to be deficient, lacking in transparency, deceptive, unfair, or misrepresentative of our practices, we may be subject to investigation, enforcement actions by regulators or other adverse consequences.

Our obligations related to data privacy and security are quickly changing in an increasingly stringent fashion, creating some uncertainty as to the effective future legal framework. Additionally, these obligations may be subject to differing applications and interpretations, which may be inconsistent or in conflict among jurisdictions. Preparation for and compliance with these obligations requires us to devote significant resources (including, without limitation, financial and time-related resources). These obligations may necessitate changes to our information technologies, systems, and practices and to those of any third parties that process personal data on our behalf. Although we endeavor to comply with all applicable data privacy and security obligations, we may at times fail (or be perceived to have failed) to do so. Despite our efforts, our personnel or third parties upon whom we rely may fail to comply with such obligations, which could negatively impact our business operations and compliance posture. For example, any failure by a third-party processor to comply with applicable law, regulations, or contractual obligations could result in adverse effects, including inability to operate our business and proceedings against us by governmental entities or others. Moreover, clinical trial subjects about whom we or our potential collaborators obtain information, as well as the third-party providers (such as research institutions) who share this information with us, may contractually limit our ability to use and disclose the information.

If we or the third parties on which we rely fail, or are perceived to have failed, to address or comply with data privacy and security obligations, we could face significant consequences. These consequences may include, but are not limited to, government enforcement actions (e.g., investigations, fines, penalties, audits, inspections, and similar); litigation (including class-related claims); additional reporting requirements and/or oversight; bans on processing personal data; and orders to destroy or not use personal data. Any of these events could have a material adverse effect on our reputation, business, or financial condition, including but not limited to: loss of customers; interruptions or stoppages in our business operations (including our clinical trials); inability to process personal data or to operate in certain jurisdictions; limited ability to develop or commercialize our product candidates; expenditure of time and resources to defend any claim or inquiry; adverse publicity; or revision or restructuring of our operations.

Although we work to comply with applicable laws, regulations and standards, our contractual obligations and other legal obligations, these requirements are evolving and may be modified, interpreted and applied in an inconsistent manner from one jurisdiction to another, and may conflict with one another or other legal obligations with which we must comply. Compliance with U.S. and foreign data protection laws and regulations could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate in certain jurisdictions. Failure by us or our collaborators and third-party providers to comply with U.S. and foreign data protection laws and regulations could result in government enforcement actions (which could include civil or criminal penalties), private litigation and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects about whom we or our potential collaborators obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws or breached our contractual obligations, even if we are not found liable, could be expensive and time consuming to defend, could result in adverse publicity and could harm our business.

Risks Related to our Dependence on Third Parties

We rely, and expect to continue to rely, on third parties to conduct, supervise, and monitor our preclinical studies and clinical trials. If these third parties do not properly and successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates.

We rely on third parties in winding down our development of our former clinical product candidates, and we expect to rely on third-party CROs to conduct, supervise, and monitor our future preclinical and studies and clinical trials for our product candidates and do not currently plan to independently conduct preclinical studies or future clinical trials of any other potential product candidates. We expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions and clinical investigators to conduct our future preclinical studies and clinical trials. While we have agreements governing their activities, we have limited influence over their actual performance and control only certain aspects of their activities. The failure of these third parties to successfully carry out their contractual duties or meet expected deadlines could substantially harm our business because we may not obtain marketing approval for or commercialize our product candidates in a timely manner or at all. Moreover, these agreements might terminate for a variety of reasons, including a failure to perform by the third parties. If we need to enter into alternative arrangements, that would delay our product development activities and harm our business.

Our reliance on these third parties for development activities will reduce our control over these activities. Nevertheless, we are responsible for ensuring that each of our studies and clinical trials is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs does not relieve us of our regulatory responsibilities. For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial and for ensuring that our preclinical studies are conducted in accordance with good laboratory practice (GLP) as appropriate. Moreover, the FDA and comparable foreign regulatory authorities require us to comply with standards, commonly referred to as good clinical practices (GCPs), for conducting, monitoring, recording, and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity, and confidentiality of trial participants are protected. As a clinical trial sponsor, we will also have regulatory requirements that directly apply to us. Regulatory authorities enforce these requirements through periodic inspections of trial sponsors, clinical investigators, and trial sites. If we or any of our CROs fail to comply with applicable GCPs, we or our CROs may be subject to enforcement or other legal actions, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials.

In addition, once we have an approved product, we will be required to report certain financial interests of our third-party investigators if these relationships exceed certain financial thresholds or meet other criteria. The FDA and comparable foreign regulatory authorities may question the integrity of the data from those clinical trials conducted by investigators who previously served or currently serve as scientific advisors or consultants to us from time to time and receive cash compensation in connection with such services or otherwise receive compensation from us that could be deemed to impact study outcome, proprietary interests in a product candidate, certain company equity interests or significant payments of other sorts.

We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials complies with GCP regulations. In addition, our clinical trials must be conducted with product candidates that were produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process. We also are required to register certain clinical trials and post the results of certain completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within specified time frames. Failure to do so can result in enforcement actions and adverse publicity.

Our CROs may also have relationships with other entities, some of which may be our competitors, for whom they may also be conducting clinical trials or other drug development activities that could harm our competitive position. In addition, our CROs are not our employees, and except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our ongoing clinical, non-clinical, and preclinical programs. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our preclinical studies or clinical trials in accordance with regulatory requirements or our stated protocols, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates, or we or they may be subject to regulatory enforcement actions. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed. To the extent we are unable to successfully identify and manage the performance of third-party service providers in the future, our business may be harmed.

If any of our relationships with these third-party CROs terminates, we may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays could occur, which could compromise our ability to meet our desired development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not harm our business.

If we are not able to establish future collaborations, we may have to alter some of our future development and commercialization plans.

Our product development programs and the potential commercialization of our product candidates will require substantial additional capital to fund expenses. While currently we have no plans to do so, we may decide to collaborate for the future development and potential commercialization of our product candidates. Furthermore, we may find that our programs require the use of proprietary rights held by third parties, and the growth of our business may depend in part on our ability to acquire, in-license or use these proprietary rights. We will likely have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of any product candidates we may seek to develop with them. We cannot predict the success of any collaboration that we have entered into or will enter into.

We face significant competition in seeking appropriate collaborators, and a number of more established companies may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, financial resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA, European Medicines Agency (EMA), the U.K. Medicines and Healthcare products Regulatory Agency (MHRA) or similar foreign regulatory authorities, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge, and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. We may also be restricted under future license agreements from entering into agreements on certain terms with potential collaborators. Collaborations are complex and time consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

We may not be able to negotiate further collaborations on a timely basis, on acceptable terms, or at all. Even if we are able to obtain a license to intellectual property of interest, we may not be able to secure exclusive rights, in which case others could use the same rights and compete with us. Our existing collaboration partners may not prioritize our product candidates or otherwise not effectively pursue the development of our product candidates which may delay, reduce or terminate the development of such product candidate, reduce or delay its development program or delay its potential commercialization. Further if we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to delay, reduce or terminate the development of such product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. Doing so will likely harm our ability to execute our business plans. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate product revenue.

Risks Related to Intellectual Property

If we are unable to obtain, maintain and protect sufficient patent and other intellectual property rights for our product candidates and technology, or if the scope of patent and other intellectual property rights obtained is not sufficiently broad, we may not be able to compete effectively in our market.

Our success depends in significant part on our ability and the ability of future licensors, licensees or collaborators to obtain, maintain, enforce and defend patents and other intellectual property rights with respect to our product candidates and technology and to operate our business without infringing, misappropriating or otherwise violating the intellectual property rights of others. A U.S. provisional patent application is not eligible to become an issued patent until, among other things, we file non-provisional patent application within 12 months of filing of the provisional patent application. With regard to such U.S. provisional patent applications, if we do not timely file any non-provisional patent applications, we may lose our priority dates with respect to our provisional patent applications and any patent protection on the inventions disclosed in our provisional patent applications. While we intend to timely file non-provisional patent applications relating to our provisional patent applications, we cannot predict whether any such patent applications will result in the issuance of patents that provide us with any competitive advantage.

The patent prosecution process is expensive and time-consuming. We and our future licensors, licensees or collaborators may not be able to prepare, file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we or our future licensors will fail to identify patentable aspects of our research and development output in time to obtain patent protection or fail to file patent applications covering inventions made in the course of development and commercialization activities before a competitor or another third party files a patent application covering, or publishes information disclosing, a similar, independently-developed invention. Such competitor's or other third party's patent application may pose obstacles to our ability to obtain patent protection or limit the scope of the patent protection we may obtain.

Although we enter into non-disclosure and confidentiality agreements with parties who have access to confidential or patentable aspects of our research and development output, such as our employees, collaborators, CROs, CDMOs, consultants, advisors and other third parties, any of these parties may breach the agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. In addition, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we or our future licensors were the first to make the inventions claimed in our owned or any future licensed patents or pending patent applications, or were the first to file for patent protection of such inventions.

The patent position of biotechnology and pharmaceutical companies generally is uncertain, involves complex legal and factual questions and is the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our and our current or future licensors' patent rights are uncertain. Our and our future licensors' pending, and future patent applications may not result in patents being issued that protect our technology or product candidates, in whole or in part, or which effectively exclude others from commercializing competitive technologies and product candidates. The patent examination process may require us or our future licensors to narrow the scope of the claims of our pending and future patent applications, and therefore, even if such patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors or other third parties from competing with us or otherwise provide us with any competitive advantage. Our and our licensors' patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications, and then only to the extent the issued claims cover such technology. Any patents that we hold or in-license in the future may be challenged, narrowed, circumvented or invalidated by third parties. Consequently, we do not know whether any of our product candidates will be protectable or remain protected by valid and enforceable patents. Our competitors or other third parties may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner. Any of the foregoing could impair our competitive position and harm our business.

The patent protection we obtain for our product candidates and technologies may be challenged and rendered invalid and/or unenforceable.

Even if our owned patent applications issue as patents, the issuance of any such patents is not conclusive as to their inventorship, scope, validity or enforceability, and such patents may be challenged, invalidated, narrowed or held to be unenforceable, including in the courts or patent offices in the United States and abroad, or circumvented. We may be subject to a third-party preissuance submission of prior art to the United States Patent and Trademark Office (USPTO), or equivalent foreign bodies, or become involved in opposition, derivation, revocation, re-examination, post-grant and inter partes review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. Moreover, we may have to participate in interference or derivation proceedings declared by the USPTO to determine priority or ownership of invention or in post-grant challenge proceedings, such as oppositions in a foreign patent office, that challenge priority of invention or other features of patentability. Such proceedings and any other patent challenges may result in loss of patent rights, loss of exclusivity, loss of priority or in patent claims being narrowed, invalidated or held unenforceable, which could limit our ability to stop others from using or commercializing similar or identical technology and products or limit the duration of the patent protection of our technology and product candidates. Such proceedings also may result in substantial cost and require significant time from our scientists and management, even if the eventual outcome is favorable to us. Moreover, there could be public announcements of the results of hearings, motions or other developments related to any of the foregoing proceedings. If securities analysts or investors perceive those results to be negative, it could cause the price of shares of our common stock to decline. Any of the foregoing could harm our business.

Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Because we will rely on third parties to develop and manufacture our future product candidates, we must, at times, share trade secrets with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, collaborative research agreements, consulting agreements or other similar agreements with our collaborators, advisors, employees and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, such as trade secrets. Despite these contractual agreements with third parties, sharing trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may harm our business.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets, although our agreements may contain certain limited publication rights. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets would impair our competitive position and harm our business.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time-consuming and unsuccessful, and issued patents covering our technology and product candidates could be found invalid or unenforceable if challenged.

Competitors and other third parties may infringe, misappropriate or otherwise violate our issued patents or other intellectual property. In addition, our patents may become involved in inventorship or priority disputes. Our pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. To counter infringement or other unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents or that our patents are invalid or unenforceable. In a patent infringement proceeding, a court may decide that a patent of ours is invalid or unenforceable, in whole or in part, construe the patent's claims narrowly or refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly. We may find it impractical or undesirable to enforce our intellectual property against some third parties.

In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement or insufficient written description. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution. Third parties may also raise similar claims before the USPTO or an equivalent foreign body, even outside the context of litigation. Potential proceedings include re-examination, post-grant review, inter partes review, interference proceedings, derivation proceedings and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in the revocation of, cancellation of, or amendment to our patents in such a way that they no longer cover our technology or any product candidates that we may develop. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on the applicable product candidates or technology covered by the patent rendered invalid or unenforceable. Such a loss of patent protection would harm our business.

Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the ownership or priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Such licenses may not be available on commercially reasonable terms, or at all, or may be non-exclusive. If we are unable to obtain and maintain such licenses, we may need to cease the development, manufacture and commercialization of one or more of the product candidates we may develop. In addition, if we or any future licensors are unsuccessful in any inventorship disputes to which we or they are subject, we may lose valuable intellectual property rights, such as exclusive ownership of, or the exclusive right to use, our owned or any future in-licensed patents. The loss of exclusivity or the narrowing of such patent claims could limit our ability to stop others from using or commercializing similar or identical technology and products. Any of the foregoing could harm our business. Even if we are successful in any of the foregoing disputes, it could result in substantial costs and be a distraction to management and other employees. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation or proceeding.

Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Most of our competitors are larger than we are and have substantially greater resources. They are, therefore, likely to be able to sustain the costs of complex patent litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing, misappropriating or otherwise violating our intellectual property. Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims could result in substantial costs and diversion of management resources, which could harm our business. In addition, the uncertainties associated with litigation could compromise our ability to raise the funds necessary to initiate anticipated clinical trials, continue our internal research programs or in-license needed technology or other product candidates. There could also be public announcements of the results of the hearing, motions or other interim proceedings or developments. If securities analysts or investors perceive those results to be negative, it could cause the price of shares of our common stock to decline. Any of the foregoing events could harm our business.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting, maintaining, defending and enforcing patents and other intellectual property rights on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection or other intellectual property rights to develop their own products and may export otherwise infringing, misappropriating or violating products to territories where we have patent or other intellectual property protection, but enforcement rights are not as strong as those in the United States. These products may compete with our product candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of some countries do not favor the enforcement of patents and other intellectual property rights, which could make it difficult for us to stop the infringement, misappropriation or other violation of our intellectual property rights generally. Proceedings to enforce our intellectual property rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful.

Many countries, including EU countries, India, Japan and China, have compulsory licensing laws under which a patent owner may be compelled under specified circumstances to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In those countries, we may have limited remedies if patents are infringed or if we are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license, which could harm our business.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent which might adversely affect our ability to develop and market our product candidates.

We cannot guarantee that any of our patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending patent application in the United States and abroad that is relevant to or necessary for the commercialization of our product candidates in any jurisdiction. For example, U.S. patent applications filed before November 29, 2000 and certain U.S. patent applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Patent applications in the United States and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our product candidates could have been filed by third parties without our knowledge. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our product candidates or the use of our product candidates. The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our product candidates. We may incorrectly determine that our product candidates are not covered by a third-party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our product candidates. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our product candidates.

If we fail to identify and correctly interpret relevant patents or if we are unable to obtain licenses to relevant patents, we may be subject to infringement claims. We cannot guarantee that we will be able to successfully settle or otherwise resolve such infringement claims. If we fail in any such dispute, in addition to being forced to pay damages, which may be significant, we may be temporarily or permanently prohibited from commercializing any of our product candidates that are held to be infringing. We might, if possible, also be forced to redesign product candidates so that we no longer infringe the third-party intellectual property rights. Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business and could harm our business.

If we are unable to obtain licenses from third parties on commercially reasonable terms or fail to comply with our obligations under such agreements, our business could be harmed.

It may be necessary for us to use the patented or proprietary technology of third parties to commercialize our products, in which case we would be required to obtain a license from these third parties. The licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. If we are unable to license such technology, or if we are forced to license such technology, on unfavorable terms, our business could be harmed. If we are unable to obtain a necessary license, we may be unable to develop or commercialize the affected product candidates, which could harm our business, and the third parties owning such intellectual property rights could seek either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us.

Moreover, some of our patents and patent applications in the future may be co-owned with third parties. If we are unable to obtain an exclusive license to any such co-owners' interest in such patents or patent applications, such co-owners may be able to license their rights to other third parties, including our competitors, who could market competing products and technology. In addition, we may need the cooperation of any such co-owners in order to enforce such patents against third parties, and such cooperation may not be provided to us.

Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired for a product candidate, we may be open to competition from competitive medications, including generic medications. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such product candidates might expire before or shortly after such product candidates are commercialized. As a result, our owned and any future licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing product candidates similar or identical to ours.

Depending upon the timing, duration and conditions of any FDA marketing approval of our product candidates, one or more of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments, and one or more of our foreign patents may be eligible for patent term extension under similar legislation, for example, in the EU. In the United States, the Hatch-Waxman Amendments permit a patent term extension of up to five years for a patent covering an approved product as compensation for effective patent term lost during product development and the FDA regulatory review process. However, there are no assurances that the FDA or any comparable foreign regulatory authority or national patent office will grant such extensions, in whole or in part. For example, we may not receive an extension if we fail to exercise due diligence during the testing phase or regulatory review process, fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. Only one patent per approved product can be extended, the extension cannot extend the total patent term beyond 14 years from approval, and only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for the applicable product candidate will be shortened, and our competitors may obtain approval to market competing products sooner. As a result, our revenue from applicable products could be reduced.

Further, if this occurs, our competitors may take advantage of our investment in development and trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case, and our competitive position and business could be harmed.

Changes in patent law could diminish the value of our patents, thereby impairing our ability to protect our product candidates.

Obtaining and enforcing patents in the pharmaceutical industry is inherently uncertain, due in part to ongoing changes in the patent laws. Depending on decisions by Congress, the federal courts, and the USPTO and equivalent institutions in other jurisdictions, the laws and regulations governing patents, and interpretation thereof, could change in unpredictable ways that could weaken our ability to obtain new patents or to enforce existing or future patents. For example, the U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. Therefore, there is increased uncertainty with regard to our ability to obtain patents in the future, as well as uncertainty with respect to the value of patents once obtained.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. Assuming that other requirements for patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith America Invents Act, or the Leahy-Smith Act, enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. The Leahy-Smith Act also includes a number of significant changes that affect the way patent applications are prosecuted and may also affect patent litigation. These include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO-administered post-grant proceedings, including post-grant review, inter partes review and derivation proceedings. The USPTO recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, particularly the first inventor-to-file provisions. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could harm our business.

Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated if we fail to comply with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other government fees on any issued patents and applications are required to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of a patent. In certain circumstances, we may rely on our future licensors to pay these fees. The USPTO and various foreign patent agencies also require compliance with a number of procedural, documentary, fee payment and other similar requirements during the patent application and prosecution process.

Noncompliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official communications within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in irrevocable abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. If we or any future licensors or collaborators fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market with similar or identical products or technology, which would harm our business.

Third parties may initiate legal proceedings alleging that we are infringing, misappropriating or otherwise violating their intellectual property rights, the outcome of which would be uncertain and could negatively impact the success of our business.

Our commercial success depends upon our ability and the ability of our collaborators to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing, misappropriating or otherwise violating the intellectual property and other proprietary rights of third parties. There is considerable intellectual property litigation in the biotechnology and pharmaceutical industries. We may become party to, or be threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our product candidates and technology, including re-examination, interference, post-grant review, inter partes review or derivation proceedings before the USPTO or an equivalent foreign body. Numerous U.S. and foreign issued patents and pending patent applications owned by third parties exist in the fields in which we are developing our product candidates. In the event that any of these patents were asserted against us, we believe that we would have defenses against any such action, including that such patents are not valid or that we would be able to replace such technology with alternative, non-infringing technology. However, if any such patents were to be asserted against us and our defenses to such assertion were unsuccessful and such alternative technology was not available or technologically or commercially practical, unless we obtain a license to such patents, we could be liable for damages, which could be significant and include treble damages and attorneys' fees if we are found to willfully infringe such patents, and we could be precluded from commercializing any product candidates that were ultimately held to infringe such patents. Any potential future legal proceedings relating to these patents could cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. If we are unsuccessful in our challenges to these patents and become subject to litigation or are unable to obtain a license on commercially reasonable terms with respect to these patents, it could harm our business.

Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future, regardless of their merit. Even if we believe third-party intellectual property claims are without merit, there is no assurance that a court would find in our favor on questions of infringement, validity, enforceability or priority. A court of competent jurisdiction could hold that third-party patents asserted against us are valid, enforceable and infringed, which could adversely affect our ability to commercialize any product candidates we may develop and any other product candidates or technologies covered by the asserted third-party patents. In order to successfully challenge the validity of any such U.S. patent in federal court, we would need to overcome a presumption of validity. As this burden is a high one requiring us to present clear and convincing evidence as to the invalidity of any such U.S. patent claim, there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. If we are found to infringe, misappropriate or otherwise violate a third party's intellectual property rights, and we are unsuccessful in demonstrating that such rights are invalid or unenforceable, we could be required to obtain a license from such a third party in order to continue developing and marketing our products and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments. We could be forced, including by court order, to cease commercializing the infringing technology or product candidates. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties and other fees, redesign our infringing drug or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business. Any of the foregoing events would harm our business.

We may be subject to claims by third parties asserting that we or our employees have infringed upon, misappropriated or otherwise violated their intellectual property rights, or claiming ownership of what we regard as our own intellectual property.

Many of our employees were previously employed at other biotechnology or pharmaceutical companies. Although we try to ensure that our employees, consultants and advisors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these individuals have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's former employer. Litigation may be necessary to defend against these claims.

In addition, we or our future licensors may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or any future in-licensed patents or other intellectual property as an inventor or co-inventor. While it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact conceives, develops or reduces to practice intellectual property that we regard as our own. Our and their assignment agreements may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property.

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs, delay development of our product candidates and be a distraction to management. Any of the foregoing events would harm our business.

Intellectual property litigation could cause us to spend substantial resources and distract our personnel from their normal responsibilities.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace, including compromising our ability to raise the funds necessary to initiate anticipated clinical trials, continue our research programs, license necessary technology from third parties or enter into development collaborations that would help us commercialize our product candidates, if approved. Any of the foregoing events would harm our business.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

We rely on trade secrets and confidentiality agreements to protect our unpatented know-how, technology and other proprietary information and to maintain our competitive position. Trade secrets and know-how can be difficult to protect. We seek to protect these trade secrets and other proprietary technology, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, collaborators, CROs, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. We cannot guarantee that we have entered into such agreements with each party that may have or has had access to our trade secrets or proprietary technology and processes. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor or other third party, our competitive position would be harmed.

We may not be able to protect and enforce our trademarks and trade names, or build name recognition in our markets of interest thereby harming our competitive position.

We intend to rely on both registered and common law rights for our trademarks. We plan to apply to register these trademarks with the USPTO and may in the future seek to register additional trademarks in the United States and other countries. Our trademark applications may not be allowed for registration in a timely fashion or at all, and our future registered trademarks may not be maintained or enforced. In addition, any registered or unregistered trademarks or trade names that we own or will own may be challenged, infringed, circumvented, declared generic, lapsed or determined to be infringing on or dilutive of other marks. We may not be able to protect our rights in these trademarks and trade names or may be forced to stop using these names, which we need for name recognition by potential partners or customers in our markets of interest. In addition, third parties have filed, and may in the future file, for registration of trademarks similar or identical to our trademarks, thereby impeding our ability to build brand identity and possibly leading to market confusion. If they succeed in registering or developing common law rights in such trademarks, and if we are not successful in challenging such rights, we may not be able to use these trademarks to develop brand recognition of our technologies, products or services. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names.

During the trademark registration process, we may receive Office Actions from the USPTO or from comparable agencies in foreign jurisdictions objecting to the registration of our trademark. Although we would be given an opportunity to respond to those objections, we may be unable to overcome such rejections. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and/or to seek the cancellation of registered trademarks. Opposition or cancellation proceedings may in the future be filed against our trademark applications or registrations, and our trademark applications or registrations may not survive such proceedings. In addition, third parties may file first for our trademarks in certain countries. If they succeed in registering such trademarks, and if we are not successful in challenging such third-party rights, we may not be able to use these trademarks to market our products in those countries. If we do not secure registrations for our trademarks, we may encounter more difficulty in enforcing them against third parties than we otherwise would. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively, which could harm our business.

Intellectual property rights do not necessarily address all potential threats.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to any product candidates we may develop or utilize similar technology but that are not covered by the claims of the patents that we own now or own or license in the future;
- we, or our future licensors, might not have been the first to make the inventions covered by the issued patent or pending patent application that we own now or own or license in the future;
- we, or our future licensors, might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;

- it is possible that our pending owned patent applications or those that we may own or license in the future will not lead to issued patents; issued patents that we hold rights to may be held invalid or unenforceable, including as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in the United States under FDA-related safe harbor patent infringement exemptions and/or in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- the patents of others may harm our business; and
- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Should any of these events occur, they could harm our business.

Risks Related to our Business Operations and Employee Matters

We have recently reduced the size of our organization, and we may encounter difficulties in managing this development and restructuring, which could disrupt our operations. In addition, we may not achieve anticipated benefits and savings from the reduction.

In February 2023, we commenced certain restructuring actions (the Restructuring Plan) to conserve financial resources and better align our workforce with current business needs, as a result of the decision to pause development of ETX-155 and focus on our preclinical Kv7.2/3 program. In July 2023, we made the determination to pause further development of our Kv7 program and to conduct a comprehensive exploration of strategic alternatives focused on maximizing stockholder value.

The workforce reduction that will accompany our strategic realignment will result in the loss of longer-term employees, the loss of institutional knowledge and expertise and the reallocation and combination of certain roles and responsibilities across the organization, all of which could adversely affect our operations. The restructuring and possible additional cost containment measures may yield unintended consequences, such as attrition beyond our intended workforce reduction and reduced employee morale. In addition, we may not achieve anticipated benefits from the workforce reduction. Due to our limited resources, we may not be able to effectively manage our operations or recruit and retain qualified personnel, which may result in weaknesses in our infrastructure and operations, risks that we may not be able to comply with legal and regulatory requirements, and loss of employees and reduced productivity among remaining employees. If our management is unable to effectively manage this transition and workforce reduction and additional cost containment measures, our expenses may be more than expected and we may not be able to implement our business strategy. As a result, our future financial performance and our ability to commercialize our future product candidates successfully would be negatively affected.

Our employees, independent contractors, consultants, commercial collaborators, principal investigators, CROs and vendors may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements.

We are exposed to the risk that our employees, independent contractors, consultants, commercial collaborators, principal investigators, CROs and vendors may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless or negligent conduct or unauthorized activities that violates (1) the laws and regulations of the FDA, the EMA, the MHRA and other similar regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities, (2) manufacturing standards, (3) federal and state data privacy, security, fraud and abuse and other healthcare laws and regulations in the United States and abroad and (4) laws that require the true, complete and accurate reporting of financial information or data. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Misconduct by these parties could also involve the improper use of individually identifiable information, including information obtained in the course of clinical trials, creating fraudulent data in our preclinical studies or clinical trials or illegal misappropriation of product candidates, which could result in regulatory sanctions and harm our reputation.

We have adopted a code of business conduct and ethics, but it is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. Additionally, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, including damages, fines, disgorgement, imprisonment, exclusion from participation in government healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm and the delay, reduction, termination or restructuring of our operations.

Our international operations in the U.K. may expose us to business, regulatory, political, operational, financial, pricing and reimbursement risks associated with doing business outside of the United States.

Our business is subject to risks associated with conducting business internationally. Some of our suppliers, industry partners and clinical study centers are located outside of the United States. Furthermore, our business strategy incorporates potential international expansion as we seek to obtain regulatory approval for, and commercialize, our product candidates in patient populations outside the United States. If approved, we may hire sales representatives and conduct physician and patient association outreach activities outside of the United States. Doing business internationally involves a number of risks, including but not limited to:

- multiple, conflicting and changing laws and regulations, including those related to Brexit related changes, such as privacy regulations, tax laws, export and import restrictions, employment laws, regulatory requirements, and other governmental approvals, permits and licenses;
- failure by us to obtain and maintain regulatory approvals for the use of our products in various countries; rejection or qualification of foreign clinical trial data by the competent authorities of other countries;
- delays or interruptions in the supply of clinical trial materials resulting from any events affecting raw material supply or manufacturing capabilities abroad, including those that may result from the COVID-19 pandemic;
- additional potentially relevant third-party patent and other intellectual property rights;
- complexities and difficulties in obtaining, maintaining, protecting and enforcing our intellectual property;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple payor reimbursement regimes, government payors or patient self-pay systems;
- limits in our ability to penetrate international markets;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our product candidates and exposure to foreign currency exchange rate fluctuations;
- currency exchange rate fluctuations and the resulting effect on our revenue and expenses and the cost and risk of entering into hedging transactions if we chose to do so in the future;
- natural disasters, political and economic instability, including wars, terrorism and political unrest, outbreak of disease, including COVID-19 and related public health guidance measures, boycotts, curtailment of trade and other business restrictions;
- certain expenses including, among others, expenses for travel and insurance; and
- regulatory and compliance risks that relate to anti-corruption compliance and record-keeping that may fall within the purview of the U.S. Foreign Corrupt Practices Act, its accounting provisions or its anti-bribery provisions or provisions of anti-corruption or anti-bribery laws in other countries.

Any of these factors could harm our future international expansion and operations and, consequently, our results of operations.

We may not be able to utilize a significant portion of our net operating loss carryforwards.

As of December 31, 2022, we had net operating loss carryforwards of approximately \$7.1 million for federal income tax purposes, \$41.6 million for foreign income tax purposes and \$8.2 million for state income tax purposes. The federal net operating loss may be used up to 80% of future taxable income while the state and foreign losses may be used to offset up to 100% of future taxable income. The federal net operating loss carryforward can be carried forward indefinitely while the state net operating loss carryforward will begin to expire in varying amounts in 2039. The net operating loss carryforwards subject to expiration could expire unused and be unavailable to offset future income tax liabilities. Under the Tax Cuts and Jobs Act (Tax Act), as modified by the Coronavirus Aid, Relief and Economic Security Act (CARES Act), federal net operating losses incurred in taxable years beginning after December 31, 2017 and in future taxable years may be carried forward indefinitely, but the deductibility of such federal net operating losses in taxable years beginning after December 31, 2020 is limited.

Separately, under Section 382 of the Internal Revenue Code of 1986, as amended, (Internal Revenue Code), and corresponding provisions of state law, if a corporation undergoes an “ownership change,” which is generally defined as a greater than 50 percentage point change, by value, in its equity ownership by certain stockholders over a rolling three-year period, the corporation’s ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change income or taxes may be limited. The completion of our IPO, together with private placements and other transactions that have occurred since our inception, may trigger such an ownership change pursuant to Section 382 of the Internal Revenue Code. We have not completed a Section 382 analysis, and therefore, there can be no assurances that the NOLs carryforward are not already limited.

In addition, we may experience ownership changes as a result of subsequent shifts in our stock ownership, some of which may be outside of our control. If an ownership change occurs and our ability to use our NOL carryforwards is materially limited, it could harm our future operating results by effectively increasing our future tax obligations.

We may seek to grow our business through acquisitions or investments in new or complementary businesses, products or technologies, through the licensing of products or technologies from third parties or other strategic alliances, and the failure to manage acquisitions, investments, licenses or other strategic alliances, or the failure to integrate them with our existing business, could have a material adverse effect on our operating results, dilute our stockholders’ ownership, increase our debt or cause us to incur significant expense.

Our success depends on our ability to continually enhance and broaden our product offerings in response to changing clinician and patients’ needs, competitive technologies and market pressures. Accordingly, from time to time we may consider opportunities to acquire, make investments in or license other technologies, products and businesses that may enhance our capabilities, complement our existing products and technologies or expand the breadth of our markets or customer base. Potential and completed acquisitions, strategic investments, licenses and other alliances involve numerous risks, including:

- difficulty assimilating or integrating acquired or licensed technologies, products, employees or business operations; issues maintaining uniform standards, procedures, controls and policies;
- unanticipated costs associated with acquisitions or strategic alliances, including the assumption of unknown or contingent liabilities and the incurrence of debt or future write-offs of intangible assets or goodwill;
- diversion of management’s attention from our core business and disruption of ongoing operations;
- adverse effects on existing business relationships with suppliers, sales agents, health care facilities, surgeons and other health care providers;
- risks associated with entering new markets in which we have limited or no experience;
- potential losses related to investments in other companies;
- potential loss of key employees of acquired businesses; and
- increased legal and accounting compliance costs.

We do not know if we will be able to identify acquisitions or strategic relationships we deem suitable, whether we will be able to successfully complete any such transactions on favorable terms, if at all, or whether we will be able to successfully integrate any acquired business, product or technology into our business or retain any key personnel, suppliers, sales agent, health care facilities, physicians or other health care providers. Our ability to successfully grow through strategic transactions depends upon our ability to identify, negotiate, complete and integrate suitable target businesses, technologies or products and to obtain any necessary financing. These efforts could be expensive and time-consuming and may disrupt our ongoing business and prevent management from focusing on our operations.

If we pursue any foreign acquisitions, they typically involve unique risks in addition to those mentioned above, including those related to integration of operations across different cultures, languages and legal and regulatory environments, currency risks and the particular economic, political and regulatory risks associated with specific countries.

To finance any acquisitions, investments or strategic alliances, we may choose to issue shares of our common stock as consideration, which could dilute the ownership of our stockholders. If the price of our common stock is low or volatile, we may be unable to consummate any acquisitions, investments or strategic alliances using our common stock as consideration. Additional funds may not be available on terms that are favorable to us, or at all.

Risks Related to our Common Stock

Our operating results may fluctuate significantly and may be difficult to predict.

Our quarterly and annual operating results may fluctuate significantly, due to a variety of factors, many of which are outside of our control and may be difficult to predict, including:

- the timing and cost of, and level of investment in, research, development and, if approved, commercialization activities relating to our future product candidates, which may change from time to time;
- the timing and status of enrollment for clinical trials;
- the cost of manufacturing our product candidates, as well as building out our supply chain, which may vary depending on the quantity of production and the terms of our agreements with manufacturers;
- expenditures that we may incur to acquire, develop or commercialize additional product candidates and technologies; timing and amount of any milestone, royalty or other payments due under any collaboration or license agreement; future accounting pronouncements or changes in our accounting policies;
- the timing and success or failure of preclinical studies and clinical trials for our product candidates or competing product candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners;
- the timing of receipt of approvals for our product candidates from regulatory authorities in the United States and internationally; exchange rate fluctuations;
- coverage and reimbursement policies with respect to our product candidates, if approved, and potential future drugs that compete with our products; and
- the level of demand for our product candidates, if approved, which may vary significantly over time.

The trading price of the shares of our common stock may be volatile, and purchasers of our common stock could incur substantial losses.

Our stock price has been volatile, fluctuating from a high trading price of \$29.69 per share in August 2021 to a low trading price of \$2.21 in February 2023. The stock market in general and the market for biotechnology companies in particular have also experienced extreme volatility that has often been unrelated to the operating performance of particular companies. The market price for our common stock may continue to be volatile in the future and may be influenced by many factors, including:

- adverse regulatory decisions;
- any delay in our regulatory filings for our product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings, including without limitation the FDA's issuance of a "refusal to file" letter or a request for additional information;
- the commencement, enrollment or results of any future clinical trials we may conduct, or changes in the development status of our product candidates;
- adverse results from, delays in or termination of our clinical trials or those of our competitors;
- unanticipated serious safety concerns related to the use of our product candidates;
- lower than expected market acceptance of our product candidates following approval for commercialization;
- changes in financial estimates by us or by any securities analysts who might cover our stock;
- conditions or trends in our industry;

- changes in the market valuations of similar companies;
- stock market price and volume fluctuations of comparable companies and, in particular, those that operate in the pharmaceutical industry;
- publication of research reports about us or our industry or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- announcements by us or our competitors of strategic transactions, significant acquisitions, strategic partnerships or divestitures;
- announcements of investigations or regulatory scrutiny of our operations or lawsuits filed against us;
- investors' general perception of our company and our business;
- actions by institutional or activist investors;
- changes to our business, including pipeline reprioritizations and restructurings;
- recruitment or departure of key personnel;
- overall performance of the equity markets;
- trading volume of our common stock;
- disputes or other developments relating to intellectual property rights, including patents, litigation matters and our ability to obtain, maintain, defend, protect and enforce patent and other intellectual property rights for our technologies;
- threats of or actual significant lawsuits, including patent or stockholder litigation;
- proposed changes to healthcare laws in the United States or foreign jurisdictions, or speculation regarding such changes;
- general political and economic conditions; and
- other events or factors, many of which are beyond our control.

In the past, stockholders have initiated class action lawsuits against pharmaceutical and biotechnology companies following periods of volatility in the market prices of these companies' stock, in particular following significant drops in stock price. Such litigation, if instituted against us, could cause us to incur substantial costs and divert management's attention and resources from our business. In addition, in the current volatile market for biotechnology stocks, in particular where shares are trading below cash balances, certain biotechnology investors have advocated for increases in short-term stockholder value through proposed corporate actions such as financial restructurings, special dividends, stock repurchases, mergers, other business combinations or sales of assets. Any such proposals directed at us could cause us to incur substantial costs and divert management's attention and resources from our business.

A significant portion of our common stock may be sold into the market, which could cause the market price of our common stock to drop significantly.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. If our stockholders sell, or the market perceives that our stockholders intend to sell, substantial amounts of our common stock in the public market, the market price of our common stock could decline significantly.

We have registered and intend to continue to register all shares of common stock that we may issue under our equity compensation plans. These shares can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates. In connection with the Restructuring Plan, we accelerated vesting of certain outstanding and unvested equity awards held by terminated employees, including our former chief executive officer and other executives. As a result, a greater number of shares of common stock will be available for sale in the public market earlier than would have been the case if the Restructuring Plan had not been implemented.

Additionally, the holders of an aggregate of 15.7 million shares of our common stock, or their transferees, have rights, subject to some conditions, to require us to file one or more registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. If we were to register the resale of these shares, they could be freely sold in the public market without limitation. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of our company more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws, as currently in effect, may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- provide for a classified board of directors whose members serve staggered terms;
- authorize our board of directors to issue, without further action by the stockholders, shares of undesignated preferred stock with terms, rights and preferences determined by our board of directors that may be senior to our common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the chairperson of our board of directors or our chief executive officer;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for election to our board of directors;
- prohibit cumulative voting in the election of directors;
- provide that our directors may be removed for cause only upon the vote of the holders of at least 66 2/3% of our outstanding shares of common stock;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum; and
- require the approval of our board of directors or the holders of at least 66 2/3% of our outstanding shares of common stock to amend our bylaws and certain provisions of our certificate of incorporation.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law (DGCL), which generally, subject to certain exceptions, prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any “interested” stockholder for a period of three years following the date on which the stockholder became an “interested” stockholder. Any delay or prevention of a change of control transaction or changes in our management could cause the market price of our common stock to decline.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our amended and restated certificate of incorporation and amended and restated bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the DGCL, our amended and restated bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- We will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person’s conduct was unlawful.
- We may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law.
- We are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.
- We will not be obligated pursuant to our amended and restated bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification.

- The rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons.

We may not retroactively amend our amended and restated bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

Concentration of ownership of our common stock among our existing executive officers, directors and principal stockholders may prevent new investors from influencing significant corporate decisions and also reduces the public float for our common stock.

Based upon our common stock outstanding as of June 30, 2023, our executive officers, directors and current beneficial owners of 5% or more of our common stock, in the aggregate, beneficially own approximately 89.4% of our outstanding common stock. These stockholders, acting together, are able to significantly influence all matters requiring stockholder approval, including the election and removal of directors and any merger or other significant corporate transactions. The interests of this group of stockholders may not coincide with the interests of other stockholders.

Some of these persons or entities may have interests different than yours. For example, because many of these stockholders purchased their shares at prices substantially below the price at which shares were sold in the IPO and have held their shares for a longer period, they may be more interested in selling our company to an acquirer than other investors, or they may want us to pursue strategies that deviate from the interests of other stockholders.

In addition, as a result of this concentration of ownership, there is a limited number of number of shares of our common stock that are not held by officers, directors and controlling stockholders (which is referred to as our public float), thereby adversely impacting the liquidity of our common stock and potentially depressing the price at which you may be able to sell shares of common stock.

We have identified material weaknesses in our internal control over financial reporting. If we are unable to remediate these material weaknesses, or if we identify additional material weaknesses in the future or otherwise fail to maintain effective internal control over financial reporting, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect our business.

Prior to the completion of the IPO, we were a private company with limited accounting personnel to adequately execute our accounting processes and other supervisory resources with which to address our internal control over financial reporting. In connection with the preparation of our consolidated financial statements for the year ended December 31, 2020, we identified material weaknesses in our internal control over financial reporting, two of which remain unremediated as of December 31, 2022. The material weaknesses, and our remediation plan, are disclosed in Item 4 of this Quarterly Report on Form 10-Q.

We believe we have made substantial progress toward achieving the effectiveness of our internal control over financial reporting and disclosure controls and procedures. The actions that have been taken are subject to continued review and testing by management as well as oversight by the audit committee of our board of directors. We will not be able to conclude whether the steps we have taken will fully remediate these material weaknesses in our internal control over financial reporting until we have completed our remediation efforts and subsequent evaluation of their effectiveness.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired.

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (Exchange Act), the Sarbanes-Oxley Act and the rules and regulations of the Nasdaq Stock Market. Section 302 of the Sarbanes-Oxley Act requires, among other things, that we report on the effectiveness of our disclosure controls and procedures in our quarterly and annual reports and, beginning with our annual report for the year ending 2022, Section 404 of the Sarbanes-Oxley Act requires that we perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting in our Form 10-K filing for that year. This requires that we incur substantial additional professional fees and internal costs to expand our accounting and finance functions and that we expend significant management efforts.

As a public company, we will be required to maintain internal control over financial reporting and to report any material weaknesses in those internal controls. We cannot assure you that the measures we have taken to date, and are continuing to implement, or any measures we may take in the future, will be sufficient to identify or prevent future material weaknesses. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected. In addition, our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting in our first annual report required to be filed with the SEC following the date we are no longer an emerging growth company or a smaller reporting company with less than \$100 million in revenue.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls, we may not be able to produce timely and accurate financial statements. If that were to happen, the market price of our stock could decline and we could be subject to sanctions or investigations by the Nasdaq Stock Market, the SEC or other regulatory authorities. In addition, our common stock may not be able to remain listed on the Nasdaq Stock Market or any other securities exchange.

Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware and, to the extent enforceable, the federal district courts of the United States of America as the exclusive forums for substantially all disputes between us and our stockholders, which restricts our stockholders' ability to choose the judicial forum for disputes with us or our directors, officers, or employees.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for the following types of claims or causes of action under Delaware statutory or common law: any derivative claims or causes of action brought on our behalf; any claims or causes of action asserting a breach of a fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation, or our amended and restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. In addition, our amended and restated certificate of incorporation provides that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. These choice of forum provisions will not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Such provisions are intended to benefit and may be enforced by us, our officers and directors, employees and agents, including the underwriters for any offering giving rise to such complaint and any other professional or entity who has prepared or certified any part of the document underlying the offering and may result in increased costs for stockholders to bring a claim.

We believe these provisions may benefit us by providing increased consistency in the application of Delaware law and federal securities laws by chancellors and judges, as applicable, particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi-forum litigation. These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage lawsuits with respect to such claims or make such lawsuits more costly for stockholders, although our stockholders will not be deemed to have waived our compliance with federal securities laws and the rules and regulations thereunder. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions, and there can be no assurance that such provisions will be enforced by a court in those other jurisdictions. If a court were to find either choice of forum provision contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions.

General Risk Factors

Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

Unless and until we can generate a substantial amount of revenue from our product candidates, we may finance our future cash needs through public or private equity offerings, debt financings, collaborations, licensing arrangements or other sources, or any combination of the foregoing. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans.

To the extent that we raise additional capital through the sale of common stock, convertible securities or other equity securities, your ownership interest may be diluted, and the terms of these securities could include liquidation or other preferences and anti-dilution protections that could adversely affect your rights as a common stockholder. In addition, debt financing, if available, may result in fixed payment obligations and may involve agreements that include restrictive covenants that limit our ability to take specific actions, such as incurring additional debt, making capital expenditures, creating liens, redeeming stock or declaring dividends, that could adversely impact our ability to conduct our business. In addition, securing financing could require a substantial amount of time and attention from our management and may divert a disproportionate amount of their attention away from day-to-day activities, which may adversely affect our management's ability to oversee the development of our product candidates. Additional capital may not be available to us, or even if it is, the cost of such capital may be high. We may be forced to obtain additional capital before reaching clinical or regulatory milestones, when our stock price or trading volume or both are low, or when the general market for life sciences companies is weak. Raising capital under any of these or similar scenarios, if we can raise any at all, may lead to significant dilution to our existing stockholders.

If we raise additional funds through collaborations or marketing, distribution, licensing and royalty arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

If equity research analysts do not publish research or reports, or publish unfavorable research or reports, about us, our business or our market, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that equity research analysts publish about us and our business. As a newly public company, we may have limited equity analyst coverage. Equity research analysts may elect not to provide research coverage of our common stock, and such lack of research coverage may adversely affect the market price of our common stock. In the event we do have equity research analyst coverage, we will not have any control over the analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

Unfavorable global economic conditions could adversely affect our business, financial condition, stock price, and results of operations.

The global credit and financial markets have experienced extreme volatility and disruptions (including as a result of the COVID-19 pandemic and actual or perceived changes in interest rates, inflation and macroeconomic uncertainties), which has included severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, high inflation, uncertainty about economic stability, and increases in unemployment rates. The financial markets and the global economy may also be adversely affected by the current or anticipated impact of military conflict, including the conflict between Russia and Ukraine, terrorism, or other geopolitical events. Sanctions imposed by the U.S. and other countries in response to such conflicts, including the one in Ukraine, may also continue to adversely impact the financial markets and the global economy, and any economic countermeasures by the affected countries or others could exacerbate market and economic instability. There can be no assurance that further deterioration in credit and financial markets and confidence in economic conditions will not occur. A severe or prolonged economic downturn could result in a variety of risks to our business, including a decrease in the demand for our drug candidates and in our ability to raise additional capital when needed on acceptable terms, if at all. In addition, current inflationary trends in the global economy may impact salaries and wages, costs of goods and transportation expenses, among other things, and recent and potential future disruptions in access to bank deposits or lending commitments due to bank failures may create market and economic instability. We cannot anticipate all of the ways in which the foregoing, and the current economic climate and financial market conditions generally, could adversely impact our business.

We incur costs and demands upon our management as a result of complying with the laws and regulations affecting public companies in the U.S., which may harm our business.

As a public company listed in the U.S., we incur significant additional legal, accounting and other expenses. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure, including regulations implemented by the SEC and the Nasdaq Stock Market, may increase legal and financial compliance costs and make some activities more time consuming. These laws, regulations and standards are subject to varying interpretations and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from regular business activities to compliance activities. If, notwithstanding our efforts, we fail to comply with new laws, regulations and standards, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

Failure to comply with these rules might also make it more difficult for us to obtain certain types of insurance, including director and officer liability insurance, and we might be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, on committees of our board of directors or as members of senior management.

If our information technology systems or data, or those of third parties upon which we rely, such as CROs, are or were compromised, we could experience adverse consequences resulting from such compromise, including but not limited to regulatory investigations or actions; litigation; fines and penalties; disruptions of our business operations; reputational harm; loss of revenue or profits; loss of customers or sales; and other adverse consequences.

In the ordinary course of our business, we may collect, store, use, transmit, disclose, or otherwise process proprietary, confidential, and sensitive data, including personal data (such as health-related data), intellectual property, and trade secrets. We may rely upon third parties service providers and technologies to operate critical business systems to process confidential information and personal data in a variety of contexts, including, without limitation, third-party providers of cloud-based infrastructure, encryption and authentication technology, employee email and other functions. Our ability to monitor these third parties' cybersecurity practices is limited, and these third parties may not have adequate information security measures in place. We may share or receive sensitive data with or from third parties.

Cyberattacks, malicious internet-based activity, and online and offline fraud are prevalent and continue to increase. These threats are becoming increasingly difficult to detect. These threats come from a variety of sources. In addition to traditional computer "hackers," threat actors, personnel (such as through theft or misuse), sophisticated nation-states, and nation-state-supported actors now engage in attacks.

We and the third parties upon which we rely, such as CROs, may be subject to a variety of evolving threats, including but not limited to social-engineering attacks (including through phishing attacks), malicious code (such as viruses and worms), malware (including as a result of advanced persistent threat intrusions), denial-of-service attacks (such as credential stuffing), personnel misconduct or error, ransomware attacks, supply-chain attacks, software bugs, server malfunctions, software or hardware failures, loss of data or other information technology assets, adware, telecommunications failures, geopolitical developments, earthquakes, fires, floods, and other similar threats. Ransomware attacks, including those perpetrated by organized criminal threat actors, nation-states, and nation-state-supported actors, are becoming increasingly prevalent and severe and can lead to significant interruptions in our operations, loss of data and income, reputational harm, and diversion of funds. For example, concerns have been raised about a potential increase in cybersecurity attacks generally as a result of the war between Russia and Ukraine and the resulting sanctions by U.S. and European governments, together with any additional future sanctions or other actions by them. Extortion payments may alleviate the negative impact of a ransomware attack, but we may be unwilling or unable to make such payments due to, for example, applicable laws or regulations prohibiting such payments. Similarly, supply-chain attacks have increased in frequency and severity, and we cannot guarantee that third parties and infrastructure in our supply chain or our third-party partners' supply chains have not been compromised or that they do not contain exploitable defects or bugs that could result in a breach of or disruption to our information technology systems (including our products and services) or the third-party information technology systems that support us and our services.

Our remote workforce poses increased risks to our information technology systems and data, as more of our personnel work from home, utilizing network connections outside our premises. Future business transactions (such as acquisitions or integrations) could expose us to additional cybersecurity risks and vulnerabilities, as our systems could be negatively affected by vulnerabilities present in acquired or integrated entities' systems and technologies. Furthermore, we may discover security issues that were not found during due diligence of such acquired or integrated entities, and it may be difficult to integrate companies into our information technology environment and security program. Any of the previously identified or similar threats could cause a security incident or other interruption. A security incident or other interruption could result in unauthorized, unlawful, or accidental acquisition, modification, destruction, loss, alteration, encryption, disclosure of, or access to data. If such an event were to occur, it could result in a material disruption of our development programs and our business operations. For example, the loss of clinical trial data from completed, ongoing or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their computer systems could also harm our business. These threats pose a risk to the security of our systems, the confidentiality and the availability and integrity of our data, and these risks apply both to us, and to third parties on whose systems we rely for the conduct of our business.

We may expend significant resources or modify our business activities (including future clinical trial activities) in an effort to protect against security incidents. Certain data privacy and security obligations may require us to implement and maintain specific security measures, industry-standard or reasonable security measures to protect our information technology systems and data. While we have implemented security measures designed to protect against security incidents, there can be no assurance that these measures will be effective. We take steps to detect and remediate vulnerabilities. We may be unable in the future to detect vulnerabilities in our information technology systems because such threats and techniques change frequently, are often sophisticated in nature, and may not be detected until after a security incident has occurred. These vulnerabilities therefore may pose material risks to our business. Despite our efforts to identify and remediate vulnerabilities, if any, in our information technology systems, our efforts may not be successful. Further, we may experience delays in developing and deploying remedial measures designed to address any such identified vulnerabilities.

Applicable data privacy and security obligations may require us to notify relevant stakeholders of security incidents. Such disclosures are costly, and the disclosures or the failure to comply with such requirements could lead to adverse consequences. If we (or a third party upon whom we rely) experience a security incident or are perceived to have experienced a security incident, we may experience adverse consequences. These consequences may include: government enforcement actions (for example, investigations, fines, penalties, audits, and inspections); additional reporting requirements and/or oversight; restrictions on processing data (including personal data); litigation (including class claims); indemnification obligations; negative publicity; reputational harm; monetary expenditures; interruptions in our operations (including availability of data); financial loss; and other similar harms. Security incidents and attendant consequences may cause delays in the development of our product candidates and negatively impact our ability to grow and operate our business.

Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data privacy and security obligations. We cannot be sure that our insurance coverage will be adequate or sufficient to protect us from or to mitigate liabilities arising out of our privacy and security practices, that such coverage will continue to be available on commercially reasonable terms or at all, or that such coverage will pay future claims. In addition to experiencing a security incident, third parties may gather, collect, or infer sensitive information about us from public sources, data brokers, or other means that reveals competitively sensitive details about our organization and could be used to undermine our competitive advantage or market position.

We are an “emerging growth company” and a “smaller reporting company,” and as a result of the reduced reporting requirements applicable to “emerging growth companies” and “smaller reporting companies,” our common stock may be less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act. For as long as we continue to be an “emerging growth company,” we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies,” including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We may take advantage of these exemptions until we are no longer an “emerging growth company.” We could be an “emerging growth company” for up to five years, although circumstances could cause us to lose that status earlier, including if the aggregate market value of our common stock held by non-affiliates exceeds \$700 million as of any June 30 (the end of our second fiscal quarter) before that time, in which case we would no longer be an “emerging growth company” as of the following December 31 (our fiscal year-end).

We are also a “smaller reporting company,” as defined in the Exchange Act. Even after we no longer qualify as an “emerging growth company,” we may still qualify as a “smaller reporting company,” which would allow us to continue to take advantage of many of the same exemptions from disclosure requirements. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and the price of our common stock may be more volatile.

We may be unable to maintain adequate insurance coverage.

We presently have general liability, workers’ compensation, directors’ and officers’ and product liability insurance coverage. Although we believe we will be able to maintain such coverage for a reasonable cost and obtain any additional coverages that our business may require, no assurances can be made that we will be able to do so.

Changes in tax laws or regulations that are applied adversely to us or our customers may seriously harm our business.

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, which could affect the tax treatment of any of our future domestic and foreign earnings. Any new taxes could adversely affect our domestic and international business operations, and our business and financial performance. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us.

We are a “small or medium-sized enterprise” (SME) as defined under U.K. corporate tax regulations. We may continue to rely on U.K. research and development tax credits and incentives that are available to SMEs as a source of capital for our business. Changes in the SME eligibility criteria by the U.K. government or changes in our business could prevent us from being eligible for these tax credits in the future. Further, in November 2022, the U.K. government announced changes to the research and development tax credit program; these changes, which include a reduction in tax credit rates for SMEs, are effective on or after April 1, 2023. Changes such as these reduce the amount of capital we obtain from recoverable U.K. research and development tax credits, which could also harm our business.

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

Recent Sales of Unregistered Securities

None.

Use of Proceeds

On August 9, 2021 our Registration Statement on Form S-1, as amended (File No. 333-257980), was declared effective in connection with our IPO. The aggregate net proceeds from our IPO, after underwriting discounts and commissions of \$6.4 million and other estimated offering expenses of \$2.5 million, were \$83.1 million. There has been no material change in the planned use of proceeds from our IPO as described in our prospectus filed pursuant to Rule 424(b)(4) under the Securities Act with the SEC on August 11, 2021.

Item 3. Defaults Upon Senior Securities.

Not applicable.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

Not applicable.

Item 6. Exhibits.

Exhibit Number	Description of Exhibit	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation of the Registrant	8-K	001-40708	3.1	8/12/2021
3.2	Amended and Restated Bylaws of the Registrant	S-1	333-257980	3.4	8/2/2021
4.1	Reference is made to Exhibits 3.1 and 3.2				
4.2	Form of common stock certificate of the Registrant	S-1	333-257980	4.1	8/2/2021
4.3	Amended and Restated Investors Rights Agreement, dated May 21, 2021, by and among the Registrant and the investors listed on Schedule A thereto	S-1	333-257980	10.1	7/16/2021
31.1*	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.				
32.1*	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive File because XBRL tags are embedded within the Inline XBRL document.				
101.SCH	Inline XBRL Taxonomy Extension Scheme 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.

**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 Eliem Therapeutics, Inc. (the "Company") on Form 10-Q for the period ending June 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: August 10, 2023

By: _____ /s/ Andrew Levin

Andrew Levin

Executive Chairman of the Board of Directors
(Principal Executive Officer and Principal Financial Officer)

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Eliem Therapeutics, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.
