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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2021

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: 001-38890

Cortexyme, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**90-1024039**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
269 East Grand Ave.	
South San Francisco, California	**94080**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (415) 910-5717

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 $0.001 per share	CRTX	Nasdaq Global Select 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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of October 25, 2021, the registrant had 29,877,608 shares of common stock, $0.001 par value per share, outstanding.

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

Cortexyme, Inc.
Condensed Consolidated Balance Sheets
(Unaudited)
(In thousands, except share and per share amounts)

	September 30, 2021	December 31, 2020 (1)
ASSETS		
Current assets:		
Cash and cash equivalents	$ 62,207	$ 66,841
Short term investments	52,205	66,979
Prepaid expenses and other current assets	5,015	4,042
Total current assets	119,427	137,862
Property and equipment, net	303	427
Operating lease right-of-use assets, net	1,352	674
Long term investments	26,141	50,464
Other assets	193	39
Total assets	$ 147,416	$ 189,466
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 2,880	$ 3,555
Accrued expenses and other current liabilities	11,274	13,441
Total current liabilities	14,154	16,996
Long-term operating lease liabilities	610	208
Total liabilities	14,764	17,204
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.001 par value, 10,000,000 authorized, no shares issued and outstanding as of September 30, 2021 and December 31, 2020	—	—
Common stock, $0.001 par value, 100,000,000 shares authorized, 29,867,263 and 29,543,222 issued and outstanding as of September 30, 2021 and December 31, 2020, respectively	30	29
Additional paid in capital	345,751	318,574
Accumulated other comprehensive income	71	313
Accumulated deficit	(213,200)	(146,654)
Total stockholders' equity	132,652	172,262
Total liabilities and stockholders' equity	$ 147,416	$ 189,466

(1) The balance sheet as of December 31, 2020 is derived from the audited financial statements as of that date

See accompanying notes.

Cortexyme, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(Unaudited)
(In thousands, except share and per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Operating expenses:				
Research and development	$ 14,038	$ 16,983	$ 45,582	$ 45,450
General and administrative	7,639	4,929	21,192	12,591
Total operating expenses	21,677	21,912	66,774	58,041
Loss from operations	(21,677)	(21,912)	(66,774)	(58,041)
Interest income	128	406	515	1,747
Other expense, net	(157)	—	(287)	—
Net loss	(21,706)	(21,506)	(66,546)	(56,294)
Other comprehensive income (loss):				
Foreign currency translation adjustments	18	—	18	—
Unrealized gain (loss) on available for sales securities	(64)	(198)	(260)	453
Total comprehensive loss	$ (21,752)	$ (21,704)	$ (66,788)	$ (55,841)
Net loss per share - basic and diluted	$ (0.73)	$ (0.73)	$ (2.25)	$ (1.94)
Weighted average shares of common stock outstanding - basic and diluted	29,767,376	29,488,739	29,637,328	29,066,006

See accompanying notes.

Cortexyme, Inc.
Condensed Consolidated Statements of Stockholders' Equity
(Unaudited)
(In thousands, except share and per share amounts)

For the three months ended September 30, 2021 and 2020

	Common Stock		Additional Paid in Capital	Accumulated Other Comprehensive Income / (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance June 30, 2021	29,655,786	$ 30	$ 333,427	$ 117	$ (191,494)	$ 142,080
Exercise of stock options	211,477	—	4,706	—	—	4,706
Stock based compensation	—	—	7,618	—	—	7,618
Other comprehensive loss	—	—	—	(46)	—	(46)
Net loss	—	—	—	—	(21,706)	(21,706)
Balance September 30, 2021	29,867,263	$ 30	$ 345,751	$ 71	$ (213,200)	$ 132,652
Balance June 30, 2020	29,486,269	$ 29	$ 309,320	$ 711	$ (104,593)	$ 205,467
Exercise of stock options	7,980	—	90	—	—	90
Stock based compensation	—	—	4,158	—	—	4,158
Other comprehensive loss	—	—	—	(198)	—	(198)
Net loss	—	—	—	—	(21,506)	(21,506)
Balance September 30, 2020	29,494,249	$ 29	$ 313,568	$ 513	$ (126,099)	$ 188,011

See accompanying notes.

Cortexyme, Inc.
Condensed Consolidated Statements of Stockholders' Equity
(Unaudited)
(In thousands, except share and per share amounts)

For the nine months ended September 30, 2021 and 2020

	Common Stock		Additional Paid in Capital	Accumulated Other Comprehensive Income / (Loss)	Accumulated Deficit	Shareholders' Equity
	Shares	Amount				
Balance January 1, 2021	29,543,222	$ 29	$ 318,574	$ 313	$ (146,654)	$ 172,262
Exercise of stock options	324,041	1	5,817	—	—	5,818
Stock based compensation	—	—	21,360	—	—	21,360
Other comprehensive loss	—	—	—	(242)	—	(242)
Net loss	—	—	—	—	(66,546)	(66,546)
Balance September 30, 2021	29,867,263	$ 30	$ 345,751	$ 71	$ (213,200)	$ 132,652
Balance January 1, 2020	26,869,413	$ 27	$ 185,196	$ 60	$ (69,805)	$ 115,478
Issuance of common stock in connection with private placement, net of issuance costs of $7,372	2,500,000	2	117,626	—	—	117,628
Exercise of stock options	124,836	—	1,235	—	—	1,235
Stock based compensation	—	—	9,511	—	—	9,511
Other comprehensive income	—	—	—	453	—	453
Net loss	—	—	—	—	(56,294)	(56,294)
Balance September 30, 2020	29,494,249	$ 29	$ 313,568	$ 513	$ (126,099)	$ 188,011

See accompanying notes.

Cortexyme, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(In thousands)

	For the Nine Months Ended September 30,	
	2021	**2020**
Cash flows from operating activities		
Net Loss	$ (66,546)	$ (56,294)
Adjustments to reconcile net loss to net cash used in operating activities:		
Non-cash rent expense	199	275
Stock based compensation	21,360	9,511
Depreciation and amortization	260	247
Amortization of premium on available for sale investments	679	429
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(973)	1,044
Other assets	(154)	8
Accounts payable	(675)	1,234
Accrued expenses and other current liabilities	(2,664)	6,004
Net cash used in operating activities	(48,514)	(37,542)
Cash flow from investing activities:		
Purchase of investments	(35,778)	(183,356)
Proceeds from maturities of investments	73,947	115,141
Purchase of property and equipment	(136)	(42)
Net cash provided by / (used in) investing activities	38,033	(68,257)
Cash flows from financing activities:		
Payments of finance leases	—	(32)
Proceeds from issuance of common stock upon exercise of stock options	5,818	1,235
Proceeds from private placement offering, net of issuance costs	—	117,628
Net cash provided by financing activities	5,818	118,831
Effect of exchange rate changes on cash	29	—
Net increase / (decrease) in cash and cash equivalents	(4,634)	13,032
Cash and cash equivalents at beginning of period	66,841	51,214
Cash and cash equivalents at end of period	$ 62,207	$ 64,246
Supplemental disclosures of non-cash information:		
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 1,254	$ 620

See accompanying notes.

Note 1. Organization

Description of Business

Cortexyme, Inc. (the "Company") was incorporated in the State of Delaware in June 2012 and is headquartered in South San Francisco, California. The Company is a clinical stage biopharmaceutical company focused on developing therapeutics based on data supporting a new theory of the cause of Alzheimer's disease and other degenerative disorders. Cortexyme is targeting a specific, infectious pathogen tied to neurodegeneration and chronic inflammation in humans and animal models.

Private Investment in Public Equity ("PIPE")

In February 2020, the Company completed a private investment in public equity transaction ("PIPE Financing"). The Company entered into Stock Purchase Agreements (the "Purchase Agreements") with certain accredited investors, including an entity affiliated with a member of the Company's Board of Directors, pursuant to which the Company sold and issued shares of common stock for aggregate gross proceeds of $125.0 million. Costs related to the offering were $7.4 million. Pursuant to the Purchase Agreements, the Company sold 2,500,000 common shares at $50.00 per common share. In connection with the PIPE Financing, the Company filed a registration statement on Form S-1 (File No. 333-237594), with the SEC registering for resale the shares of common stock issued in the PIPE Financing. The registration statement was declared effective by the SEC on April 13, 2020.

Liquidity and Capital Resources

The Company has incurred losses and negative cash flows from operations since inception and expects to continue to generate operating losses for the foreseeable future. As of September 30, 2021, the Company had an accumulated deficit of $213.2 million. Since inception through September 30, 2021, the Company has funded operations primarily with the net proceeds from the issuance of convertible promissory notes, from the issuance of redeemable convertible preferred stock, from the net proceeds from the Company's initial public offering (the "IPO") and from the net proceeds from the PIPE Financing. As of September 30, 2021, the Company had cash, cash equivalents, and short-term investments of $114.4 million, which it believes will be sufficient to fund its planned operations for a period of at least 12 months from the date of the issuance of the accompanying unaudited consolidated financial statements. The Company also has long-term investments of $26.1 million.

Management expects to incur additional losses in the future to fund its operations and conduct product research and development and may need to raise additional capital to fully implement its business plan. The Company may raise additional capital through the issuance of equity securities, debt financings or other sources in order to further implement its business plan. However, our ability to raise additional capital may be more difficult in light of the top-line results from our Phase 2/3 GAIN Trial. If such financing is not available when needed and at adequate levels, the Company will need to reevaluate its operating plan and may be required to delay the development of its product candidates.

Note 2. Summary of Significant Accounting Policies

Basis of Consolidation

The condensed consolidated financial statements include the accounts of Cortexyme, Inc. and its wholly owned subsidiary. All intercompany balances and transactions have been eliminated.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and pursuant to the instructions of the SEC on Form 10-Q and Article 10 of Regulation S-X of the SEC. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the management's opinion, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair presentation of the results of operations and cash flows for the periods presented have been included.

The condensed consolidated balance sheet as of September 30, 2021, the condensed consolidated statements of operations and comprehensive loss for the three and nine months ended September 30, 2021 and 2020, the condensed consolidated statements of stockholders' equity for the three and nine months ended September 30, 2021 and 2020, the condensed consolidated statements of

cash flows for the nine months ended September 30, 2021 and 2020, and the financial data and other financial information disclosed in the notes to the condensed consolidated financial statements are unaudited. These financial statements should be read in conjunction with the audited financial statements and notes thereto for the year ended December 31, 2020 included in the Company's Form 10-K filed with the SEC on March 1, 2021. The results of operations for the three and nine months ended September 30, 2021 are not necessarily indicative of the results to be expected for the year ending December 31, 2021, or for any other future annual or interim period.

Risks and Uncertainties

The Company's future results of operations involve a number of risks and uncertainties. Factors that could affect the Company's future operating results and cause actual results to vary materially from expectations include, but are not limited to, uncertainty of results of clinical trials and reaching milestones, uncertainty of regulatory approval of the Company's potential drug candidates, uncertainty of market acceptance of the Company's drug candidates, competition from substitute products and larger companies, securing and protecting proprietary technology, strategic relationships and dependence on key individuals. The Company's drug candidate will require approvals from the U.S. Food and Drug Administration (FDA) and comparable foreign regulatory agencies prior to commercial sales in their respective jurisdictions. There can be no assurance that any drug candidate will receive the necessary approvals. If the Company was denied approval, approval was delayed or the Company was unable to maintain approval for any drug candidate, it could have a materially adverse impact on the Company.

In connection with the COVID-19 pandemic, governments have implemented significant measures, including closures, quarantines, travel restrictions and other social distancing directives, intended to control the spread of the virus. Companies have also taken precautions, such as requiring employees to work remotely, imposing travel restrictions, and temporarily closing businesses. To the extent that these restrictions remain in place, additional prevention and mitigation measures are implemented in the future or there is uncertainty about the effectiveness of these or any other measures to contain or treat COVID-19, there is likely to be a continuing, adverse impact on global economic conditions and consumer confidence and spending, which could materially and adversely affect the Company's research and development, as well as operational activities. At this time, the Company continues to manage and mitigate potential disruptions to its research and future manufacturing and supply chain considerations. The Company has not experienced significant hinderances to its operations or material negative financial impacts as compared to prior periods. At this time, the extent to which the COVID-19 pandemic impacts the Company's business will depend on future developments which are highly uncertain and cannot be predicted.

Use of Estimates

The preparation of the Company's consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and expenses, as well as related disclosure of contingent assets and liabilities. The most significant estimates used in the Company's consolidated financial statements relate to the stock-based awards and other issuances, accruals for research and development costs, useful lives of long-lived assets, stock-based compensation and related assumptions, the incremental borrowing rate for leases and income tax uncertainties, including a valuation allowance for deferred tax assets; and contingencies. The Company bases its estimates on historical experience and on various other market specific and other relevant assumptions that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ materially from the Company's estimates.

Significant Accounting Policies

There have been no significant changes to the accounting policies during the nine months ended September 30, 2021, as compared to the significant accounting policies described in our Annual Report on Form 10-K.

Cash and Cash Equivalents

The Company considers all highly liquid investments with original maturities of three months or less at the date of purchase to be cash and cash equivalents. Cash equivalents, which consist of amounts invested in money market funds, are stated at fair value. There are no unrealized gains or losses on the money market funds for the periods presented.

Fair Value Measurements

The fair value of the Company's financial instruments reflects the amounts that the Company estimates that it would receive in connection with the sale of an asset or pay in connection with the transfer of a liability in an orderly transaction between market participants at the measurement date (exit price). The Company discloses and recognizes the fair value of its assets and liabilities using a hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to valuations based upon unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to valuations based upon unobservable inputs that are significant to the valuation (Level 3 measurements). The guidance establishes three levels of the fair value hierarchy as follows:

Level 1 - Inputs that reflect unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date;

Level 2 - Inputs other than quoted prices that are observable for the assets or liability either directly or indirectly, including inputs in markets that are not considered to be active;

Level 3 - Inputs that are unobservable. Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability. The Company recognizes transfers between levels of the fair value hierarchy as of the end of the reporting period.

Recent Accounting Pronouncements Not Yet Adopted

The following are new accounting pronouncements that the Company is evaluating for future impacts on its financial statements:

Financial Instruments—Credit Losses: In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments which amends the principles around the recognition of credit losses by mandating entities incorporate an estimate of current expected credit losses when determining the value of certain assets. The guidance also amends reporting around allowances for credit losses on available-for-sale marketable securities. In November 2019, the FASB issued ASU 2019-10, Financial Instruments—Credit Losses (Topic 326), Derivatives and Hedging (Topic 815) and Leases (Topic 842): Effective Dates, which established that a one-time determination of the effective date for ASU 2016-13 would be based on the Company's SEC reporting status as of November 15, 2019. The Company was a "smaller reporting company" as defined by Item 10 of Regulation S-K, and therefore, ASU 2016-13 is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. The Company is evaluating the impact of the guidance on its financial statements.

All other newly issued accounting pronouncements not yet effective have been deemed either immaterial or not applicable.

Note 3. Fair Value Measurements

The Company measures and reports its cash equivalents and investments at fair value.

Money market funds are measured at fair value on a recurring basis using quoted prices and are classified as Level 1. Investments are measured at fair value based on inputs other than quoted prices that are derived from observable market data and are classified as Level 2 inputs.

Financial assets and liabilities subject to fair value measurements on a recurring basis and the level of inputs used in such measurements by major security type as of September 30, 2021 and December 31, 2020 are presented in the following tables (in thousands):

	Fair Value Measurements at September 30, 2021			
	Total	Level 1	Level 2	Level 3
Money market funds	$ 36,600	$ 36,600	$ —	$ —
Certificates of Deposit	13,516	—	13,516	—
Repurchase Agreements	16,500	—	16,500	—
Corporate notes	58,743	—	58,743	—
Government and agency notes	4,215	—	4,215	—
Municipal notes	2,622	—	2,622	—
Total	$ 132,196	$ 36,600	$ 95,596	$ —

	Fair Value Measurements at December 31, 2020			
	Total	Level 1	Level 2	Level 3
Money market funds	$ 15,661	$ 15,661	$ —	$ —
Certificates of Deposit	30,765	—	30,765	—
Repurchase Agreements	15,000	—	15,000	—
Corporate notes	75,426	—	75,426	—
Government and agency notes	8,296	—	8,296	—
Municipal notes	3,446	—	3,446	—
Total	$ 148,594	$ 15,661	$ 132,933	$ —

The following table summarizes the available-for-sale securities (in thousands):

	Fair Value Measurements at September 30, 2021			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Money market funds	$ 36,600	$ —	$ —	$ 36,600
Certificates of Deposit	13,487	35	(6)	13,516
Repurchase Agreements	16,500	—	—	16,500
Corporate notes	58,724	38	(19)	58,743
Government and agency notes	4,212	5	(2)	4,215
Municipal notes	2,621	1	—	2,622
Total cash equivalents and investments	$ 132,144	$ 79	$ (27)	$ 132,196
Classified as:				
Cash equivalents (maturities within 90 days)				$ 53,850
Short-term investments (maturities within one year)				52,205
Long-term investments (maturities beyond 1 year)				26,141
Total cash equivalents and investments				$ 132,196

	Fair Value Measurements at December 31, 2020			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Money market funds	$ 15,661	$ —	$ —	$ 15,661
Certificates of Deposit	30,603	162	—	30,765
Repurchase Agreements	15,000	—	—	15,000
Corporate notes	75,298	183	(55)	75,426
Government and agency notes	8,274	22	—	8,296
Municipal notes	3,445	1	—	3,446
Total cash equivalents and investments	$ 148,281	$ 368	$ (55)	$ 148,594

Classified as:	
Cash equivalents (maturities within 90 days)	$ 31,151
Short-term investments (maturities within one year)	66,979
Long-term investments (maturities beyond 1 year)	50,464
Total cash equivalents and investments	$ 148,594

As of September 30, 2021, the remaining contractual maturities of available-for-sale securities was approximately 10 months. There have been no significant realized gains or losses on available-for-sale securities for the periods presented. Based on the Company's review of its available-for-sale securities, the Company has a limited number of available-for-sale securities in insignificant loss positions as of September 30, 2021. Management evaluates securities for other-than-temporary impairment (OTTI) on a quarterly basis, and more frequently when economic or market conditions warrant such an evaluation. Investment securities are generally evaluated for OTTI under FASB Accounting Standards Codification (ASC) Topic 320, Accounting for Certain Investments in Debt and Equity Securities. OTTI under the ASC Topic 320 model, management considers many factors, including: (1) the length of time and the extent to which the fair value has been less than cost, (2) the financial condition and near-term prospects of the issuer, (3) whether the market decline was affected by macroeconomic conditions, and (4) whether the entity has the intent to sell the debt security or more likely than not will be required to sell the debt security before its anticipated recovery. The assessment of whether an other-than-temporary decline exists involves a high degree of subjectivity and judgment and is based on the information available to management at a point in time. The Company believes it had no other-than-temporary impairments on these securities as of September 30, 2021.

The investments are classified as available-for-sale securities. At September 30, 2021 and December 31, 2020, the balance in the Company's accumulated other comprehensive income was comprised primarily of activity related to the Company's available-for-sale securities. There were no realized gains or losses recognized on the sale or maturity of available-for-sale securities for the three and nine months ended September 30, 2021 and as a result, the Company did not reclassify any amounts out of accumulated other comprehensive income for the quarter.

There were no transfers between Levels 1, 2 or 3 for the period presented.

Note 4. Cash, Cash Equivalents and Investments

The following tables categorize the fair values of cash, cash equivalents, short-term investments and long-term investments measured at fair value on a recurring basis on our balance sheets (in thousands):

	September 30, 2021	December 31, 2020
Cash and cash equivalents:		
Cash	$ 8,357	$ 35,690
Money market funds	36,600	15,661
Repurchase agreements	16,500	15,000
Certificates of deposit	750	490
Total cash and cash equivalents	$ 62,207	$ 66,841
Short-term investments:		
Certificates of deposit	$ 8,575	$ 23,387
Municipal notes	1,583	2,365
Corporate notes	37,832	34,991
Government and agency notes	4,215	6,236
Total short-term investments	$ 52,205	$ 66,979
Long-term investments		
Corporate notes	$ 20,911	$ 40,435
Certificates of deposit	4,191	6,888
Municipal notes	1,039	1,081
Government and agency notes	—	2,060
Total long-term investments	$ 26,141	$ 50,464

Note 5. Balance Sheet Components

Prepaid Expenses and Other Current Assets

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

	September 30, 2021	December 31, 2020
Prepaid expenses	$ 472	$ 274
Prepaid insurance	1,965	964
Prepaid research and development expenses	2,083	2,110
Other current assets	495	694
Total prepaid expenses and other current assets	$ 5,015	$ 4,042

Property and Equipment, Net

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

	September 30, 2021	December 31, 2020
Computer equipment	$ 52	$ 33
Lab equipment	503	405
Finance lease right of use assets	557	557
Leasehold improvement	40	21
Office furniture	26	26
Less: accumulated amortization and depreciation	(875)	(615)
Property and equipment, net	$ 303	$ 427

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following (in thousands):

	September 30, 2021	December 31, 2020
Personnel expenses	$ 2,793	$ 2,415
Professional fees	401	141
Research and development expenses	7,251	10,603
Other	829	282
Total accrued expenses and other current liabilities	$ 11,274	$ 13,441

Note 6. Leases

Real Estate Operating Leases

In June 2018, the Company entered into a three-year lease agreement with no renewal options with an investor in the Series B redeemable convertible preferred stock. The lease began on July 16, 2018 and provides 3,185 square feet of office and laboratory space in South San Francisco, California. The Company issued 114,437 shares of its Series B redeemable convertible preferred stock with a fair value of $1.1 million in exchange for the leased facility. No other payments are due under the lease. The common area maintenance and other operating costs are included in the base rent. 100% of the issued shares were initially subject to a repurchase option. Pursuant to the terms of the lease, each month beginning on the one-month anniversary of the commencement date of the lease, $1/36^{th}$ of the total shares are released from the repurchase option until all shares are released over the lease period of three years. The scheduled release of shares ceased immediately upon the IPO which was a terminating event.

The Company completed its IPO on May 13, 2019 and as a result, pursuant to the terms of the lease agreement, all previously unvested shares were fully vested and as part of the IPO process, all outstanding shares of the Company's redeemable convertible preferred stock including the Series B redeemable convertible preferred stock issued in connection with the lease agreement were converted into shares of the Company's common stock on a 1-for-1 basis and the operating lease liability was extinguished.

In May 2019, the Company entered into an amendment to the lease agreement to rent additional space in the same facility under the same terms as its existing facility lease except the terms of payment. Under the terms of the amendment, the Company paid a one-time fee of approximately $63,000 for the additional space and the lease agreement was set to terminate in July 2021. No other payments were due under the lease agreement and no renewal option is available. As the entire lease was prepaid, there was no associated lease liability.

In May 2020, the Company entered into a second amendment to the lease agreement to rent additional space in the same facility under the same terms as its existing facility lease except the terms of payment. Under the terms of the amendment, the Company paid rent monthly for the additional space and the lease agreement was set to terminate in July 2021. The Company recorded an operating lease asset and liability of $172,000.

In May 2021, the Company entered into a third amendment to the lease agreement to extend the term of its existing facility space to July 15, 2022 under the same terms as its existing facility lease except the terms of payment. The lease amendment provides for one-year extension period under the same terms. The Company paid a security deposit of $105,000, which is included in Other Assets on the September 30, 2021 condensed consolidated balance sheets. As a result of this amendment, the Company recognized an additional right-of-use asset and corresponding lease liability of $1.2 million. In the same agreement, the Company also agreed to rent additional space effective July 16, 2021 for a period of 12 months. The lease amendment provides for one-year extension period and is included in the lease term as it is reasonably certain that the Company will exercise the option. The Company recognized an additional right of use asset and corresponding lease liability of $44,000 in July 2021. Total payments under the third amendment to the lease including the additional space will be $1.3 million.

In May 2020, the Company entered into a lease agreement to rent space in San Diego, California. The lease agreement is for three years, which commenced August 1, 2020. Total payments under the lease will be $337,000. The Company paid a security deposit of $29,000 and is included in Other Assets on the September 30, 2021 condensed consolidated balance sheets. At the

commencement of the lease, the Company recorded an operating lease asset of $326,000, which consists of an operating lease liability of $317,000 and cash rent prepayment of $9,000.

The Company recognizes lease expense on a straight-line basis over the term of its operating lease. As of September 30, 2021, total future rent expense from all real estate operating leases of $1.3 million will be recognized over the remaining terms of 22 months on a straight-line basis over the respective lease period.

Clinical Equipment Operating Lease

The Company uses certain vendor supplied equipment in connection with its on-going clinical trial. The Company has analyzed the vendor agreement and determined that it contains an embedded operating lease. The Company recognizes monthly the leases costs in our research and development expenses. The right of use asset and lease liability are recognized at the lease commencement date based on the present value of lease payments over the lease term. The Company's lease does not provide an implicit rate. The Company used an adjusted historical incremental borrowing rate, based on the information available at the approximate lease commencement date, to determine the present value of lease payments. The remaining lease expense of $6,000 will be recognized over the remaining lease term of approximately 2 months.

Clinical Equipment Financing Lease

The Company uses certain vendor supplied equipment in connection with its on-going clinical trial. The Company has analyzed the vendor agreements and determined that they contain embedded finance leases. The Company recognizes the depreciation expense in research and development expenses in the condensed consolidated statements of operations and comprehensive loss and recognizes expense on a straight-line basis starting when the equipment is placed into service until the end of the contract term ranging from 20 to 34 months. Depreciation expense of the financing lease right of use asset for the nine months ended September 30, 2021 and 2020 was $170,000 and $173,000, respectively.

Supplemental balance sheet information related to leases as follows (in thousands except lease terms and discount rates):

	September 30, 2021	December 31, 2020
Operating lease right of use asset, net	$ 1,352	$ 674
Short-term operating lease liability	737	238
Long-term operating lease liability	610	208
	$ 1,347	$ 446
Finance lease right of use asset	557	557
Finance lease accumulated amortization	(507)	(337)
Total finance lease right of use asset, net	$ 50	$ 220
Weighted average remaining lease term		
Operating leases	1.8 years	1.6 years
Finance leases	0.2 years	0.9 years
Weighted average discount rate		
Operating leases	1.88%	2.10%
Finance leases	—%	—%

Year ended December 31,	Operating Lease
2021 (excluding the nine months ended September 30, 2021)	192
2022	756
2023	423
Total lease payments	1,371
Less: imputed interest	(24)
Total remaining lease liability	1,347

Note 7. Stock-Based Compensation

On December 4, 2014, the Company's stockholders approved the 2014 Stock Plan ("2014 Plan"), and most recently amended the 2014 Plan on April 25, 2019. The 2014 Plan was amended, restated and re-named the 2019 Equity Incentive Plan (the

"2019 Plan"), which became effective as of May 7, 2019, the day prior to the effectiveness of the registration statement filed in connection with the IPO. The remaining shares available for issuance under the 2014 Plan were added to the shares reserved for issuance under the 2019 Plan.

The 2019 Plan provides for the grant of stock options (including incentive stock options and non-qualified stock options), stock appreciation rights, restricted stock, RSUs, performance units, and performance shares to the Company's employees, directors, and consultants. The maximum aggregate number of shares that may be issued under the 2019 Plan is 7,388,053 shares of the Company's common stock. In addition, the number of shares available for issuance under the 2019 Plan will be annually increased on the first day of each fiscal years beginning with fiscal 2020, by an amount equal to the least of (i) 2,146,354 shares of common stock; (ii) 4% of the outstanding shares of its common stock as of the last day of its immediately preceding fiscal year; and (iii) such other amount as the Company's Board of Directors may determine.

The 2019 Plan may be amended, suspended or terminated by the Company's Board of Directors at any time, provided such action does not impair the existing rights of any participant, subject to stockholder approval of any amendment to the 2019 Plan as required by applicable law or listing requirements. Unless sooner terminated by the Company's Board of Directors, the 2019 Plan will automatically terminate on April 23, 2029.

As of September 30, 2021, the Company had 899,925 shares available for future issuance under the 2019 Plan.

Stock Options

Activity for service-based stock options under the 2019 Plan is as follows:

	Number of Options and Unvested Shares	Weighted Average Exercise Price	Weighted average remaining contractual life (years)	Aggregate intrinsic value
				(In thousands)
Balance at December 31, 2020	**4,790,327**	$ 25.47	8.69	$ 49,723
Options granted	675,116	62.01		
Options exercised	(324,041)	17.95		
Options cancelled / forfeited	(123,960)	47.09		
Balance at September 30, 2021	**5,017,442**	$ 30.34	8.17	$ 307,681
Options vested and expected to vest as of September 30, 2021	5,017,442	30.34	8.17	307,681
Options exercisable as of September 30, 2021	2,144,364	$ 17.42	7.36	$ 159,205

For the three and nine months ended September 30, 2021, the Company recognized stock-based compensation expense of $6,685,000 and $18,580,000, respectively, related to options granted to employees and non-employees. The compensation expense is allocated on a departmental basis, based on the classification of the option holder. No income tax benefits have been recognized in the statement of operations for stock-based compensation arrangements. As of September 30, 2021, total unamortized employee stock-based compensation was $80.4 million, which is expected to be recognized over the remaining estimated vesting period of 3.01 years.

Performance Stock Options ("PSOs")

The following table summarizes activity under the Company's PSOs from the 2019 Plan and related information:

	Shares Subject to Outstanding PSOs	Weighted Average Exercise Price	Weighted average remaining contractual life (years)
Balance at December 31, 2020	675,000	$ 29.60	9.94
Balance at September 30, 2021	675,000	29.60	9.19
Outstanding	675,000	$ 29.60	9.19
Vested	—	—	—

For the three and nine months ended September 30, 2021, the Company recognized stock-based compensation expense of $933,000 and $2,780,000, respectively, related to these PSOs. As of September 30, 2021, total unamortized stock-based compensation related to PSOs was $7.1 million, which is expected to be recognized over the remaining estimated vesting period of 2.04 years.

Stock-Based Compensation Expense

The following table summarizes employee and non-employee stock-based compensation expense for the three and nine months ended September 30, 2021 and 2020 and the allocation within the condensed consolidated statements of operations and comprehensive loss (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
General and administrative expense	$ 3,770	$ 2,261	$ 10,878	$ 4,915
Research and development expense	3,848	1,897	10,482	4,596
Total stock-based compensation	$ 7,618	$ 4,158	$ 21,360	$ 9,511

Employee Stock Purchase Plan

On April 24, 2019, the Company's Board of Directors adopted its 2019 Employee Stock Purchase Plan ("2019 ESPP"), which was subsequently approved by the Company's stockholders and became effective on May 7, 2019, the day immediately prior to the effectiveness of the registration statement filed in connection with the IPO. The 2019 ESPP is intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Internal Revenue Code (the "Code") for U.S. employees. In addition, the 2019 ESPP authorizes grants of purchase rights that do not comply with Section 423 of the Code under a separate non-423 component for non-U.S. employees and certain non-U.S. service providers. The Company has reserved 832,421 shares of common stock for issuance under the 2019 ESPP. In addition, the number of shares reserved for issuance under the 2019 ESPP will be increased automatically on the first day of each fiscal year for a period of up to ten years, starting with the 2020 fiscal year, by a number equal to the least of: (i) 536,589 shares; (ii) 1% of the shares of common stock outstanding on the last day of the prior fiscal year; or (iii) such lesser number of shares determined by the Company's Board of Directors. The 2019 ESPP is expected to be implemented through a series of offerings under which participants are granted purchase rights to purchase shares of the Company's common stock on specified dates during such offerings. The Company has not yet approved an offering under the 2019 ESPP.

Note 8. Related Party Transactions

As described in Note 1, on February 10, 2020, the Company issued and sold shares of common stock at a purchase price of $50.00 per share in a private placement. In the private placement, the Company issued and sold 30,000 shares of common stock for an aggregate purchase price of $1,500,000 to an entity affiliated with David A. Lamond, a member of the Company's Board of Directors.

In the first quarter of 2021, the Company entered into two agreements with LifeSci Advisors, LLC for non-capital advisory consulting services. The Company's Chief Operating Officer and Chief Financial Officer, Christopher Lowe, has an investment in a sister entity to LifeSci Advisors, LLC whose business is unrelated to the services being offered by LifeSci Advisors, LLC to the Company. For the nine months ended September 30, 2021, the Company has incurred total expenses of $541,000 related to these agreements.

Note 9. Income Taxes

The Company has a history of losses and expects to record a loss in 2021.

The Company accounts for income taxes under ASC Topic 740 – Income Taxes. Under this standard, deferred tax assets and liabilities are recognized for future tax benefits or consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

A valuation allowance is provided for significant deferred tax assets when it is more likely than not that such assets will not be realized through future operations. No provision for income taxes has been recorded due to the available net operating loss carry forwards. Future tax benefits which may arise as a result of these losses have not been recognized in these financial statements, as their realization is determined not likely to occur and accordingly, the Company has recorded a valuation allowance for the future deferred tax assets.

On March 27, 2020, President Trump signed the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") into law. On December 21, 2020, President Trump also signed into law the Consolidated Appropriations Act, 2021 ("CAA Act") which includes further COVID-19 economic relief and extension of certain expiring tax provisions. The Company has reviewed the aspects of these laws as it relates to the income taxes and has concluded that at this time, the CARES Act and CAA Act will have no material impact to the Company's 2021 provision for income taxes. The Company will continue to evaluate changes and revisions of the CARES Act and CAA Act and their impact on the Company’s financial position, results of operations and cash flows.

Note 10. Net Loss Per Share

The following outstanding potentially dilutive shares have been excluded from the calculation of diluted net loss per share for the period presented due to their anti-dilutive effect:

	September 30,	
	2021	**2020**
Stock options issued and outstanding	5,017,442	3,768,925
Performance stock options	675,000	—
Total	5,692,442	3,768,925

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with (i) our unaudited condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and (ii) our audited financial statements and related notes and management's discussion and analysis of financial condition and results of operations included in our Annual Report on Form 10-K for the year ended December 31, 2020 filed with the Securities and Exchange Commission (the "SEC"), on March 1, 2021. Unless the context requires otherwise, references in this Quarterly Report on Form 10-Q to the "Company," "Cortexyme," "we," "us" and "our" refer to Cortexyme, Inc. In preparing the Management's Discussion and Analysis below, we presume the readers have access to and have read the Management's Discussion and Analysis in our Prospectus, pursuant to Instruction 2 to paragraph (b) of Item 303 of Regulation S-K.

Forward-Looking Statements

This Quarterly Report on Form 10-Q 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 (the "Exchange Act"). All statements other than statements of historical facts contained in this quarterly report, including statements regarding our future results of operations and financial position, business strategy, prospective products, product approvals, research and development costs, timing and likelihood of success, plans and objectives of management for future operations, adequacy of our cash resources and working capital, impact of COVID-19 pandemic on our research and development activities and business operations, and future results of anticipated products, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other similar expressions. The forward-looking statements in this quarterly report are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in this report in Part II, Item 1A -"Risk Factors," and in our Annual Report on Form 10-K for the year ended December 31, 2020 and elsewhere in this Quarterly Report on Form 10-Q and in other filings we make with the SEC from time to time. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. These forward-looking statements speak only as of the date hereof. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

Overview

We are a clinical stage biopharmaceutical company with a growing pipeline of therapeutics in Alzheimer's disease and other degenerative diseases. Our approach is based on the seminal discovery of the presence of *Porphyromonas gingivalis ("P. gingivalis")*, and its secreted toxic virulence factor proteases, called gingipains, in the brains of greater than 90% of Alzheimer's patients. Additionally, we and other researchers have observed that *P. gingivalis* infection causes Alzheimer's and Parkinson's pathology in animal models, and these effects have been successfully treated with a gingipain inhibitor in preclinical studies. Our proprietary lead drug candidate, atuzaginstat (COR388), is an orally administered, brain-penetrating small molecule gingipain protease inhibitor.

Alzheimer's Disease

On October 26, 2021, we announced top-line results from our global Phase 2/3 clinical trial of atuzaginstat, called the GAIN (GingipAIN Inhibitor for Treatment of Alzheimer's Disease) trial, in mild to moderate Alzheimer's patients. The 643-participant study did not meet statistical significance in its co-primary cognitive and functional endpoints as measured by ADAS-Cog11 and ADCS-ADL at end of the treatment period in the overall cohort. The study did show a dose response for a pre-specified subgroup of participants with *P. gingivalis* DNA detectable in saliva at baseline (n=242), with a 57% slowing of cognitive decline as measured by ADAS-Cog11 in the 80 mg BID arm (p=0.02) and a 42% slowing in the 40 mg BID arm (p=0.07) vs. placebo. Significant benefits in this subgroup were not seen on the other co-primary, ADCS-ADL. The study also indicated that most adverse events were mild to moderate in severity. The most common were gastrointestinal, such as diarrhea in up to 16% and nausea in 6% of participants treated with atuzaginstat vs. 3% and 2% of placebo participants, respectively. Atuzaginstat was associated with dose-related liver enzyme elevations >3X the upper limit of normal: 2% on placebo, 7% on 40 mg BID, and 15% on 80 mg BID. These

elevations alone were not clinically significant, and virtually all participants were asymptomatic. Two participants in the 80 mg BID arm had concomitant bilirubin elevations without alternative explanation. Lab changes resolved while participants remained on drug or after withdrawal without any known long-term adverse effects.

We are actively engaging with regulators, the medical community, patient advocacy groups, and other key stakeholders to advance development of atuzaginstat and the second-generation lysine-gingipain inhibitor COR588, which is differentiated by novel compound properties and once daily administration. We are reviewing plans for the further development of atuzaginstat and expect to have additional information in the coming quarters.

Alzheimer's disease represents one of the most significant unmet medical needs of our time and prior to the approval of Aduhelm on June 7, 2021, there were no marketed treatments that address the underlying cause of the disease. The disease afflicts an estimated 5.7 million people in the United States and more than 30 million people worldwide and is expected to grow to 14.0 million people in the United States by 2050. The direct costs of caring for individuals with Alzheimer's disease and other dementias in the United States were estimated to total $300 billion in 2020 and are projected to increase to $1.1 trillion by 2050, according to the Alzheimer's Association. Historical challenges in developing effective therapeutics for this disease include a poor understanding of disease causation and animal models that do not translate to efficacy in humans. We believe our novel approach can overcome these challenges by targeting an upstream cause of neuroinflammation and neurodegeneration. Our drug candidate has demonstrated proof of concept in a new physiological animal model that we believe is representative of human Alzheimer's disease pathology.

Atuzaginstat is the first and only selective small molecule inhibitor of gingipain activity being investigated in clinical trials for the treatment of neurodegenerative disease. Atuzaginstat is designed to target an upstream driver of multiple pathological pathways, including amyloid beta production, inflammation and neurodegeneration, in contrast to mechanisms of action targeting downstream effects, such as amyloid plaques and tau tangles, which have been largely unsuccessful in clinical trials to date. Accordingly, we believe atuzaginstat could represent a disease-modifying therapy for the chronic treatment of neurodegenerative disease.

Periodontal Disease

The GAIN Trial sub-study in periodontal disease demonstrated a trend to benefit on the primary clinical endpoint of pocket depth in the same pre-specified sub-group with *P. gingivalis* DNA detectable in saliva. Further results will inform the next stage of development in periodontitis and will be presented at a future scientific conference.

P. gingivalis has been identified as a key pathogen in the development of periodontal disease. Periodontal disease is a common age-related disease affecting nearly 50% of the population over 50 years of age, or 65 million people, in the United States. The disease presents with symptoms including chronic inflammation, degeneration of gum tissue and tooth loss. Periodontal disease is associated with increased risk of cardiovascular disease, diabetes and certain cancers. The disease is often chronic and recurring due to persistent bacterial infection and antibiotic resistance. Current standard of care for the treatment of periodontal disease commonly involves scaling and root planning to remove bacterial plaque and tartar, in addition to local delivery of antibiotics in some cases. Atuzaginstat (COR388) reduced periodontal disease and associated bone loss in multiple animal models of periodontal disease. Target engagement and efficacy data for atuzaginstat (COR388) in aged dogs was published in January 2020 in the journal *Pharmacology Research and Perspectives.*

COR588 is a second generation brain penetrant lysine gingipain inhibitor which has completed IND enabling studies. We began Phase 1 studies utilizing COR588 in September 2021. We presently expect to study COR588 in periodontal disease with potential utilization in additional indications.

Parkinson's Disease

Parkinson's disease affects more than 1 million people in the United States and 10 million worldwide. Currently approved treatments are limited to primarily managing symptoms. Based upon published literature and our research to date, our start-up activities continue for a placebo controlled multicenter Phase 2 study in Parkinson's disease called the PEAK (Gingipain inhibitor for treatment of PArKinson's' disease) Trial. In light of the GAIN Trial results, we are incorporating our experience in the GAIN Trial into the potential study design for PEAK.

Coronavirus

A 3CLpro inhibitor, COR803, has been selected as lead compound for treatment of coronavirus infections, including COVID-19 disease, caused by SARS-CoV-2 infection. COR803 is a novel patent-pending small molecule 3CLpro inhibitor discovered and developed by us based on our expertise in cysteine protease inhibition. 3CLpro, or Mpro, is a validated antiviral drug

target shown to be essential in viral replication of SARS-CoV-2. COR803 has beneficial properties over other COVID-19 therapeutics and 3CLpro inhibitors in development including; covalent irreversible binding of the viral 3CLpro enzyme; high potency of antiviral EC90 of 30 nM in human lung cell viral replication assays; highly selective for 3CLpro versus other cellular proteases including Cathepsin L; and excellent systemic exposure utilizing intranasal or subcutaneous administration, allowing for clinical use in multiple settings such as outpatient and inpatient.

Pipeline

Two arginine gingipain inhibitors, COR788 and COR822, have been selected as lead compounds to progress toward IND-enabling studies, including manufacturing scale-up and dose range-finding toxicology studies based on their properties of potency, selectivity, pharmacologic efficacy, and pharmacokinetics. Arginine gingipain is a distinct target associated with P. gingivalis that contributes to bacterial survival, replication and toxicity. An arginine gingipain inhibitor may be used as monotherapy in new indications or potentially additively with lysine gingipain inhibitors, like atuzaginstat. Both molecules have novel composition of matter (patent pending), are brain penetrant and orally available.

Partial Clinical Hold

On February 12, 2021, we received a letter from the FDA stating that a partial clinical hold has been placed on atuzaginstat (COR388) impacting the open-label extension (OLE) phase of the GAIN Trial. Under the hold, no new participants were enrolled in the OLE and currently enrolled OLE participants were discontinued. Participants in the fully enrolled (N=643) double-blind, placebo-controlled randomized phase of the GAIN Trial continued to receive study drug at their assigned dose. The partial clinical hold was initiated following the review of hepatic adverse events in the GAIN trial by the FDA. These events have been reversible and without any known long-term adverse effects for the participants. We plan to review the GAIN Trial results with the FDA and other regulators as part of a discussion of the overall development program for atuzaginstat.

Business Update Regarding COVID-19

The current COVID-19 pandemic has presented a substantial public health and economic challenge around the world and is affecting our employees, patients, communities and business operations, as well as the U.S. economy and financial markets. The full extent to which the COVID-19 pandemic will directly or indirectly impact our business, results of operations and financial condition will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information that may emerge concerning COVID-19, the actions taken to contain it or treat its impact and the economic impact on local, regional, national and international markets.

To date, our employees, vendors and clinical trial sites have been able to advance our GAIN clinical trial and complete enrollment. At this time the impact of the COVID-19 pandemic has not resulted in changes to our previously stated analysis timelines for the GAIN trial. We are continuing to assess the potential impact of the COVID-19 pandemic on our business and operations, including our expenses, preclinical operations and clinical trials. Our office-based employees have been working primarily from home since mid-March 2020, while ensuring essential staffing levels in our operations remain in place, including maintaining key personnel in our lab facility. We have implemented plans to enable all employees to voluntarily return to work in our offices and lab facility which include safety protocols, such as face coverings, social distancing, frequent cleaning, and COVID-19 testing. Employee have been gradually returning to the office on a voluntary basis since June 2021. We continue to assess the risks which take into account applicable public health authority and local government guidelines and are designed to ensure community and employee safety. However, the effects of the COVID-19 pandemic continue to rapidly evolve and even if our employees more broadly return to work in our offices and lab facility, we may have to resume a more restrictive remote work model, whether as a result of spikes or surges in COVID-19 infection or hospitalization rates or public authority mandates. We are not currently experiencing any significant supply chain disruptions due to COVID-19. We have diversified our vendor relationships geographically for both starting materials and manufacturing. However, in the future, the ongoing COVID-19 pandemic, may result in the inability of some of our suppliers to deliver drug supplies on a timely basis. We have taken and continues to take proactive measures to maintain the integrity of its ongoing clinical trial. To potentially mitigate some of the risks of COVID-19 and based on interest and the ability to maintain milestone timelines, we enrolled an additional 73 subjects in the GAIN trial. Despite these efforts, the COVID-19 pandemic could impact timelines, subject follow up visits and study completion. We will continue to monitor the COVID-19 situation and its impact on the ability to continue the development of, and seek regulatory approvals for, our product candidates.

Financial Overview

Since commencing material operations in 2014, we have devoted substantially all of our efforts and financial resources to building our research and development capabilities, establishing our corporate infrastructure and most recently, executing our Phase

1a, Phase 1b and Phase 2/3 clinical trials of atuzaginstat and increasing investment in new indications for atuzaginstat and clinical trials for COR588.

To date, we have not generated any revenue and we have never been profitable. We have incurred net losses since the commencement of our operations. As of September 30, 2021, we had an accumulated deficit of $213.2 million. We incurred a net loss of $21.7 million and $66.5 million in the three and nine months ended September 30, 2021. We do not expect to generate product revenue unless and until we obtain marketing approval for and commercialize a drug candidate, and we cannot assure you that we will ever generate significant revenue or profits.

To date, we have financed our operations primarily through the issuance and sale of convertible promissory notes and redeemable convertible preferred stock and common stock. From inception through September 30, 2021, we received net proceeds of approximately $294.9 million from the issuance of redeemable convertible preferred stock, convertible promissory notes and common stock. This includes net proceeds of approximately $117.6 million from the issuance and sale of common stock in a private placement to certain accredited investors received in February 2020.

As of September 30, 2021 and December 31, 2020, we had cash, cash equivalents and short-term investments of $114.4 million and $133.8 million, respectively. The balances exclude long-term investments of $26.1 million and $50.5 million as of those same periods. Our cash equivalents, short-term and long-term investments are held in money market funds, certificate of deposits, repurchase agreements, investments in corporate debt securities, municipal debt obligations and government agency obligations.

We believe that our existing cash, cash equivalents and investments will be sufficient to fund our planned operations through 2023. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect.

We expect to incur substantial expenditures in the foreseeable future as we expand our pipeline and advance our drug candidates through clinical development, the regulatory approval process and, if approved, commercial launch activities. Specifically, in the near term we expect to incur substantial expenses relating to our ongoing and planned clinical trials, the development and validation of our manufacturing processes, and other development activities.

We will need substantial additional funding to support our continuing operations and pursue our development strategy. Until such time as we can generate significant revenue from sales of an approved drug, if ever, we expect to finance our operations through the sale of equity, debt financings or other capital sources. Adequate funding may not be available to us on acceptable terms, or at all. If we fail to raise capital or enter into such agreements as, and when, needed, we may have to significantly delay, scale back or discontinue the development and commercialization of our drug candidates or delay our efforts to expand our product pipeline.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe that the assumptions and estimates associated with accrued research and development expenditures and stock-based compensation have the most significant impact on our condensed consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates.

The following critical accounting policies are described under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies, Significant Judgements and Use Estimates" in our 2020 Annual Report on Form 10-K and the notes to the unaudited condensed consolidated financial statements included in Item 1, "Unaudited Financial Statements," of this Quarterly Report on Form 10-Q. We believe that of our critical accounting policies, the

following accounting policies are the most critical to fully understanding and evaluating our financial condition and results of operations:

- Research and Development Expenses;
- Stock-Based Compensation Expense; and
- Income Taxes

There have been no material changes in our critical accounting policies during the nine months ended September 30, 2021, as compared to those disclosed in "Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies, Significant Judgments and Use of Estimates" in our Annual Report.

Components of Results of Operations

Operating Expenses

Research and Development Expenses

Our research and development expenses consist of expenses incurred in connection with the research and development of our research programs. These expenses include payroll and personnel expenses, including stock-based compensation, for our research and product development employees, laboratory supplies, product licenses, consulting costs, contract research, regulatory, quality assurance, preclinical and clinical expenses, allocated rent, facilities costs and depreciation. We expense both internal and external research and development costs as they are incurred. Non-refundable advance payments and deposits for services that will be used or rendered for future research and development activities are recorded as prepaid expenses and recognized as an expense as the related services are performed.

To date, our research and development expenses have supported the advancement of atuzaginstat and our other drug candidates in preclinical development. We expect that at least for the foreseeable future, a substantial majority of our research and development expense will support the clinical and regulatory development of our lead candidate atuzaginstat.

We expect our research and development expenses to increase substantially during the next few years as we seek to complete existing and initiate additional clinical trials, pursue regulatory approval of atuzaginstat and advance other drug candidates into clinical development. Over the next few years, we expect our preclinical, clinical and contract manufacturing expenses to increase significantly relative to what we have incurred to date. Predicting the timing or the final cost to complete our clinical program or validation of our manufacturing and supply processes is difficult and delays may occur because of many factors.

The duration, costs and timing of our clinical trial and development of our product candidates will depend on a variety of factors that include, but are not limited to, the following:

- per patient trial costs;
- biomarker analysis costs;
- the cost and timing of drug manufacturing for the trials;
- the number of patients that participate in the trials;
- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the screening, randomization, drop-out or discontinuation rates of patients;

- potential additional safety monitoring or other studies requested by regulatory agencies; and
- the efficacy and safety profile of the product candidates.

In addition, the probability of success for each product candidate will depend on numerous factors, including safety, efficacy, competition, manufacturing capability and commercial viability. We will determine which programs to pursue and how much to fund each program in response to the scientific and clinical success of each product candidate, as well as an assessment of each product candidate's commercial potential.

Because our product candidates are still in clinical development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of our product candidates or whether, or when, we may achieve profitability.

The COVID-19 pandemic may have an adverse impact on our operations, supply chains, our current or future clinical trials, and increase our expenses, including as a result of impacts associated with preventive and precautionary measures that we, other businesses and governments are taking.

General and Administrative

General and administrative expenses consist principally of personnel-related costs, including payroll and stock-based compensation, for personnel in executive, finance, human resources, business and corporate development, and other administrative functions, professional fees for legal, consulting, insurance and accounting services, allocated rent and other facilities costs, depreciation, and other general operating expenses not otherwise classified as research and development expenses.

We anticipate that our general and administrative expenses will increase as the size of our business operations grows to support additional research and development activities.

Interest Income

Interest and other income, net consists primarily of interest earned on our short-term and long-term investments portfolio.

Results of Operations

Comparison of the three months ended September 30, 2021 to the three months ended September 30, 2020

The following sets forth our results of operations for the three months ended September 30, 2021 and 2020 (in thousands):

	Three Months Ended September 30,		Change	
	2021	2020	$	%
Operating expenses:				
Research and development	$ 14,038	$ 16,983	$ (2,945)	(17.3) %
General and administrative	7,639	4,929	2,710	55.0 %
Loss from operations	(21,677)	(21,912)	235	(1.1) %
Interest income	128	406	(278)	(68.5) %
Other expense, net	(157)	—	(157)	100.0 %
Net loss	$ (21,706)	$ (21,506)	(200)	0.9 %

Research and Development Expenses *(in thousands):*

	Three Months Ended September 30,		Change	
	2021	2020	$	%
Direct research and development expenses:				
Atuzaginstat	$ 4,502	$ 11,985	$ (7,483)	(62.4) %
COR588	1,662	526	1,136	216.0 %
Other direct research costs	557	520	37	7.1 %
Indirect research and development expenses:				
Personnel related (including stock-based compensation)	6,497	3,488	3,009	86.3 %
Facilities and other research and development expenses	820	464	356	76.7 %
Total research and development expenses	$ 14,038	$ 16,983	$ (2,945)	(17.3) %

Research and development expenses were $14.0 million for the three months ended September 30, 2021, compared to $17.0 million for the three months ended September 30, 2020, a decrease of $3.0 million.

The costs for atuzaginstat, currently in our GAIN Phase 2/3 clinical trial, decreased $7.5 million from the prior year due to decreases of $1.7 million in drug manufacturing costs and $5.8 million in clinical trial costs as patients continue to conclude participation in the GAIN trial. The GAIN trial is expected to substantially conclude in the fourth quarter 2021 and we anticipate continued overall expenses to decrease as patients complete the trial protocols and the final top-line data read out occurs.

In the three months ended September 30, 2021, we initiated our clinical trial for our new compound COR588. COR588 is a unique small molecule lysine gingipain inhibitor with likely once daily oral dosing that we intend to position in periodontal disease and other new indications. We incurred $1.7 million in costs for the three months ended September 30, 2021 for Phase 1 clinical study costs compared to $0.5 million for the three months ended September 30, 2020. The variance of $1.1 million was caused by increases of $0.4 million in drug manufacturing costs, $0.6 million in clinical trial costs and $0.1 million for preclinical and IND enabling studies.

Other direct research costs remained flat against the same period a year ago and is related primarily to pipeline development and preclinical work in the three months ended September 30, 2021.

We incurred $6.5 million in personnel related expenses in the three months ended September 30, 2021 compared to $3.5 million in the same period for 2020. The increase of $3.0 million is due to a $1.1 million increase in personnel related expenses for increased headcount and a $1.9 million increase in allocated stock-based compensation costs.

Facilities and other research and development expenses increased $0.4 million from the three months ended September 30, 2020 to $0.8 million due to regulatory and quality assurance consulting.

General and Administrative Expenses

General and administrative expenses were $7.6 million for the three months ended September 30, 2021 compared to $4.9 million for the three months ended September 30, 2020. The increase of $2.7 million was due to increases in our employee headcount, which was comprised of compensation and benefits costs of $0.3 million and $1.5 million in allocated stock-based compensation expense, $0.2 million in consulting expense, $0.4 million in investor relations expense, $0.2 million insurance expense and $0.1 million in other general and administrative expenses.

Interest Income

Interest income was $0.1 million for the three months ended September 30, 2021 compared to $0.4 million for the three months ended September 30, 2020. The decrease was a result of decreased average cash and investment balances and decreases in the overall yield of the investment portfolio.

We anticipate continued historic low overall yields from our investment portfolio in future quarters, specifically the credit securities markets.

Other Expense

Other expense increased by $0.2 million for the three months ended September 30, 2021 compared to $0 for the three months ended September 30, 2020. The increase was primarily due to unrealized losses resulting from changes in foreign exchange rates.

Comparison of the nine months ended September 30, 2021 to the nine months ended September 30, 2020

The following sets forth our results of operations for the nine months ended September 30, 2021 and 2020 (in thousands):

	Nine Months Ended September 30,		Change	
	2021	2020	$	%
Operating expenses:				
Research and development	$ 45,582	$ 45,450	$ 132	0.3 %
General and administrative	21,192	12,591	8,601	68.3 %
Loss from operations	(66,774)	(58,041)	(8,733)	15.0 %
Interest income	515	1,747	(1,232)	(70.5) %
Other expense, net	(287)	—	(287)	100.0 %
Net loss	$ (66,546)	$ (56,294)	$ (10,252)	18.2 %

Research and Development Expenses *(in thousands):*

	Nine Months Ended September 30,		Change	
	2021	2020	$	%
Direct research and development expenses:				
Atuzaginstat	$ 19,607	$ 32,943	$ (13,336)	(40.5) %
COR588	4,295	842	3,453	410.1 %
Other direct research costs	2,404	1,772	632	35.7 %
Indirect research and development expenses:				
Personnel related (including stock-based compensation)	17,481	8,801	8,680	98.6 %
Facilities and other research and development expenses	1,795	1,092	703	64.4 %
Total research and development expenses	$ 45,582	$ 45,450	$ 132	0.3 %

Research and development expenses were $45.6 million for the nine months ended September 30, 2021, compared to $45.5 million for the nine months ended September 30, 2020, an increase of $0.1 million.

The costs for atuzaginstat development, currently in our GAIN Phase 2/3 clinical trial, decreased $13.3 million from the same period in the prior year due to decreases of $4.3 million in drug manufacturing costs and $9.0 million in clinical trial costs. The GAIN trial is expected to substantially conclude in the fourth quarter 2021 and we anticipate continued overall expenses to decrease as patients complete the trial protocols and the final top-line data read out occurs.

For the nine months ended September 30, 2021, we initiated our clinical trial for our new compound COR588. COR588 is a unique small molecule lysine gingipain inhibitor with likely once daily oral dosing that we intend to position in periodontal disease and other new indications. We incurred $4.3 million in costs for the nine months ended September 30, 2021, an increase of $3.5 million from the same period in the prior year. This increase was primarily due to $1.4 million in drug manufacturing costs, $0.8 million in clinical trial costs and $1.3 million for preclinical and IND enabling studies. We expect increased costs for this compound as it moves through the Phase 1 clinical study which began in September, 2021. Additionally, other direct research costs increased $0.6 million primarily due to pipeline development and preclinical research.

For the nine months ended September 30, 2021, we experienced a net increase of $8.7 million in personnel related expenses due to an increase in our employee headcount which was comprised of an increase in compensation and benefit costs of $2.8 million and $5.9 million in allocated stock-based compensation costs.

Facilities and other research and development expenses increased $0.7 million from the nine months ended September 30, 2020 to $1.8 million due to increased regulatory and quality assurance consulting.

General and Administrative Expenses

General and administrative expenses increased $8.6 million to $21.2 million for the nine months ended September 30, 2021 from $12.6 million for the nine months ended September 30, 2020. The increase in general and administrative expenses was primarily due to an increase of $7.1 million in personnel costs due to an increase in our employee headcount which was comprised of an increase in compensation and benefits costs of $1.1 million and $6.0 million in allocated stock-based compensation expense, $0.7 million in consulting expense, $0.4 million in investor relations expense and $0.4 million in insurance expense.

Interest Income

Interest income was $0.5 million for the nine months ended September 30, 2021 compared to $1.7 million for the nine months ended September 30, 2020. The decrease was a result of decreased average cash and investment balances and lower yield on those investments.

We anticipate continued historic low overall yields from our investment portfolio in future quarters, specifically the credit securities markets.

Other Expense

Other expense increased by $0.3 million for the nine months ended September 30, 2021 compared to $0 for the nine months ended September 30, 2020. The increase was primarily due to unrealized losses resulting from changes in foreign exchange rates.

Liquidity, Capital Resources and Plan of Operations

We have incurred cumulative net losses and negative cash flows from operations since our inception and anticipate we will continue to incur net losses for the foreseeable future. As of September 30, 2021, we had an accumulated deficit of $213.2 million. and we had cash, cash equivalents and investments of $140.6 million.

Based on our existing business plan, we believe that our existing cash, cash equivalents and investments will be sufficient to fund our anticipated level of operations through at least 2023. However, our operating plans may change and in any event we may need to raise substantial additional financing in the future to fund our operations.

Capital Resources

Our primary use of cash is to fund operating expenses, which consist primarily of research and development expenditures related to our lead program, atuzaginstat, and other research efforts, and to a lesser extent, general and administrative expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable and accrued expenses.

Our product candidates are still in clinical development and the outcome of these efforts is uncertain. Accordingly, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of our product candidates or whether, or when, we may achieve profitability. We will continue to require additional capital to develop our drug candidates and fund operations for the foreseeable future. We may seek to raise capital through private or public equity or debt financings, collaborative or other arrangements with other companies, or through other sources of financing. Adequate additional funding may not be available to us on acceptable terms or at all. Our failure to raise capital as and when needed could have a negative impact on our financial condition and our ability to pursue our business strategies. We anticipate that we will need to raise substantial additional capital, the requirements of which will depend on many factors, including:

- the progress, costs, trial design, results of and timing of our Phase 2/3 GAIN trial and other clinical trials of atuzaginstat, including our Phase 2 PEAK trial for Parkinson’s disease, our COR588 Phase 1 trial and for potential additional indications that we may pursue beyond Alzheimer’s and Parkinson’s disease;
- the willingness of the FDA or EMA to accept our Phase 2/3 GAIN trial, as well as data from our completed and planned clinical and preclinical studies and other work, as the basis for review and approval of atuzaginstat for Alzheimer’s disease;
- the outcome, costs and timing of seeking and obtaining FDA, EMA and any other regulatory approvals;
- the number and characteristics of drug candidates that we pursue;

- our ability to manufacture sufficient quantities of our drug candidates;
- our need to expand our research and development activities;
- the costs associated with securing and establishing commercialization and manufacturing capabilities;
- the costs of acquiring, licensing or investing in businesses, drug candidates and technologies;
- our ability to maintain, expand and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with the licensing, filing, prosecution, defense and enforcement of any patents or other intellectual property rights;
- our need and ability to retain management and hire scientific and clinical personnel;
- the effect of competing drugs and drug candidates and other market developments;
- our need to implement additional internal systems and infrastructure, including financial and reporting systems; and
- the economic and other terms, timing of and success of any collaboration, licensing or other arrangements into which we may enter in the future.

If we raise additional funds by issuing equity securities, our stockholders will experience dilution. Any future debt financing into which we enter may impose upon us additional covenants that restrict our operations, including limitations on our ability to incur liens or additional debt, pay dividends, repurchase our common stock, make certain investments and engage in certain merger, consolidation or asset sale transactions. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders. If we are unable to raise additional funds when needed, we may be required to delay, reduce, or terminate some or all of our development programs and clinical trials. We may also be required to sell or license to others rights to our drug candidates in certain territories or indications that we would prefer to develop and commercialize ourselves.

Our ability to raise additional capital 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 the ongoing COVID-19 pandemic. However, based on our current business plans, we believe that our existing cash, cash equivalents and investments will be sufficient to fund our planned operations through 2023.

Summary Statement of Cash Flows

Cash Flows

The following table sets forth the primary sources and uses of cash and cash equivalents for each of the periods presented below (in thousands):

	Nine Months Ended September 30,	
	2021	**2020**
Net cash (used in) provided by:		
Operating activities	$ (48,514)	$ (37,542)
Investing activities	38,033	(68,257)
Financing activities	5,818	118,831
Effect of exchange rate changes on cash	29	—
Net increase / (decrease) in cash and cash equivalents	$ (4,634)	$ 13,032

Operating Activities

Net cash used in operating activities was $48.5 million for the nine months ended September 30, 2021. Cash used in operating activities was primarily due to our net loss of $66.5 million for the period, adjusted for $22.5 million of non-cash items, including $21.4 million in stock-based compensation and a net decrease in accounts payable, accrued expenses and other current liabilities of $3.4 million and increases in our current assets of $1.1 million.

Net cash used in operating activities was $37.5 million for the nine months ended September 30, 2020. Cash used in operating activities was primarily due to our net loss of $56.3 million for the period, adjusted for $10.5 million of non-cash items, including $9.5 million in stock-based compensation and a net increase in accounts payable, accrued expenses and other current liabilities of $7.3 million and decreases in our current assets of $1.0 million.

Investing Activities

Cash provided by investing activities was $38.0 million in the nine months ended September 30, 2021, primarily related to the purchase of investments of $35.8 million, maturities of investments of $73.9 million and the purchase of equipment of $0.1 million.

Cash used by investing activities was $68.3 million for the nine months ended September 30, 2020, primarily related to the purchase of available for sale investment securities of $183.4 million and maturities of $115.1 million.

Financing Activities

Cash provided by financing activities was $5.8 million in the nine months ended September 30, 2021, which consisted of net proceeds from the exercise of stock options during the period.

Cash provided by financing activities was $118.8 million for the nine months ended September 30, 2020, which consisted primarily of net proceeds from the private placement transaction and the proceeds from the exercise of stock options.

Contractual Obligations and Commitments

There have been no material changes to our contractual obligations and other non-cancelable commitments as of September 30, 2021, as compared to those disclosed in our Annual Report on Form 10-K.

Our contractual obligations primarily consist of our obligations under non-cancellable operating leases and other purchase obligations.

We enter into contracts in the normal course of business with third party contract organizations for clinical trials, non-clinical studies and testing, manufacturing, and other services and products for operating purposes. These contracts generally provide for termination after a notice period, and therefore, are cancellable contracts. The amount and timing of the payments under these contracts varies based upon the timing of the services. We have recorded accrued expense of approximately $7.7 million in our condensed consolidated balance sheet for expenditures incurred by these vendors as of September 30, 2021. We have approximately $34.0 million in cancellable future commitments based on existing contracts as of September 30, 2021.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under the rules and regulations of the SEC.

Recent Accounting Pronouncements

Please refer to Note 2 to our unaudited condensed consolidated financial statements appearing under Part 1, Item 1 of this report for a discussion of new accounting standards updates that may impact us.

Available information

Our corporate website address is www.cortexyme.com. We use the investor relations page of our website for purposes of compliance with Regulation FD and as a routine channel for distribution of important information, including news releases, analyst presentations, financial information and corporate governance practices. Our filings with the SEC are posted on our website and available free of charge as soon as reasonably practical after they are electronically filed with, or furnished to, the SEC. The SEC's website, www.sec.gov, contains reports, proxy statements and other information regarding issuers that file electronically with the SEC. The content on any website referred to in this Quarterly Report on Form 10-Q is not incorporated by reference in this Form 10-Q unless expressly noted. Further, references to website URLs are intended to be inactive textual references only.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities. The primary objective of our investment activities is to preserve capital to fund our operations. We also seek to maximize income from our investments without assuming significant risk. To achieve our objectives, we maintain a portfolio of investments in a variety of securities of high credit quality and short-term duration, invested in compliance with our policy.

We had cash, cash equivalents, and marketable securities of $140.6 million as of September 30, 2021, which consisted primarily of bank deposits, money market funds, short-term and long-term marketable securities. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations in interest income have not been significant for us. Due to the short-term maturities of our cash equivalents and marketable securities, and the low risk profile of our marketable securities, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our cash equivalents and marketable securities.

Foreign Currency Exchange Rate Risk

We are conducting clinical trials and have vendors based in countries outside the United States and we anticipate that we will continue this practice in the future. To the extent such clinical trial expenses are not denominated, or vendors do not transact, in the U..S. dollar, fluctuations in exchange rates between the U.S. dollar and such foreign currencies could result in increased operating expenses and otherwise have a material effect on our results of operations and financial condition. The impact of future exchange rate fluctuations on the results of our operations cannot be accurately predicted due to our constantly changing exposure to various currencies, and the fact that all foreign currencies do not react in the same manner in relation to the U.S. dollar. To the extent that the percentage of our non-U.S. dollar expense increases in the future, our exposure to risks associated with fluctuations in foreign exchange rates may increase. We are aware of the availability of off-balance sheet financial instruments to hedge exposure to foreign currency exchange rates, including cross-currency swaps, forward contracts and foreign currency options. However, we have not used such instruments in the past, and none were utilized in 2020 or the nine months ended September 30, 2021.

We do not believe that inflation, interest rate changes, or exchange rate fluctuations had a significant impact on our results of operations for the three and nine months ended September 30, 2021.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our disclosure controls and procedures are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934, as amended or the Exchange Act, is recorded, communicated to our management to allow timely decisions regarding required disclosure, summarized and reported within the time periods specified in the SEC's rules and forms. Any disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Under the supervision and with the participation of our management, including the Chief Executive Officer, and the Chief Operating Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures, as such term is defined under Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of September 30, 2021. Based on that evaluation, the Chief Executive Officer and the Chief Operating Officer and Chief Financial Officer have concluded that, as of such date, our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended September 30, 2021, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

We are not currently a party to any material legal proceedings.

Item 1A. Risk Factors.

Our operations and financial results are subject to various risks and uncertainties, including those described below that could adversely affect our business, financial condition, results of operations, cash flows and the trading price of our common stock. You should carefully consider the following risks, together with all of the other information in this Quarterly Report on Form 10-Q, including our financial statements and the related notes included elsewhere in this Quarterly Report on Form 10-Q.

Summary of Risk Factors

We may be unable for many reasons, including those that are beyond our control, to implement our business strategy successfully. The occurrence of any single risk or any combination of risks could materially and adversely affect our business, financial condition, results of operations, cash flows and the trading price of our common stock. Some of these risks are:

- We are a clinical stage biopharmaceutical company with a limited operating history, which may make it difficult to evaluate the prospects for our future viability. We have no drug candidates approved for commercial sale, we have never generated any revenue from sales, and we may never be profitable.
- We have concentrated our research and development efforts on the treatment of degenerative diseases, a field that has seen very limited success in drug development. Our drug candidates are based on new approaches and novel technology, which makes it difficult to predict the time and cost of drug candidate development and the regulatory approval process.
- If clinical trials of our drug candidates fail to demonstrate safety and efficacy to the satisfaction of the FDA or similar regulatory authorities outside the United States or do not otherwise produce positive results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our drug candidates.
- We will require substantial additional funding to finance our operations, complete the development and commercialization of atuzaginstat and evaluate future drug candidates. If we are unable to raise this funding when needed or on acceptable terms, we may be forced to delay, reduce or eliminate our drug development programs or other operations.
- We are substantially dependent on the success of atuzaginstat, which will require significant additional clinical testing before we can seek regulatory approval and potentially launch commercial sales, and which may not be successful in clinical trials, receive regulatory approval or be successfully commercialized, even if approved. If we are not successful in commercializing atuzaginstat, or are significantly delayed in doing so, our business will be materially harmed.
- We may not be successful in our efforts to continue to create a pipeline of drug candidates or to develop commercially successful drugs. If we fail to successfully identify and develop additional drug candidates, our commercial opportunity may be limited.
- Adverse side effects or properties or other safety risks associated with atuzaginstat or any future drug candidates could delay or preclude approval, cause us to suspend or discontinue clinical trials, abandon further development, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.
- We expect to rely on third parties to conduct our clinical trials and some aspects of our research and preclinical testing, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, research, or testing.

- We cannot be certain that atuzaginstat or any of our future drug candidates will receive regulatory approval, and without regulatory approval we will not be able to market our drug candidates.

- If we or any of our third-party manufacturers encounter difficulties in production of our current or any future drug candidate, or fail to meet rigorously enforced regulatory standards, our ability to provide supply of our drug candidates for clinical trials or for patients, if approved, could be delayed or stopped, or we may be unable to maintain a commercially viable cost structure.

- If, in the future, we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market any drug candidates we may develop, we may not be successful in commercializing those drug candidates if and when they are approved.

- Natural disasters, public health crises, political crises, and other catastrophic events or other events outside of our control may be detrimental to our capabilities or the capabilities of third parties on which we depend.

- We are currently conducting and in the future may conduct clinical trials for our drug candidates outside the United States, and the FDA, EMA and applicable foreign regulatory authorities may not accept data from such trials.

- If we are unable to obtain and maintain sufficient intellectual property protection for our drug candidates, or if the scope of the intellectual property protection is not sufficiently broad, our competitors could develop and commercialize drug candidates similar or identical to ours, and our ability to successfully commercialize our drug candidates may be adversely affected.

We have marked with an asterisk (*) those risks described below that reflect substantive changes from, or additions to, the risks described in our Annual Report on Form 10-K for the year ended December 31, 2020.

Risks Relating Our Financial Position

We are a clinical stage biopharmaceutical company with a limited operating history, which may make it difficult to evaluate the prospects for our future viability.

We are a clinical stage biopharmaceutical company with a limited operating history focused on developing therapeutics for degenerative diseases, including Alzheimer's disease. We were incorporated in June 2012 and commenced material operations in June 2014. We have a very limited operating history, which may make it difficult to evaluate the success of our business to date and assess our future viability. Drug development is a highly uncertain undertaking and involves a substantial degree of risk. We have recently initiated clinical trials for our lead drug candidate, atuzaginstat, and COR588 and have not initiated clinical trials for any of our other drug candidates. To date, we have reported top-line data in only one Phase 2/3 clinical trial and have not initiated any other late stage clinical trial, obtained marketing approval for any drug candidate, manufactured a commercial scale drug candidate, arranged for a third party to do so on our behalf, or conducted sales and marketing activities necessary for successful drug candidate 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 biopharmaceutical companies in rapidly evolving fields, and we have not yet demonstrated an ability to overcome such risks and difficulties successfully. If we do not address these risks and difficulties successfully, our business will suffer.

We have no drug candidates approved for commercial sale, we have never generated any revenue from sales, and we may never be profitable.*

We have no drug candidates approved for sale, have never generated any revenue from sales, have never been profitable and do not expect to be profitable in the foreseeable future. We have incurred net losses in each year since our inception. For the years ended December 31, 2020, 2019 and 2018, our net losses were $76.8 million, $37.0 million and $12.5 million, respectively. We had an accumulated deficit of $213.2 million as of September 30, 2021.

To date, we have devoted most of our financial resources to our corporate overhead and research and development of atuzaginstat, including our preclinical development activities and clinical trials of atuzaginstat. We expect that it will be several years, if ever, before we have a drug candidate ready for commercialization. We expect to continue to incur losses for the foreseeable future, and we expect these losses to increase as we continue our development of, and seek regulatory approvals for our drug candidates, prepare for and begin the commercialization of any approved drug candidates, and add infrastructure and personnel to support our

drug development efforts and operations as a public company. We anticipate that any such losses could be significant for the next several years. These net losses and negative cash flows have had, and will continue to have, an adverse effect on our stockholders' equity and working capital. Further, these net losses have fluctuated significantly in the past and are expected to continue to significantly fluctuate from quarter-to-quarter or year-to-year. To become and remain profitable, we must develop and eventually commercialize a drug with significant revenue.

We may never succeed in developing a commercial drug. For example, our Phase 2/3 GAIN trial did not meet statistical significance in its co-primary cognitive and functional endpoints as measured by ADAS-Cog11 and ADCS-ADL at end of the treatment period in the overall cohort. We may elect to discontinue, delay or modify clinical trials of some drug candidates or focus on others. Any changes in the outcome of any of these variables with respect to the development of our drug candidates in clinical development could mean a significant change in the costs and timing associated with the development of these drug candidates. Even if we succeed in commercializing one or more drug candidates, we may never generate revenues that are significant or large enough to achieve profitability. In addition, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown challenges. Because of these numerous risks and uncertainties, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to generate revenues or achieve profitability. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis and we will continue to incur substantial research and development and other expenditures to develop and market additional drug candidates.

We will require substantial additional funding to finance our operations, complete the development and commercialization of atuzaginstat and evaluate future drug candidates. If we are unable to raise this funding when needed or on acceptable terms, we may be forced to delay, reduce or eliminate our drug development programs or other operations.*

Since our inception, we have used substantial amounts of cash to fund our operations, and we expect our expenses to increase substantially in the foreseeable future in connection with our ongoing activities, particularly as we continue the research and development of, initiate clinical trials of, and seek marketing approval for, atuzaginstat. Developing atuzaginstat and conducting clinical trials for the treatment of Alzheimer's disease, early Parkinson's disease and any other indications that we may pursue in the future will require substantial amounts of capital. In addition, if we obtain marketing approval for atuzaginstat or any future drug candidates, we expect to incur significant commercialization expenses related to sales, marketing, manufacturing and distribution. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations.

Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. As of September 30, 2021, we had $140.6 million in cash, cash equivalents and investments. Our balance sheet includes publicly-traded corporate debt securities. We may be required to recognize impairments in the value of these investments if the relevant companies are materially adversely effected as a result of the negative effects arising from the COVID-19 pandemic or for other reasons, become unable to repay debt securities when due, or experience credit rating downgrades, or if the public trading price of these securities decreases.

We believe that our existing capital resources will be sufficient to fund our projected operations through at least 2023. However, changing circumstances may cause us to increase our spending significantly faster than we currently anticipate, and we may need to spend more money than currently expected because of circumstances beyond our control. We may need to raise additional funds sooner than we anticipate if we choose to expand more rapidly than we presently anticipate. The amount and timing of our future funding requirements will depend on many factors, some of which are outside of our control, including but not limited to:

- the progress, costs, trial design, results of and timing of our Phase 2/3 GAIN trial and other clinical trials of atuzaginstat, including our Phase 2 PEAK trial for Parkinson's disease, our COR588 Phase 1 trial and for potential additional indications that we may pursue beyond Alzheimer's and Parkinson's disease;
- the willingness of the U.S. Food and Drug Administration, or FDA, and European Medicines Agency, or EMA, following review of our GAIN Trial results to approve the implementation of a protocol for further development of atuzaginstat for Alzheimer's disease;
- the willingness of the FDA and EMA to accept our PEAK trial results, as well as data from our completed and planned clinical and preclinical studies and other work as the basis for review and approval of atuzaginstat for Parkinson's disease;
- the outcome, costs and timing of seeking and obtaining FDA, EMA and any other regulatory approvals;
- the number and characteristics of drug candidates that we pursue;

- our ability to manufacture sufficient quantities of our drug candidates;
- our need to expand our research and development activities;
- the costs associated with securing and establishing commercialization and manufacturing capabilities;
- the costs of acquiring, licensing or investing in businesses, drug candidates and technologies;
- our ability to maintain, expand and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with the licensing, filing, prosecution, defense and enforcement of any patents or other intellectual property rights;
- our need and ability to retain management and hire scientific and clinical personnel;
- the effect of competing drugs and drug candidates and other market developments;
- our need to implement additional internal systems and infrastructure, including financial and reporting systems; and
- the economic and other terms, timing of and success of any collaboration, licensing or other arrangements into which we may enter in the future.

Additional funding may not be available to us on acceptable terms or at all. Any such funding may result in dilution to stockholders, imposition of debt covenants and repayment obligations, or other restrictions that may affect our business. If we are unable to obtain funding on a timely basis, we may be required to significantly curtail one or more of our research or development programs. We also could be required to seek funds through arrangements with collaborative partners or otherwise that may require us to relinquish rights to some of our technologies or drug candidates or otherwise agree to terms unfavorable to us. Additionally, while the potential global economic impact and the duration of the COVID-19 pandemic may be difficult to assess or predict, a widespread pandemic could result in significant long-term disruption of global financial markets, which could in the future reduce our ability to access capital and negatively affect our liquidity. In addition, the trading prices for our common stock and other biopharmaceutical companies, as well as the broader equity and debt markets, have been highly volatile as a result of the COVID-19 pandemic and the resulting impact on economic activity. Furthermore, a recession or decline in market value resulting from the spread of COVID-19 could materially affect our operations, overall yields from our investment portfolio, including through impairment and loss of investment, and the value of our common stock.

Risks Related to Our Business and the Development of Our Drug Candidates

We are substantially dependent on the success of atuzaginstat, which will require significant additional clinical testing before we can seek regulatory approval and potentially launch commercial sales, and which may not be successful in clinical trials, receive regulatory approval or be successfully commercialized, even if approved.

To date, we have invested substantially all of our efforts and financial resources in the research and development of atuzaginstat, which is currently our only drug candidate. Before seeking marketing approval from regulatory authorities for the sale of atuzaginstat, we must conduct extensive clinical trials to demonstrate the safety and efficacy of the drug in humans. We are not permitted to market or promote any of our drug candidates before we receive regulatory approval from the FDA, or comparable foreign regulatory authorities, and we may never receive such regulatory approval. We cannot be certain that atuzaginstat will be successful in clinical trials. For example, our Phase 2/3 GAIN trial did not meet statistical significance in its co-primary cognitive and functional endpoints as measured by ADAS-Cog11 and ADCS-ADL at end of the treatment period in the overall cohort. In light of such results, we are actively engaging with regulators, the medical community, patient advocacy groups, and other key stakeholders to advance development of atuzaginstat but there is no guarantee that further efforts with regard to atuzaginstat will be successful, and our ability to apply, and obtain regulatory approval, for any of these indications is uncertain at this time. Further, atuzaginstat may not receive regulatory approval even if it is successful in clinical trials. If we do not receive regulatory approvals for atuzaginstat, we may not be able to continue our operations. Our prospects, including our ability to finance our operations and generate revenue, will depend entirely on the successful development, regulatory approval and commercialization of atuzaginstat. The clinical and commercial success of atuzaginstat will depend on a number of factors, including the following:

- the results from our Phase 2/3 GAIN trial, as well as other clinical trials of atuzaginstat, including our Phase 2 PEAK trial for Parkinson's disease, and clinical trials for potential additional indications that we may pursue beyond Alzheimer's and Parkinson's diseases;
- the frequency and severity of adverse effects of atuzaginstat;
- the ability of third-party manufacturers to manufacture supplies of atuzaginstat and to develop, validate and maintain a commercial-scale manufacturing process that is compliant with current good manufacturing practices, or cGMP;
- our ability to demonstrate atuzaginstat's safety and efficacy to the satisfaction of the FDA and foreign regulatory authorities;
- whether we are required by the FDA to conduct additional clinical trials prior to the approval to market atuzaginstat and whether the FDA may disagree with the number, design, size, conduct or implementation of our clinical trials;
- the receipt of necessary marketing approvals from the FDA and foreign regulatory authorities;
- whether the FDA may require implementation of a Risk Evaluation and Mitigation Strategy, or REMS, as a condition of approval or post-approval;
- our ability to successfully commercialize atuzaginstat, if approved for marketing and sale by the FDA or foreign regulatory authorities, whether alone or in collaboration with others;
- our success in educating physicians and patients about the benefits, administration and use of atuzaginstat;
- acceptance of atuzaginstat as safe and effective by patients and the medical community;
- the availability, perceived advantages, relative cost, relative safety and relative efficacy of alternative and competing treatments;
- achieving and maintaining compliance with all regulatory requirements applicable to atuzaginstat;
- the effectiveness of our own or any future collaborators' marketing, pricing, coverage and reimbursement, sales and distribution strategies and operations;
- our ability to maintain our existing patents and obtain newly issued patents that cover atuzaginstat and to enforce such patents and other intellectual property rights in and to atuzaginstat;
- our ability to avoid third-party intellectual property claims; and
- a continued acceptable safety profile of atuzaginstat following approval.

Many of these factors are beyond our control. Accordingly, we cannot assure you that we will ever be able to generate revenue through the sale of atuzaginstat. If we are not successful in commercializing atuzaginstat, or are significantly delayed in doing so, our business will be materially harmed.

Our approach to the potential treatment of the underlying cause of Alzheimer's and other neurodegenerative diseases is based on a novel therapeutic approach, which exposes us to unforeseen risks*

We have discovered and are developing a proprietary library of protease inhibitors from which we have selected our lead drug candidate, atuzaginstat, which is under development to treat Alzheimer's disease and other degenerative diseases. Our approach is based on the discovery of *P. gingivalis* and its secreted virulence factor proteases, gingipains, and represents a new approach to disease modification in Alzheimer's disease. There is no current academic or general consensus on the causation of Alzheimer's disease or method of action or current drugs that purport to treat Alzheimer's disease. Based on the results of our preclinical and clinical studies to date, we believe atuzaginstat is neuroprotective and with potential to prevent further neurodegeneration, reduce

amyloid beta levels and reduce inflammation, when administered orally. However, these ideas and this approach are novel, and we currently have only limited data based on physiological mouse models of Alzheimer's disease and our Phase 1 a/b clinical trials which enrolled 67 subjects, including nine patients with mild to moderate Alzheimer's disease and our Phase 2/3 GAIN trial which enrolled 643 patient participants with mild to moderate Alzheimer's disease. The results from the GAIN trial did not meet statistical significance in its co-primary cognitive and functional endpoints as measured by ADAS-Cog11 and ADCS-ADL at end of the treatment period in the overall cohort. We are not aware of any other brain-penetrating gingipain protease inhibitors being tested in humans. We may ultimately discover that atuzaginstat, or any of our other protease inhibitors, do not possess certain properties required for therapeutic effectiveness. We have no long-term evidence regarding the efficacy, safety and tolerability of atuzaginstat or other compounds in our proprietary library of protease inhibitors in humans. We may spend substantial funds attempting to develop these drug candidates and never succeed in doing so.

Clinical drug development is a lengthy, expensive and uncertain process. The results of preclinical studies and early clinical trials are not always predictive of future results. We did not meet statistical significance on the co-primary endpoints in the GAIN Trial and any other drug candidate that we may advance into clinical trials may not achieve favorable results in later clinical trials, if any, or receive marketing approval*

The research and development of drugs is extremely risky. Only a small percentage of drug candidates that enter the development process ever receive marketing approval. Before obtaining marketing approval from regulatory authorities for the sale of any drug candidate, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our drug candidates in humans. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain.

The results of preclinical studies and completed clinical trials are not necessarily predictive of future results, and our current drug candidate may not be further developed or have favorable results in later studies or trials. Clinical trial failure may result from a multitude of factors including, but not limited to, flaws in study design, dose selection, placebo effect, patient enrollment criteria and failure to demonstrate favorable safety or efficacy traits. As such, failure in clinical trials can occur at any stage of testing. A number of companies in the pharmaceutical industry have suffered setbacks in the advancement of their drug candidates into later-stage clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding results in earlier preclinical studies or clinical trials. The Phase 1a and Phase 1b clinical trials for our lead drug candidate, atuzaginstat, included only nine Alzheimer's patients and 58 healthy volunteers. Further, the results of our earlier stage clinical trials and our preclinical animal studies may not be predictive of the results of outcomes in later-stage clinical studies. For example, data from six Alzheimer's patients treated with atuzaginstat in our Phase 1b clinical trial showed improvements across several exploratory cognitive tests. However, these improvements should be interpreted with caution because they were not all statistically significant. When evaluated in a larger patient population, atuzaginstat may not show similar improvements toward cognitive effects or may demonstrate different chemical and pharmacological properties in patients in unforeseen or harmful ways. Additionally, our Phase 2/3 GAIN trial, with 643 patient participants with mild to moderate Alzheimer's disease, did not meet statistical significance in its co-primary cognitive and functional endpoints as measured by ADAS-Cog11 and ADCS-ADL at end of the treatment period in the overall cohort. Based upon negative or inconclusive results, we may decide, or regulatory authorities may require us, to conduct additional clinical trials or preclinical studies. In addition, data obtained from preclinical trials and clinical trials are susceptible to varying interpretations, and regulatory authorities may not interpret our data as favorably as we do, which may further delay, limit or prevent development efforts, clinical trials or marketing approval. Furthermore, as more competing drug candidates within a particular class of drugs proceed through clinical development to regulatory review and approval, the amount and type of clinical data that may be required by regulatory authorities may increase or change.

If we are unable to complete preclinical studies or clinical trials of current or future drug candidates, due to safety concerns, or if the results of these trials are not sufficient to convince regulatory authorities of their safety or efficacy, we will not be able to obtain marketing approval for commercialization on a timely basis or at all. Even if we are able to obtain marketing approval for our current and any future drug candidates, those approvals may be for indications or dose levels that deviate from our desired approach or may contain other limitations that would adversely affect our ability to generate revenue from sales of those drug candidates. Moreover, if we are not able to differentiate our drug candidate against other approved drug candidates within the same class of drugs, or if any of the other circumstances described above occur, our business would be harmed and our ability to generate revenue from that class of drugs would be severely impaired.

Adverse side effects or properties or other safety risks associated with atuzaginstat or any future drug candidates could delay or preclude approval, cause us to suspend or discontinue clinical trials, abandon further development, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any*

There may be side effects and adverse events associated with the use of atuzaginstat or any future drug candidates. atuzaginstat was well-tolerated with no concerning safety signals in our Phase 1a and Phase 1b clinical trials. While some subjects experienced minor changes in electrocardiograms, or ECGs, in particular transient increases in the QRS duration and PR interval,

these changes were not clinically significant, which means they did not result in the need to consider changes to the treatment of the patient. Similar measurements were seen at higher doses in animal studies. There were no discernable trends in the QTcF interval in human or animal studies. Relative to placebo, there were no patterns in laboratory abnormalities or changes in ECGs, vital signs or the results of physical examinations observed during these trials that would be deemed practically relevant to the treatment of the patient with atuzaginstat. Results from our preclinical testing and early clinical trials do not ensure that later clinical trials will provide adequate data to demonstrate the safety of atuzaginstat.

Our clinical trials, could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics as the clinical trials progress to longer exposures at varying dose levels and a larger number of patients. Side effects could include treatment-related adverse events not seen in our Phase 1a and Phase 1b clinical trials of atuzaginstat including hepatic adverse events. Undesirable side effects caused by, or unexpected or unacceptable characteristics associated with, atuzaginstat or any future drug candidates could result in the delay, suspension or termination of clinical trials by us, the FDA or other regulatory authorities for a number of reasons. For example, on February 12, 2021, we received a letter from the FDA stating that a partial clinical hold has been placed on atuzaginstat impacting the OLE phase of the GAIN Trial. The partial clinical hold was initiated following the review of hepatic adverse events in the atuzaginstat trial by the FDA. Under the hold, we have stopped enrollment and dosing in the OLE phase of the GAIN Trial. Atuzaginstat was associated with dose-related liver enzyme elevations >3X the upper limit of normal: 2% on placebo, 7% on 40 mg BID, and 15% on 80 mg BID. These elevations alone were not clinically significant, and virtually all participants were asymptomatic. Two participants in the 80 mg BID arm had concomitant bilirubin elevations without alternative explanation.

As we test and assess the safety of atuzaginstat in our Phase 2/3 GAIN trial or other trials, or as the use of atuzaginstat becomes more widespread if it receives regulatory approval, we may identify additional adverse events that were not identified or not considered significant in our earlier trials. If such side effects become later known in development or upon approval, if any, such findings may harm our business, financial condition, results of operations and prospects significantly. If we or others later identify undesirable side effects, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw, suspend or limit approval of atuzaginstat or any future drug candidates;
- we may be required to recall a drug or change the way such drug is administered to patients;
- regulatory authorities may require additional warnings or statements in the labeling, such as a boxed warning or a contraindication or issue safety alerts, press releases or other communications containing warnings or other safety information about the drug candidate, for example, field alerts to physicians and pharmacies;
- regulatory authorities may require a medication guide outlining the risks of such side effects for distribution to patients, or that we implement a risk evaluation and mitigation strategy, or REMS, to ensure that the benefits of the drug outweigh its risks; we may be required to change the way a drug is distributed or administered, conduct additional clinical trials or change the labeling of a drug, or be required to conduct additional post-marketing studies or surveillance;
- we could be sued and held liable for harm caused to patients;
- sales of the drug may decrease significantly or atuzaginstat or any future drug could become less competitive; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of atuzaginstat or any future drug candidates, if approved, and could significantly harm our business, financial condition, results of operations and prospects.

Success in preclinical studies or earlier clinical trials may not be indicative of results in future clinical trials*

Success in preclinical testing and early clinical trials does not ensure that later clinical trials will generate the same results or otherwise provide adequate data to demonstrate the efficacy and safety of a drug candidate. Preclinical tests and Phase 1 and Phase 2 clinical trials are primarily designed to test safety, to study pharmacokinetics and pharmacodynamics and to understand the side effects of drug candidates at various doses and schedules. Success in preclinical or animal studies and early clinical trials does not ensure that later large-scale efficacy trials will be successful, nor does it predict final results. Our drug candidates may fail to show the desired safety and efficacy in clinical development despite positive results in preclinical studies or having successfully advanced through initial clinical trials. For example, our Phase 2/3 GAIN trial did not meet statistical significance in its co-primary cognitive

and functional endpoints as measured by ADAS-Cog11 and ADCS-ADL at end of the treatment period in the overall cohort. Additionally, in future trials there may be unforeseen serious adverse events or side effects that differ from those seen in our preclinical tests, Phase 1 and Phase 2 clinical trials or our Phase 2/3 GAIN trial.

Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials even after achieving promising results in preclinical testing and earlier-stage clinical trials. Data obtained from preclinical and clinical activities are subject to varying interpretations, which may delay, limit or prevent regulatory approval. In addition, we may experience regulatory delays or rejections as a result of many factors, including changes in regulatory policy during the period of our drug candidate development. Any such delays could negatively impact our business, financial condition, results of operations and prospects.

Clinical holds imposed by the FDA could prevent us from administering atuzaginstat at doses currently utilized or planned in additional studies.

Preclinical data for atuzaginstat showed toxicity at very high exposure levels in mice and, as a result, the FDA placed atuzaginstat on partial clinical hold to enforce an exposure cap on atuzaginstat dosages in humans at approximately 2.4 times the top dose of 80 mg BID in our Phase 2/3 GAIN trial. Although the FDA has permitted the continuation of clinical trials at the planned doses of atuzaginstat, if we determine that we need to increase the dosage of atuzaginstat in humans, the partial hold, or any future clinical holds placed by the FDA may have a negative impact on our ability to carry out our clinical studies, which could delay or prevent the commercialization of atuzaginstat and may harm our business and financial condition. In addition, the FDA placed a partial clinical hold on atuzaginstat impacting the OLE phase of the GAIN Trial following the review of hepatic adverse events in the atuzaginstat trial by the FDA. Under the hold, we have stopped enrollment and dosing in the OLE phase of the GAIN Trial. The results of our Phase 2/3 GAIN trial revealed atuzaginstat was associated with dose-related liver enzyme elevations >3X the upper limit of normal: 2% on placebo, 7% on 40 mg BID, and 15% on 80 mg BID. These elevations alone were not clinically significant, and virtually all participants were asymptomatic. Two participants in the 80 mg BID arm had concomitant bilirubin elevations without alternative explanation. We plan to review the GAIN Trial results with the FDA to determine if the FDA will lift the partial clinical hold. If the FDA does not lift such hold, we may be unable to carry out further clinical studies in atuzaginstat in the United States, which would have a material adverse effect on our business.

We may not be successful in our efforts to continue to create a pipeline of drug candidates or to develop commercially successful drugs. If we fail to successfully identify and develop additional drug candidates, our commercial opportunity may be limited.

One of our strategies is to identify and pursue clinical development of additional drug candidates. We currently have four programs in the early phase of development, all of which are in the research, discovery and preclinical stages of development. Identifying, developing, obtaining regulatory approval and commercializing additional drug candidates will require substantial additional funding and is prone to the risks of failure inherent in drug development. We cannot provide you any assurance that we will be able to successfully identify or acquire additional drug candidates, advance any of these additional drug candidates through the development process, successfully commercialize any such additional drug candidates, if approved, or assemble sufficient resources to identify, acquire, develop or, if approved, commercialize additional drug candidates. If we are unable to successfully identify, acquire, develop and commercialize additional drug candidates, our commercial opportunity may be limited.

We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our drug candidates.*

We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our drug candidates, including:

- regulatory authorities, institutional review boards or ethics committees, or IRBs or ECs, may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site or we may fail to reach a consensus with regulatory authorities on trial design;
- regulatory authorities in jurisdictions in which we seek to conduct clinical trials may differ from each other on our trial design, and it may be difficult or impossible to satisfy all such authorities with one approach;
- we may have delays in reaching or fail to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different contract research organizations, or CROs, and trial sites;

- clinical trials of our drug candidates may produce negative or inconclusive results, and we may decide, or regulatory authorities may require us, to conduct additional clinical trials or abandon drug development programs;
- the number of patients required for clinical trials of our drug candidates may be larger than we anticipate;
- enrollment in our clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;
- changes to clinical trial protocols;
- our third-party contractors, including clinical investigators, contract manufacturers and vendors may fail to comply with applicable regulatory requirements, lose their licenses or permits, or otherwise fail, or lose the ability to, meet their contractual obligations to us in a timely manner, or at all;
- we might have to suspend or terminate clinical trials of our drug candidates for various reasons, including a finding that the participants are being exposed to unacceptable health risks;
- regulatory authorities or IRBs may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of our drug candidates may be greater than we anticipate, and we may lack adequate funding to continue one or more clinical trials;
- the supply or quality of our drug candidates or other materials necessary to conduct clinical trials of our drug candidates may be insufficient or inadequate;
- our drug candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulatory authorities or institutional review boards to suspend or terminate the trials;
- occurrence of serious adverse events in trials of the same class of agents conducted by other companies; and
- the occurrence of natural disasters, such as earthquakes, tsunamis, power shortages or outages, floods, or monsoons, public health crises, such as pandemics and epidemics, political crisis, such as terrorism, war, political instability or other conflict, cyberattacks, or other events outside of our control occurring at or around our clinical trials sites in the United States, Australia or Europe.

For example, enrollment in our clinical trials may be delayed or impeded as a result of the COVID-19 pandemic due to prioritization of healthcare resources toward the pandemic, and some patients may not be able to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services. In addition, we may experience increased rates of patients withdrawing from our clinical trials following enrollment as a result of contracting COVID-19 or other health conditions or because of quarantines or travel limitations (whether voluntary or required) If the patients involved with our clinical trials contract COVID-19, we may have more adverse events and deaths in our clinical trials as a result. We have taken and continue to take proactive measures to maintain the integrity of our ongoing clinical trial. For example, to potentially mitigate some of the risks of the COVID-19 pandemic and based on interest and the ability to maintain milestone timelines, we enrolled 73 additional subjects in the GAIN trial. However, these measures may not be successful, and the occurrence of any of these events could delay or impede our ability to release clinical results, delay or impact our clinical trials, including the integrity and completeness of subject data and clinical study endpoints, and could adversely impact our product candidates testing, development and timelines.

Clinical trials are expensive and time consuming, additional or unsuccessful clinical trials could cause our clinical development activities to be delayed or otherwise adversely affected.

If we are required to conduct additional clinical trials or other testing of our drug candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our drug candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- be delayed in obtaining marketing approval for our drug candidates;

- not obtain marketing approval at all;
- obtain approval for indications, dosages or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings;
- be subject to additional post-marketing testing requirements; or
- have the medicine removed from the market after obtaining marketing approval.

Drug development costs will also increase if we experience delays in testing or in obtaining marketing approvals. We do not know whether any clinical trials will begin as planned, will need to be amended or will be completed on schedule, or at all. Significant clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our drug candidates, could allow our competitors to bring drug candidates to market before we do, and could impair our ability to successfully commercialize our drug candidates, if approved, any of which may harm our business and results of operations. 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 termination or suspension of a clinical trial. Any of these occurrences may harm our business, financial condition and prospects significantly. Any termination of any clinical trial of our drug candidates will harm our commercial prospects and our ability to generate revenues.

Risks Relating to Regulatory Review and Approval of Our Drug Candidates and Other Legal Compliance Matters

We cannot be certain that atuzaginstat or any of our future drug candidates will receive regulatory approval, and without regulatory approval we will not be able to market our drug candidates.

We currently have no drug candidates approved for sale and we cannot guarantee that we will ever have marketable drug candidates. We are initially developing atuzaginstat for the treatment of patients with Alzheimer's disease and are also consulting with investigators to consider other possible indications. Our ability to generate revenue related to sales, if ever, will depend on the successful development and regulatory approval of atuzaginstat for the treatment of Alzheimer's disease and other indications.

The development of a drug candidate and issues relating to its approval and marketing are subject to extensive regulation by the FDA in the United States, the EMA in Europe and regulatory authorities in other countries, with regulations differing from country to country. We are not permitted to market our drug candidates in the United States or Europe until we receive approval of a new drug application, or NDA, from the FDA or a marketing authorization application, or MAA, from the EMA, respectively. We have not submitted any marketing applications for any of our drug candidates.

NDAs and MAAs must include extensive preclinical and clinical data and supporting information to establish the drug candidate's safety and effectiveness for each desired indication. NDAs and MAAs must also include significant information regarding the chemistry, manufacturing and controls for the drug. Obtaining approval of a NDA or a MAA is a lengthy, expensive and uncertain process, and we may not be successful in obtaining approval. The FDA and the EMA review processes can take years to complete and approval is never guaranteed. If we submit a NDA to the FDA, the FDA must decide whether to accept or reject the submission for filing. We cannot be certain that any submissions will be accepted for filing and review by the FDA. Regulators of other jurisdictions, such as the EMA, have their own procedures for approval of drug candidates. Even if a drug is approved, the FDA or the EMA, as the case may be, may limit the indications for which the drug may be marketed, require extensive warnings on the drug labeling or require expensive and time-consuming clinical trials or reporting as conditions of approval. Regulatory authorities in countries outside of the United States and Europe also have requirements for approval of drug candidates with which we must comply prior to marketing in those countries. Obtaining regulatory approval for marketing of a drug candidate in one country does not ensure that we will be able to obtain regulatory approval in any other country. In addition, delays in approvals or rejections of marketing applications in the United States, Europe or other countries may be based upon many factors, including regulatory requests for additional analyses, reports, data, preclinical studies and clinical trials, regulatory questions regarding different interpretations of data and results, changes in regulatory policy during the period of drug development and the emergence of new information regarding our drug candidates or other drug candidates. Also, regulatory approval for any of our drug candidates may be withdrawn.

We initiated our Phase 2/3 GAIN trial in patients with Alzheimer's disease in April 2019 and reported top-line results from it in October 2021. Before we submit a NDA to the FDA or a MAA to the EMA for atuzaginstat for the treatment of patients with Alzheimer's disease, we must successfully complete at least our Phase 2/3 GAIN trial and potentially additional late-stage clinical trials. The FDA generally requires two pivotal clinical trials to support approval. In addition, we must scale up manufacturing and

complete other standard preclinical and clinical studies. We cannot predict whether our future trials will be successful or whether regulators will agree with our conclusions regarding the preclinical studies and clinical trials we have conducted to date and will conduct in the future.

We have concentrated our research and development efforts on the treatment of degenerative diseases, a field that has seen very limited success in drug development. Further, our drug candidates are based on new approaches and novel technology, which makes it difficult to predict the time and cost of drug candidate development and the regulatory approval process.

We have focused our research and development efforts on addressing degenerative diseases. Collectively, efforts by pharmaceutical companies in the field of degenerative diseases have seen very limited successes in drug development. There are few effective therapeutic options available for patients with Alzheimer's disease and other degenerative diseases. Our future success is highly dependent on the successful development of our technology and our drug candidates for treating degenerative diseases. Developing and, if approved, commercializing our drug candidates for treatment of degenerative diseases subjects us to a number of challenges, including ensuring that we have selected the optimal dose of the therapeutic to block gingipains in the brain, executing an appropriate trial to test for efficacy and obtaining regulatory approval from the FDA and other regulatory authorities.

Our approach to the treatment of degenerative diseases aims to understand the cause of disease pathogensis, select the right patient population, discover and develop potent and selective small molecules that act directly in the brain or other organs on these targets, and leverage both preclinical and human pharmacodynamic data for dose selection. This strategy may not prove to be successful. We cannot be sure that our approach will yield satisfactory therapeutic drug candidates that are safe and effective, scalable, or profitable. Moreover, public perception of drug safety issues, including adoption of new therapeutics or novel approaches to treatment, may adversely influence the willingness of subjects to participate in clinical trials, or if approved, of physicians to prescribe novel treatments.

Clinical failure can occur at any stage of clinical development and we have never conducted a Phase 3 trial or submitted an NDA or MAA before*

We have only recently announced top-line results of our Phase 2/3 GAIN trial for Alzheimer's disease and reported that it did not meet statistical significance in its co-primary cognitive and functional endpoints as measured by ADAS-Cog11 and ADCS-ADL at end of the treatment period in the overall cohort. The submission of a successful NDA is a complicated process. As an organization, we have never conducted a registrational clinical trial and have limited experience in preparing, submitting and prosecuting regulatory filings, and have not submitted a NDA. Failure to commence or complete, or delays in, our planned clinical trials would prevent us from or delay us in seeking approval for, and if approved, commercializing our drug candidates, and failure to successfully complete any of these activities in a timely manner for any of our drug candidates could have a material adverse impact on our business and financial performance. The commencement, enrollment and completion of clinical trials can be delayed or suspended for a variety of reasons, including:

- inability to obtain sufficient funds required for a clinical trial;
- inability to reach agreements on acceptable terms with prospective CROs and trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- clinical holds, other regulatory objections to commencing or continuing a clinical trial or the inability to obtain regulatory approval to commence a clinical trial in countries that require such approvals;
- discussions with the FDA or non-U.S. regulators regarding the scope or design of our clinical trials;
- inability to identify and maintain a sufficient number of trial sites, many of which may already be engaged in other clinical trial programs, including some that may be for the same indications targeted by our drug candidates;
- inability to obtain approval from IRBs to conduct a clinical trial at their respective sites;
- severe or unexpected drug-related adverse effects experienced by patients;
- inability to timely manufacture sufficient quantities of the drug candidate required for a clinical trial;

- difficulty recruiting and enrolling patients to participate in clinical trials for a variety of reasons, including meeting the enrollment criteria for our study and competition from other clinical trial programs for the same indications as our drug candidates;

- inability to retain enrolled patients after a clinical trial is underway; and

- enrollment may be delayed or interrupted or patients may drop out of clinical trials due to or the fear of natural disasters, such as earthquakes, tsunamis, power shortages or outages, floods, or monsoons, public health crises, such as pandemics and epidemics, political crisis, such as terrorism, war, political instability or other conflict, cyberattacks, or other events outside of our control occurring at or around our clinical trials sites in the United States or Europe. For example, the coronavirus outbreak may delay or impede enrollment in our clinical trials due to prioritization of hospital resources toward the outbreak, and some patients may not be able to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services, which would delay our ability to release clinical results and could impact our product candidates testing, development and timelines.

In addition, the design of a clinical trial can determine whether its results will support approval of a drug and flaws in the design of a clinical trial may not become apparent until the clinical trial is well-advanced. Changes in regulatory requirements and guidance may also occur and we may need to amend clinical trial protocols to reflect these changes with appropriate regulatory authorities. Amendments may require us to resubmit clinical trial protocols to IRBs for re-examination, which may impact the costs, timing or successful completion of a clinical trial.

In addition, if we are required to conduct additional clinical trials or other preclinical studies of our drug candidates beyond those contemplated, our ability to obtain regulatory approval of these drug candidates and generate revenue from their sales would be similarly harmed.

If clinical trials of our drug candidates fail to demonstrate safety and efficacy to the satisfaction of the FDA or similar regulatory authorities outside the United States or do not otherwise produce positive results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our drug candidates.

Before obtaining regulatory approvals for the commercial sale of any of our drug candidates, we must demonstrate through lengthy, complex and expensive preclinical studies and clinical trials that our drug candidates are both safe and effective for use in each target indication. Each drug candidate must demonstrate an adequate risk versus benefit profile in its intended patient population and for its intended use.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies of our drug candidates may not be predictive of the results of early-stage or later-stage clinical trials, and results of early clinical trials of our drug candidates may not be predictive of the results of later-stage clinical trials. The results of clinical trials in one set of patients or disease indications may not be predictive of those obtained in another. In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same drug candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants. Drug 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 pharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety issues, notwithstanding promising results in earlier trials. This is particularly true in degenerative diseases, where failure rates historically have been higher than in many other disease areas. Most drug candidates that begin clinical trials are never approved by regulatory authorities for commercialization.

In addition, even if such clinical trials are successfully completed, we cannot guarantee that the FDA or foreign regulatory authorities will interpret the results as we do, and more trials could be required before we submit our drug candidates for approval. Moreover, principal investigators for our 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 other regulatory authorities. The FDA or other regulatory authorities may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected the integrity of the study. The FDA or other regulatory authorities 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 other regulatory authorities, as the case may be, and may ultimately lead to the denial of marketing approval of any of our drug candidates. To the extent that the results of the trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, we may be required to expend significant resources, which may not be available to

us, to conduct additional trials in support of potential approval of our drug candidates. Even if regulatory approval is secured for any of our drug candidates, the terms of such approval may limit the scope and use of our drug candidate, which may also limit its commercial potential.

We expect to rely on third parties to conduct our clinical trials and some aspects of our research and preclinical testing, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, research, or testing.

We currently rely and expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions, and clinical investigators, to conduct some aspects of our research and preclinical testing and our clinical trials. Any of these third parties may terminate their engagements with us or be unable to fulfill their contractual obligations. If we need to enter into alternative arrangements, it would delay our drug development activities.

Our reliance on these third parties for research and development activities reduces our control over these activities but does not relieve us of our responsibilities. For example, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with current good clinical practice regulations, or GCP, for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible, reproducible and accurate and that the rights, integrity, and confidentiality of trial participants are protected. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database within certain timeframes. Failure to do so can result in fines, adverse publicity, and civil and criminal sanctions.

If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for any drug candidates we may develop and will not be able to, or may be delayed in our efforts to, successfully commercialize our medicines.

We also expect to rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of any drug candidates we may develop or commercialization of our medicines, producing additional losses and depriving us of potential drug revenue.

We face significant competition in an environment of rapid technological and scientific change, and there is a possibility that our competitors may achieve regulatory approval before us or develop therapies that are safer, more advanced or more effective than ours.

The development and commercialization of new drugs is highly competitive. Moreover, the degenerative disease field is characterized by strong competition and a strong emphasis on intellectual property. We may face competition with respect to any drug candidates that we seek to develop or commercialize in the future from major pharmaceutical companies, specialty pharmaceutical companies, and biotechnology companies worldwide. Potential competitors also include academic institutions, government agencies, and other public and private research organizations that conduct research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing, and commercialization.

There are a number of large pharmaceutical and biotechnology companies that are currently pursuing the development of drug candidates for the treatment of the degenerative disease indications for which we have research programs, including Alzheimer’s disease. Companies that we are aware are developing therapeutics in the degenerative disease field include large companies with significant financial resources, such as AbbVie Inc., Biogen Inc., Eli Lilly and Company, Eisai Co., Ltd., Merck & Company, Inc., Novartis AG, and Roche Holding AG Group (including Genentech, its wholly owned subsidiary), as well as companies pursuing a dysfunctional immune system approach to Alzheimer’s disease or other types of therapies.

Many of our current or potential competitors, either alone or with their strategic partners, have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved drug candidates than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize drug candidates that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any drug candidates that we may develop. Furthermore, currently approved drug candidates could be discovered to have application for treatment of degenerative disease indications, which could give such drug candidates significant

regulatory and market timing advantages over any of our drug candidates. Our competitors also may obtain FDA, EMA or other regulatory approval for their drug candidates more rapidly than we may obtain approval for ours from the FDA for indications our drug candidates are targeting, which could result in our competitors establishing a strong market position before we are able to enter the market.

Additionally, drug candidates or technologies developed by our competitors may render our potential drug candidates uneconomical or obsolete, and we may not be successful in marketing any drug candidates we may develop against competitors. If our competitors market drug candidates that are more effective, safer or less expensive than our drug candidates, if approved, or that reach the market sooner than our drug candidates, if approved, we may not achieve commercial success. In addition, the pharmaceutical industry is characterized by rapid technological change. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or drug candidates developed by our competitors may render our technologies or drug candidates obsolete, less competitive or not economical.

If we or any of our third-party manufacturers encounter difficulties in production of our current or any future drug candidate, or fail to meet rigorously enforced regulatory standards, our ability to provide supply of our drug candidates for clinical trials or for patients, if approved, could be delayed or stopped, or we may be unable to maintain a commercially viable cost structure.

The processes involved in manufacturing our drug candidates are highly regulated and subject to multiple risks. As drug candidates are developed through preclinical studies to late-stage clinical trials towards approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods, are altered along the way in an effort to optimize processes and results. Such changes carry the risk that they will not achieve these intended objectives, and any of these changes could cause our drug candidates to perform differently and affect the results of planned clinical trials or other future clinical trials.

In order to conduct clinical trials of our drug candidates, or supply commercial drug candidates, if approved, we will need to manufacture them in small and large quantities. We currently rely on third parties to manufacture atuzaginstat for clinical trial purposes, and our manufacturing partners will have to modify and scale-up the manufacturing process when we transition to commercialization of our drug candidates. Our manufacturing partners may be unable to successfully modify or scale-up the manufacturing capacity for any of our drug candidates in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities. If our manufacturing partners are unable to successfully scale-up the manufacture of our drug candidates in sufficient quality and quantity, the development, testing and clinical trials of that drug candidate may be delayed or become infeasible, and regulatory approval or commercial launch of any resulting drug may be delayed or not obtained, which could significantly harm our business. The same risks would apply to our internal manufacturing facilities, should we in the future decide to build internal manufacturing capacity. In addition, building internal manufacturing capacity would carry significant risks in terms of being able to plan, design and execute on a complex project to build manufacturing facilities in a timely and cost-efficient manner.

In addition, the manufacturing process for any drug candidates that we may develop is subject to FDA, EMA and foreign regulatory requirements, and continuous oversight, and we will need to contract with manufacturers who can meet all applicable FDA, EMA and foreign regulatory authority requirements, including complying with current good manufacturing practices, or cGMPs, on an ongoing basis. If we or our third-party manufacturers are unable to reliably produce drug candidates in accordance with the requirements of the FDA, EMA or other regulatory authorities, we may not obtain or maintain the approvals we need to commercialize such drug candidates. Even if we obtain regulatory approval for any of our drug candidates, there is no assurance that either we or our third party contract manufacturers will be able to manufacture the approved drug in accordance with the requirements of the FDA, EMA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the drug, or to meet potential future demand. Any of these challenges could delay completion of clinical trials, require bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our drug candidate, impair commercialization efforts, increase our cost of goods, and have an adverse effect on our business, financial condition, results of operations and growth prospects.

If, in the future, we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market any drug candidates we may develop, we may not be successful in commercializing those drug candidates if and when they are approved.

We do not have a sales or marketing infrastructure and have no experience in the sale, marketing, or distribution of pharmaceutical drug candidates. To achieve commercial success for any approved drug candidate for which we retain sales and marketing responsibilities, we must either develop a sales and marketing organization or outsource these functions to third parties. In the future, we may choose to build a focused sales, marketing, and commercial support infrastructure to sell, or participate in sales activities with collaborators for, some of our drug candidates if and when they are approved.

There are risks involved with both establishing our own commercial capabilities and entering into arrangements with third parties to perform these services. For example, factors that may inhibit our efforts to commercialize any approved drug candidates on our own include:

- our inability to recruit and retain adequate numbers of effective sales, marketing, coverage or reimbursement, customer service, medical affairs, and other support personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future approved drug candidates;
- the inability of reimbursement professionals to negotiate arrangements for formulary access, reimbursement, and other acceptance by payors;
- the inability to price our drug candidates at a sufficient price point to ensure an adequate and attractive level of profitability;
- restricted or closed distribution channels that make it difficult to distribute our drug candidates to segments of the patient population;
- the lack of complementary drug candidates to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive drug candidate lines; and
- unforeseen costs and expenses associated with creating an independent commercialization organization.

If the commercial launch of a drug candidate for which we recruit a sales force and establish marketing and other commercialization capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our commercialization personnel.

If we enter into arrangements with third parties to perform sales, marketing, commercial support, and distribution services, our sales revenue or the profitability of sales revenue may be lower than if we were to market and sell any drug candidates we may develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to commercialize our drug candidates or may be unable to do so on terms that are favorable to us. We may have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our drug candidates effectively. If we do not establish commercialization capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our drug candidates if approved.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our drug candidates.

We face an inherent risk of product liability as a result of the clinical testing of our drug candidates and will face an even greater risk when and if we commercialize any drug candidates. For example, we may be sued if our drug candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability or a breach of warranties. Product liability claims may be brought against us by participants enrolled in our clinical trials, patients, health care providers or others using, administering or selling our drug candidates. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit testing and commercialization of our drug candidates. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased or interrupted demand for our drug candidates;
- withdrawal of clinical trial participants and inability to continue clinical trials;
- initiation of investigations by regulators;
- costs to defend the related litigation;

- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- drug recalls, withdrawals or labeling, marketing or promotional restrictions;
- termination of clinical trial sites or entire trial programs;
- injury to our reputation and significant negative media attention;
- loss of revenue;
- exhaustion of any available insurance and our capital resources;
- the inability to commercialize any drug candidate; and
- a decline in our share price.

Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of drug candidates we develop, alone or with potential collaborators. Our insurance policies may have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

We may be exposed to a variety of international risks that could materially adversely affect our business.

Our business is subject to risks associated with conducting business internationally. Some of our suppliers and clinical trial centers are located outside of the United States. In particular, we are conducting clinical trial operations in Australia. We may enter into agreements with third parties for the development and commercialization of drug candidates in international markets. International business relationships will subject us to additional risks that may materially adversely affect our ability to attain or sustain profitable operations, including:

- differing regulatory requirements for drug approvals internationally;
- rejection or qualification of foreign clinical trial data by the competent authorities of other countries;
- complexities and difficulties in obtaining, maintaining, protecting and enforcing our intellectual property;
- potential third-party patent rights in countries outside of the United States;
- the potential for so-called "parallel importing," which is what occurs when a local seller, faced with relatively high local prices, opts to import goods from another jurisdiction with relatively low prices, rather than buying them locally;
- the potential for so-called "parallel exporting," which is what occurs when a local seller buys goods meant for the locals and sells the goods for a higher price in another country, potentially causing or aggravating supply problems;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability, particularly in non-U.S. economies and markets, including several countries in Europe;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;

- 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;
- taxes in other countries;
- 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 products and exposure to foreign currency exchange rate fluctuations;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geo-political actions, including war and terrorism, public health crises, such as pandemics and epidemics, or natural disasters, including earthquakes, volcanoes, typhoons, floods, hurricanes and fires.

Any of these factors could harm our ongoing international clinical operations and supply chain, as well as any future international expansion and operations and, consequently, our business, financial condition, prospects and results of operations.

Natural disasters, public health crises, political crises, and other catastrophic events or other events outside of our control may be detrimental to our capabilities or the capabilities of third parties on which we depend.

Our headquarters are located in California near major geologic faults that have experienced earthquakes in the past. An earthquake or other natural disaster or power shortages or outages could disrupt operations, impair critical systems or result in loss of clinical samples. Any of these disruptions or other events outside of our control could have a material adverse impact on our business, harming our operating results. In addition, if any of our suppliers or third-party service providers, such as our manufacturing partners or CROs, are affected by natural disasters, such as earthquakes, tsunamis, power shortages or outages, floods or monsoons, public health crises, such as pandemics and epidemics, political crises, such as terrorism, war, political instability or other conflict, cyberattacks, or other events outside of our control, our business and operating results could suffer. Disasters, public health crises and political crises occurring at third-party facilities also could negatively impact our clinical development and regulatory approval timelines, our reputation and the perception of our company. For example, as a result of the COVID-19 pandemic, we and our third-party service providers have limited our operations or implemented limitations, including work-from-home policies. Our and our third-party service providers increased reliance on personnel working from home may negatively impact productivity, or disrupt, delay, or otherwise adversely impact our business. The increase in working remotely could increase cybersecurity risk, create data accessibility concerns, and make us and our third-party service providers more susceptible to communication disruptions, any of which could adversely impact our or their business operations or delay necessary interactions with local and federal regulators, manufacturing sites, clinical trial sites, and other third parties. In addition, as a result of shelter-in-place orders or other mandated travel restrictions, our on-site staff conducting research and development activities may not be able to access our laboratories, and these core activities may be significantly limited or curtailed, possibly for an extended period of time. Further, due to travel restrictions and “shelter in place” orders, we may experience limitations on the ability to recruit and hire key personnel due to the inability to meet with candidates and reduced ability to engage with the medical and investor communities due to the cancelation of conferences scheduled throughout the year. We also may experience operational challenges caused by sickness of our employees or their families, the desire of employees to avoid contact with large groups of people, and an increased reliance on working from home or mass transit disruptions. Furthermore, new quarantines for COVID-19 or other viruses could impact personnel at contract manufacturing facilities in China, Europe or elsewhere to deliver key materials or the availability or cost of starting materials. Any disruption of our ability to manufacture atuzaginstat or the ability of our contract manufacturing vendors in China, Europe or elsewhere to deliver key materials on a timely basis could have a material adverse effect on the initiation of new trials, the duration of open label extension studies and overall product development. In addition, we may experience delays or disruptions in non-clinical experiments and supplies for such experiments, including animals required for such experiments. These and other factors arising from the COVID-19 pandemic could worsen in countries that are already afflicted with COVID-19, could continue to spread to additional countries, or could return to countries where the pandemic has been partially contained, each of which could further adversely impact

our ability to conduct clinical trials and our business generally, and could have a material adverse impact on our operations and financial condition and results.

We will need to expand our operations and increase the size of our company, and we may experience difficulties in managing growth.

As we increase the number of ongoing drug development programs and advance our drug candidates through preclinical studies and clinical trials, we will need to increase our drug development, scientific and administrative headcount to manage these programs. In addition, to meet our obligations as a public company, we will need to increase our general and administrative capabilities. Our management, personnel and systems currently in place may not be adequate to support this future growth. Our need to effectively manage our operations, growth and various projects requires that we:

- successfully attract and recruit new employees or consultants with the expertise and experience we will require;
- manage our clinical programs effectively, which we anticipate being conducted at numerous clinical sites;
- develop a marketing and sales infrastructure; and
- continue to improve our operational, financial and management controls, reporting systems and procedures.

If we are unable to successfully manage this growth and increased complexity of operations, our business may be adversely affected.

We may not be able to manage our business effectively if we are unable to attract and retain key personnel and consultants.

We may not be able to attract or retain qualified management, finance, scientific and clinical personnel and consultants due to the intense competition for qualified personnel and consultants among biotechnology, pharmaceutical and other businesses or any other circumstances that would cause them no longer to provide their professional services to us in the near future. If we are not able to attract and retain necessary personnel and consultants to accomplish our business objectives, we may experience constraints that will significantly impede the achievement of our development objectives, our ability to raise additional capital and our ability to implement our business strategy. In addition, we may need to adjust the size of our workforce as a result of changes to our expectations for our business, which can result in diversion of management attention, disruptions to our business, and related expenses.

Our industry has experienced a high rate of turnover of management personnel in recent years. We are highly dependent on the development, regulatory, commercialization and business development expertise of Casey C. Lynch, our co-founder, and President and Chief Executive Officer. If we lose our Chief Executive Officer, our ability to implement our business strategy successfully could be seriously harmed. Any of our executive officers or key employees or consultants may terminate their employment at any time.

Replacing executive officers, key employees and consultants may be difficult and may take an extended period because of the limited number of individuals in our industry with the breadth of skills and experience required to develop, gain regulatory approval of and commercialize drug candidates successfully. Competition to hire and retain employees and consultants from this limited pool is intense, and we may be unable to hire, train, retain or motivate these additional key personnel and consultants. Our failure to retain key personnel or consultants could materially harm our business.

We have scientific and clinical advisors and consultants who assist us in formulating our research, development and clinical strategies. These advisors are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. Non-compete agreements are not permissible or are limited by law in certain jurisdictions and, even where they are permitted, these individuals typically will not enter into non-compete agreements with us. If a conflict of interest arises between their work for us and their work for another entity, we may lose their services. In addition, our advisors may have arrangements with other companies to assist those companies in developing drug candidates or technologies that may compete with ours.

Our employees, independent contractors, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements and insider trading, which could significantly harm our business.

We are exposed to the risk of fraud or other misconduct by our employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include intentional failures to comply with the regulations of the FDA and non-U.S. regulators, provide accurate information to the FDA and non-U.S. regulators, comply with health care fraud and abuse laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the health care 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. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter employee misconduct, 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 comply with these laws or regulations. If any such actions are instituted against us, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Our insurance policies are expensive and only protect us from some business risks, which will leave us exposed to significant uninsured liabilities.

We do not carry insurance for all categories of risk that our business may encounter. Some of the policies we currently maintain include general liability, products liability and directors' and officers' insurance. We do not know, however, if we will be able to maintain insurance with adequate levels of coverage. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our financial position and results of operations.

Failure to comply with health and data protection laws and regulations could lead to 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.

We and any of our potential collaborators may be subject to federal, state, and foreign data protection laws and regulations (i.e., laws and regulations that address privacy and data security). In the United States, numerous federal and state laws and regulations, including federal health information privacy laws, state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws, that govern the collection, use, disclosure, and protection of health-related and other personal information could apply to our operations or the operations of collaborators. In addition, we may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH. Depending on the facts and circumstances, we could be subject to civil, criminal, and administrative penalties if we violate HIPAA.

Several foreign jurisdictions, including the European Union, or the EU, its member states, the United Kingdom and Australia, among others, have adopted legislation and regulations that increase or change the requirements governing the collection, use, disclosure and transfer of the personal information of individuals in these jurisdictions. These laws and regulations are complex and change frequently, at times due to changes in political climate, and existing laws and regulations are subject to different and conflicting interpretations, which adds to the complexity of processing personal data from these jurisdictions. These laws have the potential to increase costs of compliance, risks of noncompliance and penalties for noncompliance.

The General Data Protection Regulation, or GDPR, replaced the EU Data Protection Directive on May 25, 2018. The GDPR introduced new data protection requirements in the EU, as well as potential fines for noncompliant companies of up to the greater of €20 million or 4% of annual global revenue. The regulation imposes numerous new requirements for the collection, use and disclosure of personal information, including more stringent requirements relating to consent and the information that must be shared with data subjects about how their personal information is used, the obligation to notify regulatory authorities and affected individuals of personal data breaches, extensive new internal privacy governance obligations, and obligations to honor expanded rights of individuals in relation to their personal information (for example, the right to access, correct and delete their data). In addition, the GDPR generally maintains the EU Data Protection Directive's restrictions on cross-border data transfer. The GDPR will increase our responsibility and liability in relation to personal data that we process, and we may be required to put in place additional potential mechanisms to ensure compliance with the new EU data protection rules.

Further, the United Kingdom's vote in favor of exiting the EU (often referred to as "Brexit") has created uncertainty with regard to data protection regulation in the United Kingdom. In particular, it is unclear whether the United Kingdom will enact data protection legislation equivalent to the GDPR and how data transfers to and from the United Kingdom will be regulated.

Compliance with U.S. and international 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 to comply with these laws and regulations could result in government enforcement actions (which could include civil, criminal and administrative penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects, employees and other individuals about whom we or our potential collaborators obtain personal information, as well as the providers who share this information with us, may limit our ability to collect, 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 and could result in adverse publicity that could harm our business.

Changes in healthcare law and implementing regulations, as well as changes in healthcare policy, may impact our business in ways that we cannot currently predict, and may have a significant adverse effect on our business and results of operations.*

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of drug candidates, restrict or regulate post-approval activities, and affect our ability to profitably sell any drug candidates for which we obtain marketing approval. Among policy makers and payors in the United States and elsewhere, including in the European Union, or EU, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

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, substantially changed the way healthcare is financed by both the government and private insurers, and significantly impacts the U.S. pharmaceutical industry. The Affordable Care Act, among other things: (i) increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and expanded rebate liability from fee-for-service Medicaid utilization to include the utilization of Medicaid managed care organizations as well; (ii) established a branded prescription drug fee that pharmaceutical manufacturers of branded prescription drugs must pay to the federal government; (iii) expanded the list of covered entities eligible to participate in the 340B drug pricing program by adding new entities to the program; (iv) established a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; (v) extended manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations; (vi) expanded eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for individuals with income at or below 133% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability; (vii) established a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and (viii) established a Center for Medicare Innovation at the Centers for Medicare & Medicaid Services, or CMS, to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been executive, judicial and Congressional challenges to certain aspects of the Affordable Care Act. For example, the Tax Cuts and Jobs Act of 2017, or the Tax Act, included a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the Affordable Care Act on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." On June 17, 2021, the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the Affordable Care Act is unconstitutional in its entirety because the "individual mandate" was repealed by Congress. Thus, the Affordable Care Act will remain in effect in its current form. Moreover, prior to the U.S. Supreme Court ruling, on January 28, 2021, President Biden issued an executive order that initiated a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the Affordable Care Act marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the Affordable Care Act. It is possible that the Affordable Care Act will be subject to judicial or Congressional challenges in the future. It is unclear how any such challenges and the healthcare reform measures of the Biden administration will impact the Affordable Care Act and our business. Other healthcare reform measures that may be adopted in the future could have a material adverse effect on our industry generally and on our ability to maintain or increase sales of our existing products that we successfully commercialize or to successfully commercialize our drug candidates, if approved. In addition to the Affordable Care Act, there will continue to be proposals by legislators at both the federal and state levels, regulators and third-party payors to keep healthcare costs down while expanding individual healthcare benefits. For example, there has been increasing legislative and enforcement interest in the United States with respect to drug pricing practices. Specifically, there have been several recent presidential executive orders, Congressional inquiries, and proposed federal 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.

Other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year pursuant to the Budget Control Act of 2011 and subsequent laws, which began in 2013 and, due to subsequent legislative amendments to the statute, including the BBA, will remain in effect through 2030, with the exception of a temporary suspension from May 1, 2020 through December 31, 2021 due to the Covid-19 pandemic, unless additional Congressional action is taken. New laws may result in additional reductions in Medicare and other healthcare funding, which may adversely affect customer demand and affordability for our drug candidates and, accordingly, the results of our financial operations. Additional changes that may affect our business include the expansion of new programs such as Medicare payment for performance initiatives for physicians under the Medicare Access and CHIP Reauthorization Act of 2015, or MACRA, which ended the use of the statutory formula for clinician payment and established a quality payment incentive program, also referred to as the Quality Payment Program. This program provides clinicians with two ways to participate, including through the Advanced Alternative Payment Models, or APMs, and the Merit-based Incentive Payment System, or MIPS. In November 2019, CMS issued a final rule finalizing the changes to the Quality Payment Program. At this time, the full impact of the introduction of the Medicare quality payment program on overall physician reimbursement remains unclear.

Also, there has been heightened governmental scrutiny recently over the manner in which drug manufacturers set prices for their marketed drug candidates, which has resulted in several Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. For example, on March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which eliminates the statutory Medicaid drug rebate cap for single source and innovator multiple source drugs, beginning January 1, 2024. At the state level, legislatures are increasingly passing legislation and implementing regulations designed to control pharmaceutical and biological drug pricing, including price or patient reimbursement constraints, discounts, restrictions on certain drug access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. For example, since 2016, Vermont requires certain manufacturers identified by the state to justify their price increases. Similar prescription drug price transparency laws have been enacted in Oregon and California, and more are pending in several other states.

We expect that these and other healthcare reform measures that may be adopted in the future may result in more rigorous coverage criteria and lower reimbursement, and in additional downward pressure on the price that we receive for any approved drug candidate. Any reduction in reimbursement from Medicare or other government-funded 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 drug candidates, once marketing approval is obtained.

Our ability to successfully commercialize any drugs that we develop depends in part on the extent to which coverage and adequate reimbursement are available from government health administration authorities, private health insurers, and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, each individually decide which medications they will pay for and establish reimbursement levels. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Government authorities currently impose mandatory discounts for certain patient groups, such as Medicare, Medicaid and Veterans Affairs, or VA, hospitals, and may seek to increase such discounts at any time. Future regulation may negatively impact the price of our product candidates, if approved. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that coverage or reimbursement will be available for any drug candidate that we commercialize and, if coverage or reimbursement is available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any drug candidate for which we obtain marketing approval. In order to get coverage and reimbursement, physicians may need to show that patients have superior treatment outcomes with our products compared to standard of care drugs, including lower-priced generic versions of standard of care drugs. If reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any drug candidate for which we obtain marketing approval. In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors, and coverage decisions and reimbursement levels for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time consuming and costly process that may require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the medicine is approved by the FDA, EMA or other comparable foreign regulatory authorities. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers

our costs, including research, development, manufacture, sale, and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies, but make their determinations independently and may impose additional restrictions. Our inability to promptly obtain and maintain coverage and profitable payment rates from both government-funded and private payors for any approved products we may develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize drug candidates, and our overall financial condition. Further, coverage policies and third-party payor reimbursement rates may change at any time. Therefore, even if favorable coverage and reimbursement status is attained, less favorable coverage policies and reimbursement rates may be implemented in the future.

In the EU, coverage and reimbursement status of any drug candidates for which we obtain regulatory approval are provided for by the national laws of EU Member States. The requirements may differ across the EU Member States. Also, at national level, actions have been taken to enact transparency laws regarding payments between pharmaceutical companies and health care professionals.

If we engage in acquisitions, we will incur a variety of costs and we may never realize the anticipated benefits of such acquisitions.

Although we currently have no plans to do so, we may attempt to acquire businesses, technologies or drug candidates that we believe are a strategic fit with our business. If we do undertake any acquisitions, the process of integrating an acquired business, technology or drug candidates into our business may result in unforeseen operating difficulties and expenditures, including diversion of resources and management's attention from our core business. In addition, we may fail to retain key executives and employees of the companies we acquire, which may reduce the value of the acquisition or give rise to additional integration costs. Future acquisitions could result in additional issuances of equity securities that would dilute the ownership of existing stockholders. Future acquisitions could also result in the incurrence of debt, contingent liabilities or the amortization of expenses related to other intangible assets, any of which could adversely affect our operating results. In addition, we may fail to realize the anticipated benefits of any acquisition.

We are currently conducting and in the future may conduct clinical trials for our drug candidates outside the United States, and the FDA, EMA and applicable foreign regulatory authorities may not accept data from such trials.*

We currently are conducting parts of the GAIN trial and other clinical trials outside the United States and in the future may choose to conduct one or more of our clinical trials outside the United States. In particular, we are conducting clinical trial operations in Australia. The acceptance of study data from clinical trials conducted outside the United States or another jurisdiction by the FDA, EMA or applicable foreign regulatory authorities may be subject to certain conditions. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the United States population and United States medical practice; and (ii) the trials were performed by clinical investigators of recognized competence and pursuant to Good Clinical Practice regulations. Additionally, the FDA's clinical trial requirements, including sufficient size of patient populations and statistical powering, must be met. Many foreign regulatory bodies have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA, EMA or any applicable foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction. If the FDA, EMA or any applicable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in our drug candidates not receiving approval or clearance for commercialization in the applicable jurisdiction.

Interim, top-line and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose preliminary or top-line data from our clinical studies, which are based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the top-line results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top-line data also remain subject

to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, top-line data should be viewed with caution until the final data are available. From time to time, we may also disclose interim data from our clinical studies.

In addition, we may report interim analyses of only certain endpoints rather than all endpoints. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Adverse differences between preliminary or interim data and final data could significantly harm our business prospects. Further, disclosure of interim data by us or by our competitors could result in volatility in the price of our common stock. Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular drug candidate or product and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding a particular drug, drug candidate or our business. If the top-line data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our drug candidates may be harmed, which could harm our business, operating results, prospects or financial condition.

Changes in funding for the FDA and other government agencies or other disruptions at these agencies could prevent new products and services from being developed or commercialized in a timely manner, which could negatively impact our business.

The ability of the FDA to review and approve new drugs 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 other government agencies 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 prolong the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA 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. As a result of the COVID-19 pandemic, health regulatory agencies globally have experienced and may continue to experience disruptions in their operations. The FDA, EMA and comparable foreign regulatory agencies may have slower response times or be under-resourced to continue discussions with us regarding the scope or design of our clinical trials and, as a result, review, inspection, and other timelines may be materially delayed. It is unknown how long these disruptions could continue, were they to occur. Any elongation or de-prioritization of our clinical trials or delay in regulatory review resulting from such disruptions could affect the development and study of atuzaginstat.

Even if we obtain regulatory approval for a drug candidate, it will remain subject to extensive ongoing regulatory review and requirements.

If any of our drug candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies, and submission of safety, efficacy, and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities.

Manufacturers and manufacturers' facilities are required to comply with extensive requirements imposed by the FDA, EMA and comparable foreign regulatory authorities, including ensuring that quality control and manufacturing procedures conform to cGMPs regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any NDA or MAA. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we receive for our drug candidates will be subject to limitations on the approved indicated uses for which the drug candidate may be marketed and promoted or to the conditions of approval (including the potential for a requirement to implement a Risk Evaluation and Mitigation Strategy), or contain requirements for potentially costly post-marketing testing. We will be required to report certain adverse reactions and production problems, if any, to the FDA, EMA and comparable

foreign regulatory authorities. Any new legislation addressing drug safety issues could result in delays in drug development or commercialization, or increased costs to assure compliance. The FDA and other agencies, including the Department of Justice, closely regulate and monitor the post-approval marketing and promotion of drug candidates to ensure that they are manufactured, marketed and distributed only for the approved indications and in accordance with the provisions of the approved labeling. We will have to comply with requirements concerning advertising and promotion for our drug candidates. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the drug candidate's approved label. As such, we may not promote our drug candidates for indications or uses for which they do not have approval. The holder of an approved NDA or MAA must submit new or supplemental applications and obtain approval for certain changes to the approved drug candidate labeling, or manufacturing process. We could also be asked to conduct post-marketing clinical trials to verify the safety and efficacy of our drug candidates in general or in specific patient subsets. If original marketing approval was obtained via the accelerated approval pathway, we could be required to conduct a successful post-marketing clinical trial to confirm clinical benefit for our drug candidates. An unsuccessful post-marketing study or failure to complete such a study could result in the withdrawal of marketing approval.

If a regulatory agency discovers previously unknown problems with a drug, such as adverse events of unanticipated severity or frequency, or problems with the facility where the drug candidate is manufactured, or disagrees with the promotion, marketing or labeling of a drug candidate, such regulatory agency may impose restrictions on that drug candidate or us, including requiring withdrawal of the drug candidate from the market. If we fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other things:

- issue warning or untitled letters that would result in adverse publicity;
- impose civil or criminal penalties;
- suspend or withdraw regulatory approvals;
- suspend any of our ongoing clinical trials;
- mandate modifications to promotional materials or require us to provide corrective information to healthcare practitioners;
- require us to enter into a consent decree or permanent injunction, which can include imposition of various fines, reimbursements for inspection costs, required due dates for specific actions and penalties for noncompliance;
- withdraw regulatory approval;
- refuse to approve pending applications or supplements to approved applications submitted by us;
- impose restrictions on our operations, including closing our contract manufacturers' facilities;
- seize or detain drug candidates; or
- require a drug candidate recall.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our drug candidates. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our company and our operating results will be adversely affected.

The policies of the FDA and of other regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our drug candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. For example, certain policies of the Trump administration may impact our business and industry. Namely, the Trump administration has taken several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. It is difficult to predict how these executive actions will be implemented, and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If these executive actions impose restrictions on the FDA's ability to engage in oversight and implementation activities in the normal course,

our business may be negatively impacted. 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 we may not achieve or sustain profitability, which would adversely affect our business, prospects, financial condition and results of operations.

Non-compliance by us or any future collaborator with regulatory requirements, including safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population can also result in significant financial penalties.

If we fail to comply with healthcare laws, we could face substantial penalties and our business, operations and financial condition could be adversely affected.

Our operations are subject to various federal and state fraud and abuse laws. The laws that may impact our operations include:

- federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order 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. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

- federal civil and criminal false claims laws and civil monetary penalty laws, including the False Claims Act, which impose criminal and civil penalties, including through civil “qui tam” or “whistleblower” actions, against individuals or entities from, among other things, knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other third-party payors that are false or fraudulent or knowingly making a false statement to improperly avoid, decrease or conceal an obligation to pay money to the federal government. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of these statutes or specific intent to violate them in order to have committed a violation;

- HIPAA, which created new federal criminal statutes that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program 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 statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;

- HIPAA, as amended by HITECH, and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization;

- the federal Physician Payment Sunshine Act, created under the Affordable Care 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 U.S. Department of Health and Human Services under the Open Payments Program, information related to payments or other transfers of value made to physicians, (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Beginning in 2022, applicable manufacturers also will be required to report information regarding its payments and other transfers of value to physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists and certified nurse midwives during the previous year;

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and

- analogous state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection and unfair competition laws which may apply to pharmaceutical business practices, including but not limited to, research, distribution, sales and marketing arrangements as well as submitting claims involving healthcare items or services reimbursed by any third-party payer, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government that otherwise restricts payments that may be made to healthcare providers and other potential referral sources; state laws that require the registration of sales representatives; 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 foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities, including compensating physicians with stock or stock options, could, despite our efforts to comply, be subject to challenge under one or more of such laws. Efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, imprisonment, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our drug candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

If we or any contract manufacturers and suppliers we engage fail to comply with environmental, health, and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We and any contract manufacturers and suppliers we engage are subject to numerous federal, state, and local environmental, health, and safety laws, regulations, and permitting requirements, including those governing laboratory procedures; the generation, handling, use, storage, treatment, and disposal of hazardous and regulated materials and wastes; the emission and discharge of hazardous materials into the ground, air, and water; and employee health and safety. Our operations involve the use of hazardous and flammable materials, including chemicals and radioactive materials. Our operations also produce hazardous waste. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. Under certain environmental laws, we could be held responsible for costs relating to any contamination at our current or past facilities and at third-party facilities. We also could incur significant costs associated with civil or criminal fines and penalties.

Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental laws and regulations may impair our research, drug development and manufacturing efforts. In addition, we cannot entirely eliminate the risk of accidental injury or contamination from these materials or wastes. Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not carry specific hazardous waste insurance coverage, and our property, casualty, and general liability insurance policies specifically exclude coverage for damages and fines arising from hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, we could be held liable for damages or be penalized with fines in an amount exceeding our resources, and our clinical trials or regulatory approvals could be suspended, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Our business activities may be subject to the Foreign Corrupt Practices Act, or FCPA, and similar anti-bribery and anti-corruption laws.

Our business activities may be subject to the FCPA and similar anti-bribery or anti-corruption laws, regulations or rules of other countries in which we may operate, including the U.K. Bribery Act. The FCPA generally prohibits offering, promising, giving,

or authorizing others to give anything of value, either directly or indirectly, to a non-U.S. government official in order to influence official action, or otherwise obtain or retain business. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls. Our business is heavily regulated and therefore involves significant interaction with public officials, including officials of non-U.S. governments. Additionally, in many other countries, the health care providers who prescribe pharmaceuticals are employed by their government, and the purchasers of pharmaceuticals are government entities; therefore, our dealings with these prescribers and purchasers are subject to regulation under the FCPA. Recently the Securities and Exchange Commission, or SEC, and Department of Justice have increased their FCPA enforcement activities with respect to biotechnology and pharmaceutical companies. There is no certainty that all of our employees, agents, contractors, or those of our affiliates, will comply with all applicable laws and regulations, particularly given the high level of complexity of these laws. Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers, or our employees, the closing down of our facilities, requirements to obtain export licenses, cessation of business activities in sanctioned countries, implementation of compliance programs, and prohibitions on the conduct of our business. Any such violations could include prohibitions on our ability to offer our drug candidates in one or more countries and could materially damage our reputation, our brand, our international expansion efforts, our ability to attract and retain employees, and our business, prospects, operating results, and financial condition.

Any collaboration arrangements that we may enter into in the future may not be successful, which could adversely affect our ability to develop and commercialize potential future drug candidates.

While we currently have no intention to enter into a collaboration agreement for atuzaginstat, in the future we may consider collaboration arrangements with pharmaceutical or biotechnology companies for the development or commercialization of drug candidates depending on the merits of retaining or divesting some or all commercialization rights. We will face, to the extent that we decide to enter into collaboration agreements, significant competition in seeking appropriate collaborators. Moreover, collaboration arrangements are complex and time-consuming to negotiate, document, implement and maintain. We may not be successful in our efforts to establish and implement collaborations or other alternative arrangements should we so chose to enter into such arrangements. The terms of any collaborations or other arrangements that we may establish may not be favorable to us.

Any future collaborations that we enter into may not be successful. The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborations are subject to numerous risks, which may include that:

- collaborators have significant discretion in determining the efforts and resources that they will apply to collaborations;
- collaborators may not pursue development and commercialization of our drug candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in their strategic focus due to the acquisition of competitive drug candidates, availability of funding or other external factors, such as a business combination that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial, abandon a drug candidate, repeat or conduct new clinical trials or require a new formulation of a drug candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, drug candidates that compete directly or indirectly with our drug candidates;
- a collaborator with marketing, manufacturing and distribution rights to one or more drug candidates may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- we could grant exclusive rights to our collaborators that would prevent us from collaborating with others;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that causes the delay or termination of the research, development or commercialization of our current or future drug candidates or that results in costly litigation or arbitration that diverts management attention and resources;

- collaborations may be terminated, and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable current or future drug candidates;

- collaborators may own or co-own intellectual property covering our drug candidates that results from our collaborating with them, and in such cases, we would not have the exclusive right to develop or commercialize such intellectual property; and

- a collaborator's sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings.

Risks Relating to Our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our drug candidates, or if the scope of the intellectual property protection is not sufficiently broad, our competitors could develop and commercialize drug candidates similar or identical to ours, and our ability to successfully commercialize our drug candidates may be adversely affected.*

Our commercial success will depend in part on obtaining and maintaining patent protection and trade secret protection of our current and future drug candidates and the methods used to manufacture them, as well as successfully defending these patents against third-party challenges. Our ability to stop third parties from making, using, selling, offering to sell or importing our drug candidates is dependent upon the extent to which we have rights under valid and enforceable patents or trade secrets that cover these activities.

The patent positions of biotechnology and pharmaceutical companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in pharmaceutical patents has emerged to date in the United States or in many jurisdictions outside of the United States. Changes in either the patent laws or interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be enforced in the patents that may be issued from the applications we currently or may in the future own or license from third parties. Further, if any patents we obtain or license are deemed invalid and unenforceable, our ability to commercialize or license our technology could be adversely affected.

Others may have filed, and in the future are likely to file, patent applications covering drug candidates that are similar, identical or competitive to ours or important to our business. We cannot be certain that any patent application owned by a third party will not have priority over patent applications filed or in-licensed by us, or that we or our licensors will not be involved in interference, opposition or invalidity proceedings before U.S. or non-U.S. patent offices.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. Only limited protection may be available and may not adequately protect our rights or permit us to gain or keep any competitive advantage. If we do not adequately protect our intellectual property and proprietary technology, competitors may be able to use our drug candidates and proprietary technologies and erode or negate any competitive advantage we may have, which could have a material adverse effect on our financial condition and results of operations. For example:

- others may be able to make compounds that are similar to our drug candidates but that are not covered by the claims of our patents;

- we might not have been the first to make the inventions covered by our pending patent applications;

- we might not have been the first to file patent applications for these inventions;

- others may independently develop similar or alternative technologies or duplicate any of our technologies;

- any patents that we obtain may not provide us with any competitive advantages;

- we may not develop additional proprietary technologies that are patentable; or

- the patents of others may have an adverse effect on our business.

We have applied, and we intend to continue applying, for patents covering aspects of our drug candidates, proprietary technologies and their uses that we deem appropriate. However, we may not be able to apply for patents on certain aspects of our current or future drug candidates, proprietary technologies and their uses in a timely fashion, at a reasonable cost, in all jurisdictions, or at all, and any potential patent coverage we obtain may not be sufficient to prevent substantial competition. As of September 30, 2021, we were the owner of record of seven issued U.S. patents, 36 non-U.S. patents, and 57 pending U.S. and non-U.S. patent applications (collectively, "the Cortexyme patent portfolio").

Four issued U.S. patents and 35 issued non-U.S. patents in the Cortexyme patent portfolio relate to atuzaginstat, with claims directed to atuzaginstat and related pharmaceutical compounds, pharmaceutical compositions containing these compounds, and use of these compounds in the treatment of various indications. Pending U.S. and non-U.S. patent applications in the Cortexyme patent portfolio relate to atuzaginstat and related pharmaceutical compounds, pharmaceutical compositions containing these compounds, methods of using these compounds in the treatment of various indications, and methods of making these compounds.

In addition, three issued U.S. patents in the Cortexyme patent portfolio relate to pharmaceutical compounds that do not encompass atuzaginstat, with claims directed to pharmaceutical compounds, pharmaceutical compositions containing these compounds, and use of these compounds in the treatment of various indications. Pending U.S. and non-U.S. patent applications relate to additional compounds in these areas; as well as to diagnostic methods and assay methods.

Without patent protection on the composition of matter of our drug candidates, our ability to assert our patents to stop others from using or selling our drug candidates in a non-pharmaceutically acceptable formulation may be limited. Due to the patent laws of a country, or the decisions of a patent examiner in a country, or our own filing strategies, we may not obtain patent coverage for all of our drug candidates or methods involving the use of these candidates in a particular patent application. We plan to pursue divisional patent applications or continuation patent applications in the United States and other countries, where applicable, to obtain claim coverage for inventions which were disclosed but not claimed in a particular parent patent application.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we or any of our actual or potential future collaborators will be successful in protecting our drug candidates, proprietary technologies and their uses by obtaining and/or defending patents. These risks and uncertainties include the following:

- the U.S. Patent and Trademark Office, or USPTO, and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process, the noncompliance with which can result in abandonment or lapse of a patent or patent application, and partial or complete loss of patent rights in the relevant jurisdiction;
- patent applications may not result in any patents being issued;
- patents that may be issued or in-licensed may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage;
- our competitors, many of whom have substantially greater resources than we do and many of whom have made significant investments in competing technologies, may seek or may have already obtained patents that will limit, interfere with or eliminate our ability to make, use and sell our potential drug candidates;
- other parties may have designed around our claims or developed technologies that may be related or competitive to our platform, may have filed or may file patent applications and may have received or may receive patents that overlap or conflict with our patent applications, either by claiming the same compounds, compositions or methods or by claiming subject matter that could dominate our patent position;
- any successful opposition to any patents owned by or licensed to us could deprive us of rights necessary to prevent others from practicing our technologies or to successfully commercialize any drug candidates that we may develop;
- because patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our drug candidates, proprietary technologies and their uses;

- an interference proceeding can be provoked by a third party or instituted by the USPTO to determine who was the first to invent any of the subject matter covered by the patent claims of applications we may in-license which have an effective filing date before March 16, 2013;

- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the United States for disease treatments that prove successful, as a matter of public policy regarding worldwide health concerns; and

- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing drug candidates.

The patent prosecution process is also expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Although we enter into non-disclosure and confidentiality agreements with parties who have access to patentable aspects of our research and development output, such as our employees, outside scientific collaborators, CROs, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach such agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. We may also rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or feasible. However, trade secrets are difficult to protect. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, outside scientific collaborators and other advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using any of our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time consuming, and unsuccessful. Further, our issued patents could be found invalid or unenforceable if challenged in court, and we may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights.

Competitors may infringe our intellectual property rights. To prevent infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. If we choose to go to court to stop another party from using the inventions claimed in any patents we obtain, that individual or company has the right to ask the court to rule that such patents are invalid or should not be enforced against that third party. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge include an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could include 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, even outside the context of litigation. Similar mechanisms for challenging the validity and enforceability of a patent exist in non-U.S. patent offices and may result in the revocation, cancellation, or amendment of any non-U.S. patents we hold in the future. The outcome following legal assertions of invalidity and unenforceability is unpredictable, and prior art could render our patents invalid. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on one or more drug candidates. Such a loss of patent protection would have a material adverse impact on our business.

These lawsuits are expensive and would consume time and resources and divert the attention of managerial and scientific personnel even if we were successful in stopping the infringement of such patents. In addition, there is a risk that the court will decide that such patents are not valid and that we do not have the right to stop the other party from using the claimed inventions. There is also the risk that, even if the validity of such patents is upheld, the court will refuse to stop the other party on the ground that such other party's activities do not infringe our rights to such patents. In addition, the U.S. Supreme Court has recently modified some tests used by the USPTO in granting patents over the past 20 years, which may decrease the likelihood that we will be able to obtain patents and increase the likelihood of challenge of any patents we obtain or license.

Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the 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. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non-exclusive license is offered and our competitors gain access to the same technology. Our defense of litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials,

continue our research programs, license necessary technology from third parties or enter into development or manufacturing partnerships that would help us bring our drug candidates to market.

Even if resolved in our favor, litigation or other legal proceedings relating to our intellectual property rights may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. 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.

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. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock.

Our ability to enforce our patent rights depends on our ability to detect infringement. It may be difficult to detect infringers who do not advertise the components or methods that are used in connection with their drug candidates. Moreover, it may be difficult or impossible to obtain evidence of infringement in a competitor's or potential competitor's drug candidate. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded if we were to prevail may not be commercially meaningful.

In addition, proceedings to enforce or defend our patents could put our patents at risk of being invalidated, held unenforceable or interpreted narrowly. Such proceedings could also provoke third parties to assert claims against us, including that some or all of the claims in one or more of our patents are invalid or otherwise unenforceable. If any of our patents covering our drug candidates are invalidated or found unenforceable, or if a court found that valid, enforceable patents held by third parties covered one or more of our drug candidates, our competitive position could be harmed or we could be required to incur significant expenses to enforce or defend our rights. If we initiate lawsuits to protect or enforce our patents, or litigate against third party claims, such proceedings would be expensive and would divert the attention of our management and technical personnel.

We may infringe the intellectual property rights of others, which may prevent or delay our drug development efforts and stop us from commercializing or increase the costs of commercializing our drug candidates.

Our success will depend in part on our ability to operate without infringing the intellectual property rights of third parties. We cannot guarantee that our drug candidates, or manufacture or use of our drug candidates, will not infringe third-party patents.

Furthermore, a third party may claim that we or our manufacturing or commercialization collaborators are using inventions covered by the third party's patent rights and may go to court to stop us from engaging in our normal operations and activities, including making or selling our drug candidates. These lawsuits are costly and could affect our results of operations and divert the attention of managerial and scientific personnel. There is a risk that a court would decide that we or our commercialization collaborators are infringing the third party's patents and would order us or our collaborators to stop the activities covered by the patents. In that event, we or our commercialization collaborators may not have a viable way around the patent and may need to halt commercialization of the relevant drug candidate. In addition, there is a risk that a court will order us or our collaborators to pay the other party damages for having violated the other party's patents. If we collaborate with third parties in the development of technology in the future, our collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to litigation or potential liability. Further, our collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability. In the future, we may agree to indemnify our collaborators against certain intellectual property infringement claims brought by third parties. The pharmaceutical and biotechnology industries have produced a proliferation of patents, and it is not always clear to industry participants, including us, which patents cover various types of drug candidates or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform.

Any claims of patent infringement asserted by third parties would be time consuming and could:

- result in costly litigation;
- divert the time and attention of our technical personnel and management;
- cause development delays;

- prevent us from commercializing atuzaginstat or our other drug candidates until the asserted patent expires or is finally held invalid or not infringed in a court of law;
- require us to develop non-infringing technology, which may not be possible on a cost-effective basis;
- require us to pay damages to the party whose intellectual property rights we may be found to be infringing, which may include treble damages if we are found to have been willfully infringing such intellectual property;
- require us to pay the attorney's fees and costs of litigation to the party whose intellectual property rights we may be found to be infringing; and/or
- require us to enter into royalty or licensing agreements, which may not be available on commercially reasonable terms, or at all.

If we are sued for patent infringement, we would need to demonstrate that our drug candidates or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid, and we may not be able to do this. Proving invalidity is difficult.

For example, in the United States, proving invalidity requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Even if we are successful in these proceedings, we may incur substantial costs and divert management's time and attention in pursuing these proceedings, which could have a material adverse effect on us. If we are unable to avoid infringing the patent rights of others, we may be required to seek a license, which may not be available, defend an infringement action or challenge the validity of the patents in court. Patent litigation is costly and time consuming. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, if we do not obtain a license, develop or obtain non-infringing technology, fail to defend an infringement action successfully or have infringed patents declared invalid, we may incur substantial monetary damages, encounter significant delays in bringing our drug candidates to market and be precluded from manufacturing or selling our drug candidates.

We do not routinely conduct independent reviews of pending patent applications of and patents issued to third parties. We cannot be certain that others have not filed patent applications for technology covered by our pending applications, or that we were the first to invent the technology, because:

- some patent applications in the United States may be maintained in secrecy until the patents are issued;
- patent applications in the United States and elsewhere can be pending for many years before issuance, or unintentionally abandoned patents or applications can be revived;
- pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our technologies, our drug candidates or the use of our drug candidates;
- identification of third-party patent rights that may be relevant to our technology is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims;
- patent applications in the United States are typically not published until 18 months after the priority date; and
- publications in the scientific literature often lag behind actual discoveries.

Furthermore, 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 and can involve other factors such as expert opinion. Our interpretation of the relevance or the scope of claims in a patent or a pending application may be incorrect, which may negatively impact our ability to market our drug candidates. Further, we may incorrectly determine that our technologies, or drug candidates are not covered by a third-party patent or may incorrectly predict whether a third party's pending patent 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 drug candidates.

Our competitors may have filed, and may in the future file, patent applications covering technology similar to ours, and others may have or obtain patents or proprietary rights that could limit our ability to make, use, sell, offer for sale or import our drug

candidates and future approved products or impair our competitive position. Numerous third-party U.S. and foreign issued patents and pending patent applications exist in the fields in which we are developing drug candidates. There may be third-party patents or patent applications with claims to compositions, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our drug candidates. Any such patent application may have priority over our patent applications, which could further require us to obtain rights to issued patents covering such technologies. If another party has filed a U.S. patent application on inventions similar to ours, we may have to participate in an interference proceeding declared by the USPTO to determine priority of invention in the United States. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful if, unbeknownst to us, the other party had independently arrived at the same or similar inventions prior to our own inventions, resulting in a loss of our U.S. patent position with respect to such inventions. Other countries have similar laws that permit secrecy of patent applications, and may be entitled to priority over our applications in such jurisdictions.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations.

Obtaining and maintaining our 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 for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. We have systems in place to remind us to pay these fees, and we employ an outside firm to pay these fees due to the USPTO and non-U.S. patent agencies. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. If we license intellectual property we may have to rely upon our licensors to comply with these requirements and effect payment of these fees with respect to any patents and patent applications that we license. However, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

We may be subject to claims that we have wrongfully hired an employee from a competitor or that we or our employees have wrongfully used or disclosed alleged confidential information or trade secrets of their former employers.

We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers. If we are not able to adequately prevent disclosure of trade secrets and other proprietary information, the value of our technology and drug candidate could be significantly diminished.

As is common in the biotechnology and pharmaceutical industries, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. We may be subject to claims that these employees, or we, have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. We may also be subject to claims that former employees, or other third parties have an ownership interest in our patents or other intellectual property. In addition, we may face claims by third parties that our agreements with employees, contractors or consultants obligating them to assign intellectual property to us are ineffective or in conflict with prior or competing contractual obligations of assignment, which could result in ownership disputes regarding intellectual property we have developed or will develop and interfere with our ability to capture the commercial value of such intellectual property. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, which could adversely affect our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

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

We rely on trade secrets to protect our proprietary technologies, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. We rely in part on confidentiality agreements with our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors, and invention assignment agreements with employees, consultants and advisors, to protect our trade secrets and other proprietary information. In addition to contractual measures, we try to protect the confidential nature of our proprietary information using commonly accepted physical and

technological security measures. Despite these efforts, we cannot provide any assurances that all such agreements have been duly executed, and these agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover our trade secrets and proprietary information. For example, the FDA, as part of its Transparency Initiative, is currently considering whether to make additional information publicly available on a routine basis, including information that we may consider to be trade secrets or other proprietary information, and it is not clear at the present time how the FDA's disclosure policies may change in the future, if at all. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

In addition, such security measures may not provide adequate protection for our proprietary information, for example, in the case of misappropriation of a trade secret by an employee, consultant, customer or third party with authorized access. Our security measures may not prevent an employee, consultant or customer from misappropriating our trade secrets and providing them to a competitor, and any recourse we take against such misconduct may not provide an adequate remedy to protect our interests fully. Monitoring unauthorized uses and disclosures is difficult, and we do not know whether the steps we have taken to protect our proprietary technologies will be effective. Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our drug candidates that we consider proprietary. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time-consuming, and the outcome is unpredictable. Even though we use commonly accepted security measures, the criteria for protection of trade secrets can vary among different jurisdictions.

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. Moreover, third parties may still obtain this information or may come upon this or similar information independently, and we would have no right to prevent them from using that technology or information to compete with us. Trade secrets could over time be disseminated within the industry through independent development, the publication of journal articles and the movement of personnel skilled in the art from company to company or academic to industry scientific positions.

Though our agreements with third parties typically restrict the ability of our advisors, employees, licensors, suppliers, third-party contractors and consultants to publish data potentially relating to our trade secrets, our agreements may contain certain limited publication rights. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Because from time to time we expect to rely on third parties in the development, manufacture, and distribution of our drug candidates and provision of our services, we must, at times, share trade secrets with them. Despite employing the contractual and other security precautions described above, the need to share trade secrets 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. If any of these events occurs or if we otherwise lose protection for our trade secrets, the value of this information may be greatly reduced and our competitive position would be harmed.

In the future, we may need to obtain licenses of third-party technology that may not be available to us or are available only on commercially unreasonable terms, and which may cause us to operate our business in a more costly or otherwise adverse manner that was not anticipated.

From time to time we may be required to license technology from third parties to further develop or commercialize our drug candidates. Should we be required to obtain licenses to any third-party technology, including any such patents required to manufacture, use or sell our drug candidates, such licenses may not be available to us on commercially reasonable terms, or at all. The inability to obtain any third-party license required to develop or commercialize any of our drug candidates could cause us to abandon any related efforts, which could seriously harm our business and operations.

Where we obtain licenses from or collaborate with third parties, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from third parties, or such activities, if controlled by us, may require the input of such third parties. We may also require the cooperation of our licensors and collaborators to enforce any licensed patent rights, and such cooperation may not be provided. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business, in compliance with applicable laws and regulations, which may affect the validity and enforceability of such patents or any patents that may issue from such applications. Moreover, if we do obtain necessary licenses, we will likely have obligations under those licenses, including making royalty and milestone payments, and any failure to satisfy those obligations could give our licensor the right to terminate the license.

Termination of a necessary license, or expiration of licensed patents or patent applications, could have a material adverse impact on our business. Our business would suffer if any such licenses terminate, if the licensors fail to abide by the terms of the

license, if the licensors fail to enforce licensed patents against infringing third parties, if the licensed patents or other rights are found to be invalid or unenforceable, or if we are unable to enter into necessary licenses on acceptable terms. Furthermore, if any exclusive licenses terminate, or if the underlying patents fail to provide the intended exclusivity, competitors or other third parties may gain the freedom to seek regulatory approval of, and to market, drug candidates identical to ours. Moreover, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights. In addition, while we cannot currently determine the amount of the royalty obligations, we would be required to pay on sales of future drug candidates, if any, the amounts may be significant. The amount of our future royalty obligations will likely depend on the technology and intellectual property we use in drug candidates that we successfully develop and commercialize, if any. Therefore, even if we successfully develop and commercialize drug candidates, we may be unable to achieve or maintain profitability.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

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 drug candidates that are similar to ours but that are not covered by the claims of the patents that we own;
- we or future collaborators might not have been the first to make the inventions covered by the issued patent or pending patent application that we own or have exclusively licensed;
- we or future collaborators might not have been the first to file patent applications covering certain of our 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 patent applications will not lead to issued patents;
- issued patents that we own or have exclusively licensed may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive drug candidates for sale in our major commercial markets;
- we cannot ensure that any of our patents, or any of our pending patent applications, if issued, or those of our licensors, will include claims having a scope sufficient to protect our drug candidates;
- we cannot ensure that any patents issued to us or our licensors will provide a basis for an exclusive market for our commercially viable drug candidates or will provide us with any competitive advantages;
- we cannot ensure that our commercial activities or drug candidates will not infringe upon the patents of others;
- we cannot ensure that we will be able to successfully commercialize our drug candidates on a substantial scale, if approved, before the relevant patents that we own or license expire;
- we may not develop additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.
- Should any of these events occur, they would significantly harm our business, results of operations and prospects.

Because of the expense and uncertainty of litigation, we may not be in a position to enforce our intellectual property rights against third parties.

Because of the expense and uncertainty of litigation, we may conclude that even if a third party is infringing our issued patent, any patents that may be issued as a result of our pending or future patent applications or other intellectual property rights, the risk-adjusted cost of bringing and enforcing such a claim or action may be too high or not in the best interest of our company or our stockholders. In such cases, we may decide that the more prudent course of action is to simply monitor the situation or initiate or seek some other non-litigious action or solution.

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

Patents are of national or regional effect, and filing, prosecuting and defending patents on all of our drug candidates 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. As such, 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 drug candidates made using our inventions in and into the United States or other jurisdictions. Further, the legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to pharmaceuticals, which could make it difficult for us to stop the infringement of our patents or marketing of competing drug candidates in violation of our proprietary rights generally. In addition, certain developing countries, including China and India, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, some countries limit the enforceability of patents against third parties, including government agencies or government contractors. In these countries, patents may provide limited or no benefit, and in those countries, we and our licensors and licensees may have limited remedies if patents are infringed or if we or our licensors or licensees are compelled to grant a license to a third party, which could diminish the value of those patents. This could limit our potential revenue opportunities. Further, competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own drug candidates and, further, may export otherwise infringing drug candidates to territories where we have patent protection but where enforcement is not as strong as that in the United States. These drug candidates may compete with our drug candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. Proceedings to enforce our patent 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. 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.

Changes in patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our drug candidates.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Our patent rights may be affected by developments or uncertainty in U.S. or non-U.S. patent statutes, patent case laws in USPTO rules and regulations or in the rules and regulations of non-U.S. patent offices.

Obtaining and enforcing patents in the pharmaceutical industry involves both technological and legal complexity and is therefore costly, time consuming and inherently uncertain. Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs. Recent patent reform legislation in the United States and other countries, including the Leahy-Smith America Invents Act (the Leahy-Smith Act), signed into law on September 16, 2011, could increase those uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art and provide more efficient and cost-effective avenues for competitors to challenge the validity of patents. 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. After March 2013, under the Leahy-Smith Act, the United States transitioned to a first inventor to file system in which, assuming that the other statutory requirements 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. 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 have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, Congress may pass patent reform legislation that is unfavorable to us.

The U.S. Supreme Court has ruled on several patent cases in recent years, narrowing the scope of patent protection available in certain circumstances and weakening the rights of patent owners in certain situations. Depending on future actions by the U.S. Congress, the U.S. courts, the USPTO and the relevant law-making bodies in other countries, the laws and regulations governing

patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

We may become subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

We may be subject to claims that former employees or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor. The failure to name the proper inventors on a patent application can result in the patents issuing thereon being unenforceable. Inventorship disputes may arise from conflicting views regarding the contributions of different individuals named as inventors, the effects of foreign laws where foreign nationals are involved in the development of the subject matter of the patent, conflicting obligations of third parties involved in developing our drug candidates or as a result of questions regarding co-ownership of potential joint inventions. Litigation may be necessary to resolve these and other claims challenging inventorship and/or ownership. Alternatively, or additionally, we may enter into agreements to clarify the scope of our rights in such intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Patent terms may be inadequate to protect our competitive position on our drug candidates for an adequate amount of time, and if we do not obtain patent term extension for our drug candidates, our business may be materially harmed.

Patent rights are of limited duration. In the United States, the natural expiration of a patent is generally 20 years after its first effective non-provisional filing date. In addition, although upon issuance a U.S. patent's life can be increased based on certain delays caused by the USPTO, this increase can be reduced or eliminated based on certain delays caused by the patent applicant during patent prosecution. Given the amount of time required for the development, testing and regulatory review of new drug candidates, patents protecting such candidates might expire before or shortly after such drug candidates are commercialized. Even if patents covering our drug candidates are obtained, once the patent life has expired for a drug candidate, we may be open to competition from generic products. A patent term extension of up to five years based on regulatory delay may be available in the United States under the Hatch-Waxman Act. However, only a single patent can be extended for each marketing approval, and any patent can be extended only once, for a single drug candidate. Moreover, the scope of protection during the period of the patent term extension does not extend to the full scope of the claim, but instead only to the scope of the drug candidate as approved. Further, a patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of drug candidate approval and only those claims covering such approved drug candidate, a method for using it or a method for manufacturing it may be extended. Laws governing analogous patent term extensions in foreign jurisdictions vary widely, as do laws governing the ability to obtain multiple patents from a single patent family. Additionally, we may not receive an extension if we fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or restoration, or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our drug candidate will be shortened and our competitors may obtain approval of competing drug candidates following our patent expiration, and our revenue could be reduced.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our current or future trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. We may license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and tradenames by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names. Our efforts to enforce or protect our proprietary rights related to trademarks, trade names, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our financial condition or results of operations.

Moreover, any name we have proposed to use with our drug candidate in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. Similar requirements exist in Europe. The FDA

typically conducts a review of proposed drug candidate names, including an evaluation of potential for confusion with other drug candidate names. If the FDA (or an equivalent administrative body in a foreign jurisdiction) objects to any of our proposed proprietary drug candidate names, we may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. Furthermore, in many countries, owning and maintaining a trademark registration may not provide an adequate defense against a subsequent infringement claim asserted by the owner of a senior trademark. At times, competitors or other third parties may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. 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. If we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

If atuzaginstat, our lead drug candidate, obtains regulatory approval, additional competitors could enter the market with generic versions, which may result in a material decline in sales of affected drugs.

Under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, a pharmaceutical manufacturer may file an abbreviated new drug application, or ANDA, seeking approval of a generic copy of an approved, small molecule innovator drug. Under the Hatch-Waxman Act, a manufacturer may also submit a new drug application, or NDA, under section 505(b)(2) that references the FDA's prior approval of the small molecule innovator drug. A 505(b)(2) NDA drug may be for a new or improved version of the original innovator drug. The Hatch-Waxman Act also provides for certain periods of regulatory exclusivity, which preclude FDA approval (or in some circumstances, FDA filing and reviewing) of an ANDA or 505(b)(2) NDA. In addition to the benefits of regulatory exclusivity, an innovator NDA holder may have patents claiming the active ingredient, drug formulation or an approved use of the drug, which would be listed with the drug in the FDA publication, "Approved Drug Products with Therapeutic Equivalence Evaluations," known as the "Orange Book." If there are patents listed in the Orange Book, a generic or 505(b)(2) applicant that seeks to market its drug before expiration of the patents must include in the ANDA a "Paragraph IV certification," challenging the validity or enforceability of, or claiming non-infringement of, the listed patent or patents. Notice of the certification must be given to the innovator, too, and if within 45 days of receiving notice the innovator sues to protect its patents, approval of the ANDA is stayed for 30 months, or as lengthened or shortened by the court.

Accordingly, if any of our small molecule drug candidates receive FDA approval, competitors could file ANDAs for generic versions of our drugs or 505(b)(2) NDAs that reference our drugs, respectively. If there are patents listed for atuzaginstat in the Orange Book, those ANDAs and 505(b)(2) NDAs would be required to include a certification as to each listed patent indicating whether the ANDA applicant does or does not intend to challenge the patent. We cannot predict how any generic competitor would address patents we may list in the Orange Book, if any, whether we would sue on any such patents, or the outcome of any such suit.

We may not be successful in securing or maintaining proprietary patent protection for drug candidates and technologies we develop or license. Moreover, if any of our owned or in-licensed patents that are listed in the Orange Book are successfully challenged by way of a Paragraph IV certification and subsequent litigation, the affected drug could immediately face generic competition and its sales would likely decline rapidly and materially. Should sales decline, we may have to write off a portion or all of the intangible assets associated with the affected drug and our results of operations and cash flows could be materially and adversely affected.

Risks Relating to Owning Our Common Stock

The market price of our common stock is likely to be volatile and could fluctuate or decline, resulting in a substantial loss of your investment.*

The market price of our common stock has been and may continue to be volatile and could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- results of clinical trials and, as we experienced following the announcement of our Phase 2/3 GAIN trial results;
- results of clinical trials of other drug candidates being evaluated for Alzheimer's disease or other neurodegenerative diseases;
- regulatory actions with respect to our drug candidates or our competitors' drug candidates;

- actual or anticipated fluctuations in our financial condition and operating results, including fluctuations in our quarterly and annual results;
- announcements of technological innovations by us or our competitors;
- overall conditions in our industry and the markets in which we operate;
- addition or loss of significant customers, or other developments with respect to significant customers;
- changes in laws or regulations applicable to our drug candidates;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- additions or departures of key personnel;
- competition from existing drug candidates or new drug candidates that may emerge;
- issuance of new or updated research or reports by securities analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- disputes or other developments related to proprietary rights, including patents, litigation matters, and our ability to obtain intellectual property protection for our technologies;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us or our stockholders;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- market conditions for pharmaceutical stocks in general;
- the expiration of contractual lock-up agreements with our executive officers, directors and stockholders;
- general economic and market conditions, including developments relating to the COVID-19 pandemic and the associated economic downturn; and
- ineffectiveness of our disclosure controls or internal controls.

Furthermore, the stock markets have experienced price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of our common stock. In the past, stockholders have instituted securities class action litigation following periods of market volatility. If we were to become involved in securities litigation, it could subject us to substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

We may be subject to securities class action and stockholder derivative actions. These, and potential similar or related litigation, could result in substantial damages and may divert management's time and attention from our business and adversely impact our business, results of operations and financial condition.*

We may become the target of securities class actions or stockholder derivative claims. Securities-related class action litigation has often been brought against companies, including many biotechnology companies, which experience volatility in the market price of their securities. This risk is especially relevant for us because biotechnology and biopharmaceutical companies often

experience significant stock price volatility in connection with their product development programs. Any preclinical or clinical trial results that the investors may deem as unfavorable, volatility in our stock price and other matters affecting our business and operations may subject us to actual and threatened securities class actions or stockholder derivative claims. These types of proceedings may result in substantial costs, divert management's attention from other business concerns and adversely impact our business, results of operations and financial condition.

Future sales of our common stock in the public market could cause our share price to fall.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities.

Certain holders of our common stock have rights, subject to conditions, to require us to file registration statements covering their shares or to include their shares in Securities Act registration statements that we may file for ourselves or other stockholders. Once we register these shares, they can be freely sold in the public market. Moreover, we have also registered under the Securities Act shares of common stock that we may issue under our equity compensation plans.

In addition, in the future, we may issue additional shares of common stock or other equity or debt securities convertible into common stock in connection with a financing, acquisition, litigation settlement, employee arrangements or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

We have never paid dividends on our common stock and we do not intend to pay dividends for the foreseeable future. Consequently, any gains from an investment in our common stock will likely depend on whether the price of our common stock increases.

We have never declared or paid any dividends on our common stock and do not intend to pay any dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the operation of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

General Risk Factors

Insiders have substantial control over us and will be able to influence corporate matters.*

As of September 30, 2021, our directors and executive officers and our affiliates beneficially owned, in the aggregate, approximately 21.1% of our outstanding capital stock. As a result, these stockholders will be able to exercise significant influence over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, such as a merger or other sale of our company or its assets. This concentration of ownership could limit stockholders' ability to influence corporate matters and may have the effect of delaying or preventing a third party from acquiring control over us.

Our charter documents and Delaware law could prevent a takeover that stockholders consider favorable and could also reduce the market price of our stock.

Our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could delay or prevent a change in control of our company. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions. These provisions include:

- providing for a classified board of directors with staggered, three-year terms;
- authorizing our board of directors to issue preferred stock with voting or other rights or preferences that could discourage a takeover attempt or delay changes in control;
- prohibiting cumulative voting in the election of directors;
- providing 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;

- prohibiting the adoption, amendment or repeal of our amended and restated bylaws or the repeal of the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors without the required approval of at least 66.67% of the shares entitled to vote at an election of directors;
- prohibiting stockholder action by written consent;
- limiting the persons who may call special meetings of stockholders; and
- requiring advance notification of stockholder nominations and proposals.

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, the provisions of Section 203 of the Delaware General Corporate Law, or the DGCL, govern us. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time without the consent of our board of directors.

These and other provisions in our amended and restated certificate of incorporation and our amended and restated bylaws and under Delaware law could discourage potential takeover attempts, reduce the price investors might be willing to pay in the future for shares of our common stock and result in the market price of our common stock being lower than it would be without these provisions.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the sole and exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' abilities to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation provides that, unless we consent to the selection of an alternative forum, to the fullest extent permitted by law, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of a fiduciary duty owed by, or other wrongdoing by, any of our directors, officers, employees or agents or our stockholders;
- any action asserting a claim against us arising under the DGCL, our amended and restated certificate of incorporation, or our amended and restated bylaws; and
- any action asserting a claim against us that is governed by the internal-affairs doctrine;

provided that, the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction; and provided further that, if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware. Our amended and restated certificate of incorporation also provides that the federal district courts of the United States of America will be the exclusive forum for the resolution of any complaint asserting a cause of action against us or any of our directors, officers, employees or agents and arising under the Securities Act.

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. However, these 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. While the Delaware Supreme Court recently determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring such a claim arising under the Securities Act against us, our directors, officers, or other employees in a venue other than in the federal district courts of the United States of America. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation, and this may require significant additional costs associated with resolving such action in other jurisdictions.

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; and

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

Our internal computer systems, or those used by our third-party research institution collaborators, CROs or other contractors or consultants, may fail or suffer security breaches.

Despite the implementation of security measures, our internal computer systems and those of our future CROs and other contractors and consultants may be vulnerable to damage from computer viruses and unauthorized access. Although to our knowledge we have not experienced any such material system failure or security breach to date, if such an event were to occur and cause interruptions in our operations, 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 our third-party research institution collaborators for research and development of our drug candidates and other third parties for the manufacture of our drug candidates and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or systems, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development and commercialization of our drug candidates could be delayed.

Our ability to utilize our federal net operating loss and tax credit carryforwards may be limited.

Our net operating loss, or NOL, carryforwards could expire unused and be unavailable to offset future income tax liabilities because of their limited duration or because of restrictions under U.S. tax law. NOLs generated in tax years ending on or prior to December 31, 2017 are only permitted to be carried forward for 20 taxable years under applicable U.S. federal tax law. Moreover, under the Tax Act as modified by the CARES Act, federal NOLs generated in tax years beginning after December 31, 2017 may be carried forward indefinitely, but the deductibility of such federal NOLs may be limited to 80% of current year taxable income for tax years beginning after January 1, 2021.

Under Sections 382 and 383 of the Internal Revenue Code, limitations on a corporation's ability to use its NOLs and tax credit carryforwards apply 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 three-year period. If we have experienced an ownership change at any time since our incorporation, we may already be subject to limitations on our ability to utilize our existing

NOL carryforwards and other tax attributes to offset taxable income or tax liability. In addition, future changes in our stock ownership, which may be outside of our control, may trigger an ownership change. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. As a result, even if we earn net taxable income in the future, our ability to use our pre-change NOL carryforwards and other tax attributes to offset such taxable income or tax liability may be subject to limitations, which could potentially result in increased future income tax liability to us.

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

Unregistered Sales of Equity Securities

None.

Issuer Repurchases of Equity Securities

None.

Use of Proceeds

On May 8, 2019, our registration statement on Form S-1 (File No. 333-230853) was declared effective by the SEC for our IPO. There has been no material change in the planned use of proceeds from our IPO from that described in the final prospectus filed by us with the SEC on May 9, 2019.

Item 3. Defaults Upon Senior Securities.

Not Applicable.

Item 4. Mine Safety Disclosures.

Not Applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

The exhibits filed or furnished as part of this Quarterly Report on Form 10-Q are set forth on the Exhibit Index, which Exhibit Index is incorporated herein by reference.

Exhibit Number	Description	Incorporated by Reference			Filed Herewith
		Form	Date	Number	
10.1	Change in Control and Severance Agreement, by and between Cortexyme Inc. and Ted Monohon, dated as of September 21, 2021				X
31.1	Certification of Chief Executive Officer pursuant to Rules 13a-14(a) and Rule 15d-14(a) of the Exchange Act				X
31.2	Certification of Chief Financial Officer pursuant to Rules 13a-14(a) and Rule 15d-14(a) of the Exchange Act				X
32.1*	Certification of Chief Executive Officer pursuant to Rule 13a-14(b) of the Exchange Act and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				X
32.2*	Certification of Chief Financial Officer pursuant to Rule 13a-14(b) of the Exchange Act and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				X
101.INS	Inline XBRL Instance Document				X
101.SCH	Inline XBRL Taxonomy Extension Schema Document				X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document				X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document				X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document				X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document				X
104	Cover Page Interactive Data File, formatted in Inline XBRL (included in Exhibit 101)				

* This certification is deemed not filed for purpose of Section 18 of the Exchange Act or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act

SIGNATURES

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

Cortexyme, Inc.

Date: October 29, 2021

By: /s/ Casey C. Lynch
Casey C. Lynch
President, Chief Executive Officer and Chairman
(Principal Executive Officer)

Date: October 29, 2021

By: /s/ Christopher Lowe
Christopher Lowe
Chief Operating Officer and Chief Financial Officer
(Principal Financial Officer)

Exhibit 10.1

CORTEXYME, INC.

EXECUTIVE CHANGE IN CONTROL AND SEVERANCE AGREEMENT

This Executive Change in Control and Severance Agreement (the "***Agreement***") is made and entered into by and between Ted Monohon ("***Executive***") and Cortexyme, Inc. (the "***Company***"), effective as of September 21, 2021 (the "***Effective Date***").

RECITALS

1. The Board of Directors of the Company (the "***Board***") has determined that it is in the best interest of the Company and its stockholders to provide certain payments and benefits in connection with certain terminations of Executive's employment with the Company, including certain terminations that occur in connection with a Change in Control.

2. Capitalized terms used in this Agreement and not otherwise defined herein are defined in Section 6 below.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

1. At-Will Employment. The Company and Executive acknowledge that Executive's employment is and will continue to be at-will, as defined under applicable law.

2. Rights Upon Termination. Except as expressly provided in Section 3, upon the termination of Executive's employment, Executive shall only be entitled to: (i) all earned but unpaid salary, all accrued but unpaid vacation and all other earned but unpaid compensation or wages, (ii) any unreimbursed business expenses incurred by Executive on or before the termination date and which are reimbursable under the Company's business expense reimbursement policies, which will be paid to Executive promptly following Executive's submission of any required receipts and other documentation to the Company in accordance with the Company's business expense reimbursement policies, provided such receipts and documents are received by the Company within forty-five (45) days after the date of Executive's termination, and (iii) such other compensation or benefits due to Executive under any Company-provided retirement, health or equity plans, policies, and arrangements or as otherwise required by law (collectively, the "***Accrued Benefits***").

3. Severance Benefits.

(a) Termination without Cause outside of Change in Control Period. If, outside of the Change in Control Period, the Company (or any parent, subsidiary or successor of the Company) terminates Executive's employment without Cause, then, subject to Section 4 below, Executive will receive the following severance benefits from the Company:

(i) Base Salary Severance. Executive will receive base salary severance in an amount equal to three (3) months (the "***Severance Period***") multiplied by Executive's Base Salary Rate.

The base salary severance shall be paid to Executive at Executive's Base Salary Rate in accordance with the Company's normal payroll practices on the Company's regularly scheduled payroll dates commencing with the first regularly scheduled payroll date that occurs at least 8 days following the Release Deadline, with the first payment being equal to the number of business days between Executive's last day of employment and the date of the first payment multiplied by Executive's daily Base Salary Rate.

(ii) Benefits Severance. Executive will receive a benefits severance payment in an amount equal to the monthly premiums that would be due for the Severance Period for continuation coverage under Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("***COBRA***"), if Executive were to elect COBRA continuation coverage for Executive and Executive's eligible dependents (based on the coverage levels in effect immediately prior to Executive's

termination or resignation and based on the premium amount that would be due for the first month of COBRA coverage if Executive were to elect such COBRA continuation coverage). The benefits severance payment shall be paid to Executive in a single lump-sum within thirty (30) days following the Release Deadline and will be made, subject to all applicable taxes and required withholdings, and regardless of whether Executive elects COBRA continuation coverage.

(b) Termination without Cause or Resignation for Good Reason during Change in Control Period. If, during the Change in Control Period, (i) the Company (or any parent, subsidiary or successor of the Company) terminates Executive's employment without Cause or (ii) Executive resigns Executive's employment with the Company (or any parent, subsidiary or successor of the Company) for Good Reason, then, subject to Section 4 below, Executive will receive the following severance benefits from the Company:

(i) Base Salary Severance. Executive will receive a base salary severance payment in an amount equal to six (6) months of base salary at Executive's Base Salary Rate. The base salary severance payment shall be paid to Executive in a single lump-sum within thirty (30) days following the Release Deadline.

(ii) Target Annual Bonus Severance. Executive will receive a target annual bonus severance payment in an amount equal to fifty percent (50%) of Executive's target annual bonus opportunity for the year in which the termination occurs. The target annual bonus severance payment shall be paid to Executive in a single lump-sum within thirty (30) days following the Release Deadline.

(iii) Benefits Severance. Executive will receive a benefits severance payment in an amount equal to six (6) months of the monthly premiums that would be due for continuation coverage under COBRA if Executive were to elect COBRA continuation coverage for Executive and Executive's eligible dependents (based on the coverage levels in effect immediately prior to Executive's termination or resignation and based on the premium amount that would be due for the first month of COBRA coverage if Executive were to elect such COBRA continuation coverage). The benefits severance payment shall be paid to Executive in a single lump-sum within thirty (30) days following the Release Deadline and will be made, subject to all applicable taxes and required withholdings, and regardless of whether Executive elects COBRA continuation coverage.

(iv) Equity Awards. Executive shall vest in any outstanding Equity Awards that are unvested as of Executive's termination of employment as follows: in the case of any outstanding Equity Awards that are subject to time-based vesting, 100% of any outstanding Equity Awards (the "Vesting Acceleration") as of the later of Executive's termination of employment or the Change in Control. The Equity Awards will otherwise remain subject to the terms and conditions of the applicable Equity Award agreement. Notwithstanding anything stated herein or elsewhere to the contrary, if the successor to the Company or any affiliate of such successor does not agree to assume, substitute or otherwise continue any then outstanding Equity Awards at the time of a Change in Control, Executive shall receive the Vesting Acceleration as of immediately prior to and contingent upon the Change in Control unless Executive's employment with the Company (or any parent, subsidiary or successor of the Company) terminates due to Executive's resignation without Good Reason or by the Company for Cause.

(c) Resignation; Termination for Cause. If Executive's employment with the Company is terminated at any time (i) by Executive other than for Good Reason, or (ii) for Cause by the Company, then Executive will not be entitled to receive severance or other benefits pursuant to this Agreement except for the Accrued Benefits.

(d) Disability; Death. If the Company terminates Executive's employment as a result of Executive's Disability where Executive is no longer willing or able to continue performing services for the Company, or Executive's employment terminates due to Executive's death, then Executive will not be entitled to receive severance or other benefits pursuant to this Agreement except for the Accrued Benefits.

(e) Breach. The parties acknowledge that Executive's entitlement to the severance payments and benefits contained in this Section 3 are of the essence and an integral part of this Agreement, and that, without such severance provisions, the parties would not enter into this Agreement. Therefore, if the Company, or any successor to the Company, breaches the terms of this Section 3 by failing or refusing pay or provide any of the severance payments or benefits owed

to Executive in the amounts and/or according to the time periods set forth herein, Executive shall be entitled to two times (2x) the amount of severance payments and benefits that Executive would otherwise be entitled to receive pursuant to this Agreement according to the same terms set forth herein. The parties acknowledge and agree that any additional severance payments and benefits paid pursuant to this Section 3(e) constitute liquidated damages that would be incurred by Executive and that these additional severance payments and benefits are not a penalty, rather they are a reasonable amount intended as liquidated damages that will compensate Executive in the circumstances in which they are payable for the efforts and resources expended, and opportunities foregone, while negotiating and/or enforcing this Agreement and in reliance on this Agreement and on the expectation of the consummation of the transactions contemplated by this Agreement, which amounts would otherwise be impossible to calculate with precision.

4. Conditions to Receipt of Severance.

(a) Release of Claims Agreement. The receipt of any severance or other benefits pursuant to Section 3 will be subject to Executive signing and not revoking a general release of all claims in a form provided by the Company, and such release becoming effective and irrevocable no later than the sixtieth (60th) day following Executive's termination (such deadline, the "***Release Deadline***"). No severance or other benefits will be paid or provided pursuant to this Agreement until the release becomes effective and irrevocable. If the release does not become effective and irrevocable by the Release Deadline, Executive will forfeit all rights to severance payments and benefits under this Agreement.

(b) Confidential Information Agreement and Other Requirements. Executive's receipt of any payments or benefits under Section 3 will be subject to Executive continuing to comply with the terms of the Confidential Information and Invention Assignment Agreement, which Executive acknowledges and agrees shall remain in full force and effect.

(c) Code Section 409A. For purposes of Section 409A of the Code, the regulations and other guidance there under and any state law of similar effect (collectively "***Section 409A***"), each payment that is paid pursuant to this Agreement is hereby designated as a separate payment. Further (i) no severance or benefits to be paid or provided to Executive, if any, pursuant to this Agreement that, when considered together with any other severance payments or benefits, are considered deferred compensation under Section 409A, will be paid or otherwise provided until Executive has had a "separation from service" within the meaning of Section 409A, (ii) no severance or benefits to be paid or provided to Executive, if any, pursuant to this Agreement that are intended to be exempt from Section 409A pursuant to Treasury Regulation Section 1.409A-1(b)(9)(iii) will be paid or otherwise provided until Executive has had an "involuntary separation from service" within the meaning of Section 409A, and (iii) in the case of (i) and (ii), any reference in this Agreement to "termination" or "termination of employment" or any similar term shall be construed to mean a "separation from service" within the meaning of Section 409A. The parties intend that all payments and benefits provided or to be provided under this Agreement comply with, or are exempt from, the requirements of Section 409A so that none of the payments or benefits will be subject to the adverse tax penalties imposed under Section 409A, and any ambiguities herein will be interpreted to so comply or be so exempt. The Company and Executive agree to work together in good faith to consider amendments to this Agreement, and to take such reasonable actions, which are necessary, appropriate or desirable to avoid imposition of any additional tax or income recognition under Section 409A before payments or benefits are provided to Executive. Any severance payments or benefits made in connection with Executive's termination under this Agreement and provided on or before the 15th day of the 3rd month following the end of Executive's first tax year in which Executive's termination occurs or, if later, the 15th day of the 3rd month following the end of the Company's first tax year in which Executive's termination occurs, shall be exempt from Section 409A to the maximum extent permitted pursuant to Treasury Regulation Section 1.409A-1(b)(4) and any additional payments or benefits provided in connection with Executive's termination under this Agreement shall be exempt from Section 409A to the maximum extent permitted pursuant to Treasury Regulation Section 1.409A-1(b)(9)(iii) (to the extent it is exempt pursuant to such section it will in any event be provided no later than the last day of Executive's 2nd taxable year following the taxable year in which Executive's termination occurs). Notwithstanding the foregoing, if any of the payments or benefits provided in connection with Executive's termination do not qualify for any reason to be exempt from Section 409A pursuant to Treasury Regulation Section 1.409A-1(b)(4), Treasury Regulation Section 1.409A-1(b)(9)(iii), or any other applicable exemption and Executive is, at the time of Executive's termination, a "specified employee," as defined in Treasury Regulation Section 1.409A-1(i), each such payment or benefit will not be provided until the first regularly scheduled payroll date that occurs on or after the date six (6) months and one (1) day following Executive's termination and, on such date (or, if earlier, another date that occurs as soon as practicable after Executive's death), Executive will receive all payments and benefits that would have been provided during such period in a single lump sum,

if applicable. In addition, notwithstanding any other provision herein to the contrary, to the extent that any reimbursements or in-kind benefits under this Agreement or otherwise constitute non- exempt "nonqualified deferred compensation" within the meaning of Section 409A, then any such reimbursements and/or benefits (i) shall be made or provided promptly but no later than December 31st of the calendar year following the year in which the expense was incurred by Executive, (ii) shall not in any way affect the expenses eligible for reimbursement or in-kind benefits to be provided in any other calendar year, and (iii) shall not be subject to liquidation or exchange for another benefit.

5. Limitation on Payments. In the event that the severance benefits provided for in this Agreement and/or other payments and benefits otherwise provided to Executive (i) constitute "parachute payments" within the meaning of Section 280G of the Code and (ii) but for this Section 5, would be subject to the excise tax imposed by Section 4999 of the Code, then, , Executive's severance benefits under Section 3, and/or any other parachute payments otherwise provided to Executive, will be either:

(a) delivered in full, or

(b) delivered as to such lesser extent which would result in no portion of such severance benefits being subject to excise tax under Section 4999 of the Code, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by Executive on an after-tax basis, of the greatest amount of severance benefits and other payments and benefits, notwithstanding that all or some portion of such severance benefits and other payments and benefits may be taxable under Section 4999 of the Code. Unless the Company and Executive otherwise agree in writing, any determination required under this Section 5 will be made in writing by the Company's outside legal counsel or independent public accountants or other firm selected by the Company (the "***Firm***"), whose determination will be conclusive and binding upon Executive and the Company for all purposes. For purposes of making the calculations required by this Section 5, the Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Executive will furnish to the Firm such information and documents as the Firm may reasonably request in order to make a determination under this Section. The Company will bear all costs the Firm may reasonably incur in connection with any calculations contemplated by this Section 5. Any reduction made pursuant to this Section 5 shall be made in accordance with the following order of priority: (i) stock options whose exercise price exceeds the fair market value of the optioned stock ("***Underwater Options***") (ii) Full Credit Payments (as defined below) that are payable in cash, (iii) non-cash Full Credit Payments that are taxable, (iv) non-cash Full Credit Payments that are not taxable (v) Partial Credit Payments (as defined below) and (vi) non-cash employee welfare benefits. In each case, reductions shall be made in reverse chronological order such that the payment or benefit owed on the latest date following the occurrence of the event triggering the excise tax will be the first payment or benefit to be reduced (with reductions made pro-rata in the event payments or benefits are owed at the same time).

6. Definition of Terms. The following terms referred to in this Agreement will have the following meanings:

(a) Base Salary Rate. For purposes of this Agreement, "***Base Salary Rate***" means Executive's base salary rate as in effect immediately prior to the date of Executive's termination of employment (provided, if Executive resigns as a result of Section 6(g)(ii), "Base Salary Rate" shall mean Executive's base salary rate as in effect immediately prior to the reduction triggering Section 6(g)(ii)).

(b) Cause. For purposes of this Agreement, "***Cause***" shall have the meaning set forth in the Plan.

(c) Code. For purposes of this Agreement, "***Code***" means the Internal Revenue Code of 1986, as amended.

(d) Change in Control. For purposes of this Agreement, "***Change in Control***" shall have the meaning set forth in the Plan.

(e) Change in Control Period. For purposes of this Agreement, "***Change in Control Period***" means the period beginning three (3) months prior to, and ending eighteen (18) months following, a Change in Control.

(f) Disability. For purposes of this Agreement, "***Disability***" means total and permanent disability as defined in Section 22(e) (3) of the Code.

(g) Equity Award. For purposes of this Agreement, "***Equity Award***" means each then outstanding award relating to the Company's common stock (whether stock options, stock appreciation rights, shares of restricted stock, restricted stock units, performance shares, performance units or other similar awards).

(h) Full Credit Payment. For purposes of this Agreement, "***Full Credit Payment***" means a payment, distribution or benefit, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, that if reduced in value by one dollar reduces the amount of the parachute payment (as defined in Section 280G of the Code) by one dollar, determined as if such payment, distribution or benefit had been paid or distributed on the date of the event triggering the excise tax.

(i) Good Reason. For purposes of this Agreement, resignation for "***Good Reason***" means Executive's resignation due to the occurrence of any of the following conditions which occurs without Executive's written consent, provided that the requirements regarding advance notice and an opportunity to cure set forth below are satisfied:

(i) A material adverse change to Executive's authority, duties or responsibilities that, taken as a whole, results in a material diminution in Executive's authority, duties or responsibilities in effect prior to such change;

(ii) A 10% or more reduction in Executive's then-current base salary or a 10% or more reduction in Executive's base compensation (including base salary and target bonus);

(iii) The Company conditions Executive's continued service with the Company on the relocation of Executive's principal work location to a location that is more than thirty-five (35) miles from Executive's then current principal work location and such relocation results in an increase in Executive's one-way commuting distance from Executive's home by thirty-five (35) miles or more;

(iv) The failure of the Company to obtain the assumption of this Agreement by any successor to the Company; or

(v) Any material breach or material violation of a material provision of this Agreement by the Company (or any successor to the Company).

In order for Executive to resign for Good Reason, Executive must provide written notice to the Company of the existence of the Good Reason condition within ninety (90) days of the initial existence of such Good Reason condition. Upon receipt of such notice, the Company will have thirty (30) days during which it may remedy the Good Reason condition and not be required to provide the severance payments and benefits described herein as a result of such proposed resignation. If the Good Reason condition is not remedied within such thirty (30) day cure period, Executive may resign based on the Good Reason condition specified in the notice effective no later than ninety (90) days following the expiration of the thirty (30) day cure period.

(j) Partial Credit Payment. For purposes of this Agreement, "***Partial Credit Payment***" means any payment, distribution or benefit that is not a Full Credit Payment. In no event shall Executive have any discretion with respect to the ordering of payment reductions.

(k) Plan. For purposes of this Agreement, "***Plan***" means the Company's 2019 Equity Incentive Plan.

7. Successors.

(a) Company Successors. Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in

the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term "Company" will include any such successor to the Company's business and/or assets.

(b) Executive's Successors. The terms of this Agreement and all rights of Executive hereunder will inure to the benefit of, and be enforceable by, Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

8. Notice.

(a) General. Notices and all other communications contemplated by this Agreement will be in writing and will be deemed to have been duly given when personally delivered or when mailed by U.S. registered or certified mail, return receipt requested and postage prepaid. In the case of Executive, mailed notices will be addressed to Executive at the home address which Executive most recently communicated to the Company in writing. In the case of the Company, mailed notices will be addressed to its corporate headquarters, and all notices will be directed to the attention of the Company's Secretary (or, if Executive is the Company's Secretary, any other executive officer of the Company).

(b) Notice of Termination. Any termination by the Company for Cause or by Executive for Good Reason or as a result of a voluntary resignation will be communicated by a notice of termination to the other party hereto given in accordance with Section 8(a) of this Agreement. Such notice will indicate the specific termination provision in this Agreement relied upon, will set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination under the provision so indicated, and will specify the termination date.

9. Miscellaneous Provisions.

(a) No Duty to Mitigate. Executive will not be required to mitigate the amount of any payment contemplated by this Agreement, nor will any earnings that Executive may receive from any other source reduce any such payment.

(b) Waiver. No provision of this Agreement will be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by Executive and by an authorized officer of the Company (other than Executive). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party will be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Headings. All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.

(d) Choice of Law. The validity, interpretation, construction and performance of this Agreement will be governed by the laws of the State of California (with the exception of its conflict of law provisions).

(e) Entire Agreement. This Agreement represents the entire agreement and understanding between the parties hereto and supersedes all prior or contemporaneous agreements with respect to the subject matter of this Agreement. Further, this Agreement supersedes in their entirety any and all prior offer letters or employment agreements entered into by and between Executive and the Company, which offer letters and employment agreements shall be null and void. No waiver, alteration, or modification of any of the provisions of this Agreement will be binding unless in writing and signed by duly authorized representatives of the parties hereto and which specifically mention this Agreement. In entering into this Agreement, no party has relied on or made any representation, warranty, inducement, promise, or understanding that is not in this Agreement. To the extent that any provisions of this Agreement conflict with those of any other agreement between Executive and the Company, the terms in this Agreement will prevail.

(f) Severability. In the event that any provision or any portion of any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable, or void, this Agreement will continue in full force

and effect without said provision or portion of provision. The remainder of this Agreement shall be interpreted so as best to give effect to the intent of the Company and Executive.

(g) Taxes, Withholding and Required Deductions. All payments and, if applicable, benefits made pursuant to this Agreement will be subject to all applicable taxes, withholding of taxes, and any other required deductions.

(h) Counterparts. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, and all of which together shall constitute one and the same agreement. Execution of a facsimile or scanned copy will have the same force and effect as execution of an original, and a facsimile or scanned signature will be deemed an original and valid signature.

(Remainder of page intentionally left blank)

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year set forth below.

COMPANY

CORTEXYME, INC.

/s/ Caryn McDowell
(Signature)

By: Caryn McDowell

Title: CLAO and Corporate Secretary

Date: September 21, 2021

EXECUTIVE

/s/ Ted Monohon
(Signature)

By: Ted Monohon

Date: September 22, 2021

Exhibit 31.1

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Casey C. Lynch, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cortexyme, Inc. for the quarter ended September 30, 2021;

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

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

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

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

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

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

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

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

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

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

Date: October 29, 2021

/s/ Casey C. Lynch

Casey C. Lynch
President, Chief Executive Officer and Chairman of our Board of Directors
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Christopher Lowe, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cortexyme, Inc. for the quarter ended September 30, 2021;

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

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

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

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

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

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

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

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

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

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

Date: October 29, 2021

/s/ Christopher Lowe

Christopher Lowe

Chief Operating Officer and Chief Financial Officer

(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 (18 U.S.C. SECTION 1350)

In connection with the Quarterly Report of Cortexyme, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2021 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: October 29, 2021

By: /s/ Casey C. Lynch

Casey C. Lynch
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 (18 U.S.C. SECTION 1350)

In connection with the Quarterly Report of Cortexyme, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2021 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: October 29, 2021

By: /s/ Christopher Lowe

Christopher Lowe
Chief Operating Officer and Chief Financial Officer
(Principal Financial Officer)