
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2022

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: 001-37467

Astria Therapeutics, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)
100 High Street
Floor 28
Boston, Massachusetts
(Address of Principal Executive Offices)

26-3687168
(IRS Employer
Identification No.)

02110
(Zip Code)

(617) 349-1971

(Registrant's Telephone Number, Including Area Code)

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

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

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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised 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 April 29, 2022, there were 13,016,955 shares of the registrant's common stock, par value \$0.001 per share, outstanding.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This Quarterly Report on Form 10-Q contains forward-looking statements, which reflect our current views with respect to, among other things, our operations and financial performance, strategy, future financial condition and clinical development programs. Such forward-looking statements are subject to various risks and uncertainties. Accordingly, there are or will be important factors that could cause actual outcomes or results to differ materially from those indicated in these statements. All statements, other than statements of historical facts, contained in this Quarterly Report on Form 10-Q, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, clinical development programs, regulatory filings and expected market growth are forward-looking statements. The words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

These forward-looking statements include, among other things, statements about:

- our expectations regarding the timing of our planned filing of an investigational new drug application for STAR-0215, and the timing, plans, goals and results of our planned Phase 1a and Phase 1b/2 clinical trials of STAR-0215, including that favorable results from such trials could establish proof of concept for the differentiation of STAR-0215 as a potential treatment for hereditary angioedema (“HAE”);
- our expectations about the unmet medical need for HAE, the potential differentiating attributes of STAR-0215 as a potential treatment for HAE, along with the potential market impact of such differentiation, the potential of STAR-0215 to be a best-in-class and the most patient friendly treatment for HAE, and the nature and anticipated growth of the global HAE market and HAE therapies;
- our expectations that we have identified a stable cell line for STAR-0215 and the ability of such cell line to generate sufficient material of suitable and appropriate quality for our planned STAR-0215 preclinical and clinical studies in a timely manner;
- our expectations regarding our ability to expand our pipeline;
- the potential benefits of any future acquisition, in-license, collaboration or preclinical development activities;
- our manufacturing plans, capabilities and strategy;
- our intellectual property position and strategy;
- our estimates regarding our cash runway, expenses, future revenues, capital requirements and needs for additional financing, including additional financing to fund our long-term operations;
- developments relating to our competitors and our industry; and
- the impact of government laws and regulations.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, particularly in the sections entitled “Summary of the Material Risks Associated with Our Business” and “Risk Factors”, that could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, joint ventures or investments that we may make or enter into.

PART I- FINANCIAL INFORMATION

Item 1. Financial Statements

Astria Therapeutics, Inc.
Condensed Consolidated Balance Sheets
(In thousands, except share and per share data)

(Unaudited)

	March 31, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 46,687	\$ 86,508
Short-term investments	66,129	39,000
Prepaid expenses and other current assets	1,405	1,567
Total current assets	114,221	127,075
Right-of-use asset	228	394
Other assets	204	45
Total assets	<u>\$ 114,653</u>	<u>\$ 127,514</u>
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 931	\$ 1,557
Accrued expenses	3,852	3,281
Current portion of operating lease liabilities	184	365
Total current liabilities	4,967	5,203
Total liabilities	4,967	5,203
Commitments (Note 7)		
Stockholders' equity:		
Preferred stock, \$0.001 par value per share, 4,908,620 shares authorized and no shares issued and outstanding	—	—
Series X redeemable convertible preferred stock, \$0.001 par value per share, 91,380 shares authorized; 31,455 shares issued and outstanding as of March 31, 2022 and December 31, 2021, respectively	96,398	96,398
Common stock, \$0.001 par value per share, 150,000,000 shares authorized; 13,016,955 shares issued and outstanding at March 31, 2021 and December 31, 2021, respectively	13	13
Additional paid-in capital	484,460	481,709
Accumulated other comprehensive loss	(53)	—
Accumulated deficit	(471,132)	(455,809)
Total stockholders' equity	109,686	122,311
Total liabilities and stockholders' equity	<u>\$ 114,653</u>	<u>\$ 127,514</u>

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

Astria Therapeutics, Inc.
Condensed Consolidated Statements of Operations
(In thousands, except share and per share data)

(Unaudited)

	Three Months Ended March 31,	
	2022	2021
Operating expenses:		
Research and development	\$ 10,358	\$ 2,593
General and administrative	5,020	2,880
Acquired in-process research and development	—	164,612
Total operating expenses	<u>15,378</u>	<u>170,085</u>
Loss from operations	(15,378)	(170,085)
Other income (expense):		
Interest and investment income	56	14
Other expense, net	(1)	(13)
Total other income, net	<u>55</u>	<u>1</u>
Net loss	(15,323)	(170,084)
Net loss per share - basic and diluted	\$ (1.18)	\$ (45.60)
Weighted-average common shares outstanding used in net loss per share - basic and diluted	<u>13,016,955</u>	<u>3,730,029</u>

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

Astria Therapeutics, Inc.
Condensed Consolidated Statements of Comprehensive Loss
(In thousands)

(Unaudited)

	Three Months Ended March 31,	
	2022	2021
Net loss	\$ (15,323)	\$ (170,084)
Other comprehensive income:		
Unrealized loss on short-term investments, net of tax of \$0	(53)	—
Total other comprehensive loss	(53)	—
Comprehensive loss	<u>\$ (15,376)</u>	<u>\$ (170,084)</u>

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

Astria Therapeutics, Inc.
Condensed Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity
(In thousands, except shares)

(Unaudited)

	Series X redeemable convertible preferred stock, shares	Series X redeemable convertible preferred stock, value	Series X redeemable convertible preferred stock, shares	Series X redeemable convertible preferred stock, value	Common stock, shares	Common stock, par value	Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive loss	Total stockholders' equity (deficit)
Balance at December 31, 2020	—	\$ —	—	\$ —	3,347,386	\$ 4	\$ 301,562	\$ (260,897)	\$ —	\$ 40,669
Issuance of preferred stock in a private offering of public equity, net of issuance costs	35,573	84,696	—	—	—	—	19,565	—	—	19,565
Issuance of preferred stock and common stock upon acquisition of Quellis	50,504	156,185	—	—	555,444	—	8,098	—	—	8,098
Expense related to warrants inherited in acquisition of Quellis	—	—	—	—	—	—	241	—	—	241
Stock-based compensation expense	—	—	—	—	—	—	366	—	—	366
Net loss	—	—	—	—	—	—	—	(170,084)	—	(170,084)
Balance at March 31, 2021	<u>86,077</u>	<u>\$ 240,881</u>	<u>—</u>	<u>\$ —</u>	<u>3,902,830</u>	<u>\$ 4</u>	<u>\$ 329,832</u>	<u>\$ (430,981)</u>	<u>\$ —</u>	<u>\$ (101,145)</u>

	Series X redeemable convertible preferred stock, shares	Series X redeemable convertible preferred stock, value	Series X redeemable convertible preferred stock, shares	Series X redeemable convertible preferred stock, value	Common stock, shares	Common stock, par value	Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive loss	Total stockholders' equity (deficit)
Balance at December 31, 2021	—	\$ —	31,455	\$ 96,398	13,016,955	\$ 13	\$ 481,709	\$ (455,809)	\$ —	\$ 122,311
Expense related to warrants inherited in acquisition of Quellis	—	—	—	—	—	—	1,542	—	—	1,542
Stock-based compensation expense	—	—	—	—	—	—	1,209	—	—	1,209
Unrealized loss on short-term investments	—	—	—	—	—	—	—	—	(53)	(53)
Net loss	—	—	—	—	—	—	—	(15,323)	—	(15,323)
Balance at March 31, 2022	<u>—</u>	<u>\$ —</u>	<u>31,455</u>	<u>\$ 96,398</u>	<u>13,016,955</u>	<u>\$ 13</u>	<u>\$ 484,460</u>	<u>\$ (471,132)</u>	<u>\$ (53)</u>	<u>\$ 109,686</u>

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

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

	Three Months Ended March 31,	
	2022	2021
Operating activities		
Net loss	\$ (15,323)	\$ (170,084)
Reconciliation of net loss to net cash used in operating activities:		
Non-cash portion of acquired in-process research and development	—	164,612
Stock-based compensation expense	1,209	366
Expense for warrants inherited in acquisition of Quellis	1,542	55
Other non-cash items	(79)	4
Changes in assets and liabilities:		
Prepaid expenses and other assets	163	767
Right-of-use asset- operating	(15)	(73)
Accounts payable	(627)	(1,712)
Accrued expenses	571	(2,651)
Net cash used in operating activities	<u>(12,559)</u>	<u>(8,716)</u>
Investing activities		
Purchases of short-term investments	(81,702)	—
Sales and maturities of short-term investments	54,603	20,000
Cash acquired in acquisition of Quellis	—	6,466
Purchases of property and equipment	—	(21)
Net cash (used in) provided by investing activities	<u>(27,099)</u>	<u>26,445</u>
Financing activities		
Proceeds from private offering of public equity, net of issuance costs	—	104,261
Net cash provided by financing activities	<u>—</u>	<u>104,261</u>
Net (decrease) increase in cash, cash equivalents and restricted cash	(39,658)	121,990
Cash, cash equivalents and restricted cash, beginning of period	86,629	25,051
Cash, cash equivalents and restricted cash, end of period	<u>\$ 46,971</u>	<u>\$ 147,041</u>

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

Astria Therapeutics, Inc.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Organization and Operations

The Company

Astria Therapeutics, Inc. (the “Company”), formerly known as Catabasis Pharmaceuticals, Inc., is a biopharmaceutical company focused on the discovery, development and commercialization of novel therapeutics. Its mission is to bring hope with life-changing therapies to patients and families that are affected by rare and niche allergic and immunological diseases. On October 26, 2020, the Company announced that the Phase 3 PolarisDMD trial of the Company’s previous lead product candidate, edasalonexent, for the treatment of Duchenne Muscular Dystrophy (“DMD”) did not meet its primary and secondary endpoints. Based on these results, the Company announced that it was stopping activities related to the development of edasalonexent, including the Company’s ongoing open-label extension trial. On January 28, 2021, the Company acquired Quellis Biosciences, Inc. (“Quellis”). The Company’s lead product candidate, which was acquired in the Quellis acquisition, is STAR-0215, a monoclonal antibody inhibitor of plasma kallikrein in preclinical development for the treatment of hereditary angioedema (“HAE”), a rare, debilitating and potentially life-threatening disease. The Company was incorporated in the State of Delaware on June 26, 2008.

Reverse Stock Split

On August 19, 2021, the Company effected a reverse stock split of its outstanding shares of common stock at a ratio of one-for-six (1:6) pursuant to a Certificate of Amendment to its Restated Certificate of Incorporation filed with the Secretary of State of the State of Delaware. Pursuant to the reverse stock split, every six shares of the Company’s issued and outstanding shares of common stock were automatically combined into one issued and outstanding share of common stock, without any change in the par value per share of the common stock. Amounts of common stock resulting from the reverse stock split were rounded down to the nearest whole share and any resulting fractional shares were cancelled for cash. The number of authorized shares of the Company’s common stock remained unchanged. The reverse stock split affected all issued and outstanding shares of the Company’s common stock, and the respective numbers of shares of common stock underlying the Company’s outstanding Series X Preferred Stock (as defined below), outstanding stock options, outstanding warrants and the Company’s equity incentive plans were proportionately adjusted. All share and per share amounts of the common stock included in the accompanying unaudited condensed consolidated financial statements have been retrospectively adjusted to give effect to the reverse stock split for all periods presented, including reclassifying an amount equal to the reduction in par value to additional paid-in capital.

Agreement and Plan of Merger

On January 28, 2021, the Company acquired Quellis (the “Quellis Acquisition”). Under the terms of that certain agreement and plan of merger, dated January 28, 2021 (the “Merger Agreement”), the Company issued to the stockholders of Quellis 555,444 shares of the Company’s common stock, par value \$0.001 per share, and 50,504 shares of newly designated Series X redeemable convertible preferred stock (“Series X Preferred Stock”) (as described below). The Series X Preferred Stock had a conversion value on the closing date of \$122.7 million. In addition, the Company assumed options granted under the Quellis 2019 Stock Incentive Plan, which became options to purchase 55,414 shares of the Company’s common stock, a warrant to purchase 2,805 shares of Series X Preferred Stock at an exercise price of \$341.70 per share, and a warrant to purchase 30,856 shares of the Company’s common stock at an exercise price of \$2.10 per share, which warrants are exercisable until December 14, 2030. Upon stockholder approval of the Conversion Proposal (as defined below) on June 2, 2021, the warrant to purchase Series X Preferred Stock was converted into the right to purchase 467,500 shares of the Company’s common stock at a per share exercise price of \$2.10 per share.

Stock Purchase Agreement and Series X Preferred Stock

Concurrent with the Quellis Acquisition, the Company entered into a Stock Purchase Agreement (the “Purchase Agreement”) with certain institutional and accredited investors. Pursuant to the Purchase Agreement, the Company sold an aggregate of 35,573 shares of Series X Preferred Stock for gross proceeds of approximately \$110.0 million, and net proceeds of \$104.3 million (the “February 2021 Financing”). Each share of Series X Preferred Stock is convertible into 166.67 shares of common stock. In accounting for the Purchase Agreement, the Company recorded a beneficial conversion feature of \$19.6 million and issuance costs of \$5.7 million. The combined

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total was treated as a discount to the value of Series X Preferred Stock, see Note 2, “*Summary of Significant Accounting Policies*” for further discussion.

As a result of the Quellis Acquisition and the February 2021 Financing, the Company issued the following Series X Preferred Stock and assumed the following warrant:

	Series X Preferred Stock at Transaction Date	Common Stock Issuable Upon Conversion at Transaction Date
Shares issued in merger	50,504	8,417,502
Shares issued in February 2021 Financing	35,573	5,928,952
Warrant assumed in merger	2,805	467,500
Total	88,882	14,813,954

At its Annual Meeting of Stockholders on June 2, 2021, the Company’s stockholders approved the conversion of the Company’s Series X Preferred Stock into shares of the Company’s common stock in accordance with Nasdaq Listing Rule 5635(a) (the “Conversion Proposal”). Following stockholder approval of the Conversion Proposal, each share of Series X Preferred Stock then outstanding automatically converted into 166.67 shares of the Company’s common stock, subject to certain beneficial ownership limitations, including that a holder of Series X Preferred Stock is prohibited from converting shares of Series X Preferred Stock into shares of the Company’s common stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (as of March 31, 2022, these percentages are set at 4.99% to 9.99% and can be adjusted by the holder to a number between 4.99% and 19.99%) of the total number of shares of the Company’s common stock issued and outstanding immediately after giving effect to such conversion. As of March 31, 2022, 54,622 shares of Series X Preferred Stock have been converted into 9,103,664 shares of common stock and 31,455 shares of Series X Preferred Stock remained outstanding. Each share of Series X Preferred Stock is convertible into 166.67 shares of common stock. At March 31, 2022, the number of shares of common stock issuable upon conversion of the remaining outstanding shares of Series X Preferred Stock is 5,242,501. Outstanding shares of Series X Preferred Stock are subject to conversion at the option of the holder.

Holders of Series X Preferred Stock are entitled to receive dividends, subject to certain beneficial ownership limitations, on shares of Series X Preferred Stock equal, on an as-if-converted-to-common-stock basis, and in the same form as dividends actually paid on shares of the Company’s common stock. Except as otherwise required by law, the Series X Preferred Stock does not have voting rights. However, as long as any shares of Series X Preferred Stock are outstanding, the Company may not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series X Preferred Stock, (i) alter or change adversely the powers, preferences or rights given to the Series X Preferred Stock or alter or amend the Certificate of Designation that authorized the Series X Preferred Stock, amend or repeal any provision of, or add any provision to, the Company’s Restated Certificate of Incorporation or bylaws, or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of preferred stock, if such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the Series X Preferred Stock, (ii) issue further shares of Series X Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Series X Preferred Stock, or (iii) enter into any agreement with respect to any of the foregoing.

Liquidity

The Company had entered into various sales agreements with Cowen and Company LLC (“Cowen”), pursuant to which the Company could issue and sell shares of common stock under at-the-market offering programs. On May 20, 2021, the Company terminated its sales agreement with Cowen. On June 30, 2021, the Company entered into an Open Market Sale AgreementSM with Jefferies LLC (“Jefferies”), pursuant to which the Company can issue and sell shares of common stock of up to \$25.0 million under at-the-market offering programs (collectively, with the Cowen at-the-market offering program, the “ATM Programs”). The Company pays the sales agent commissions of 3% of the gross proceeds from any common stock sold through the ATM Programs. As of March 31, 2022, the Company has not sold any shares of common stock pursuant to the Jefferies agreement. There was also no activity from the ATM Programs during the three months ended March 31, 2021.

The Company is subject to a number of risks similar to other life science companies, including, but not limited to, successful discovery and development of its drug candidates, raising additional capital, development by its competitors of new technological innovations, protection of proprietary technology and regulatory approval and market acceptance of the Company’s products. The

Company has been primarily involved with research and development activities and has incurred operating losses and negative cash flows from operations since its inception. The Company anticipates that it will continue to incur significant operating losses and negative cash flows for the next several years as it continues to develop its product candidates.

As of March 31, 2022, the Company had an accumulated deficit of \$471.1 million and had available cash, cash equivalents and short-term investments of \$112.8 million. The Company has determined that its existing cash, cash equivalents and short-term investments will be sufficient to meet its projected operating expenses and capital expenditure requirements for at least twelve months from the date of issuance of these unaudited condensed consolidated financial statements. The Company has not generated any product revenues and has financed its operations primarily through public offerings and private placements of its equity securities. There can be no assurance that the Company will be able to obtain additional debt, equity or other financing or generate product revenues or revenues from collaborative partners, on terms acceptable to the Company, on a timely basis or at all. Management's conclusion with respect to its ability to fund its operations is based on estimates that are subject to risks and uncertainties that may prove to be incorrect. If actual results differ from management's estimates, the Company may be required to seek additional funding or curtail planned activities to reduce operating expenses, which may have an adverse impact on the Company's ability to achieve its business objectives.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying financial statements and the related disclosures are unaudited and have been prepared in accordance with United States generally accepted accounting principles ("U.S. GAAP"). Additionally, certain information and footnote disclosures normally included in the Company's annual financial statements have been condensed or omitted from this report. Accordingly, these unaudited condensed consolidated financial statements should be read in conjunction with the financial statements as of and for the year ended December 31, 2021 and notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2021 (the "2021 Annual Report on Form 10-K").

The unaudited condensed consolidated financial statements have been prepared on the same basis as the audited financial statements. In the opinion of the Company's management, the accompanying unaudited condensed consolidated financial statements contain all adjustments, including those adjustments that are of a normal and recurring nature, which are necessary to fairly present the Company's results for the interim periods presented. The results for the three months ended March 31, 2022 are not necessarily indicative of the results for the year ending December 31, 2022 or for any future period.

The accompanying unaudited condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, Astria Securities Corporation and Quellis Biosciences, LLC, successor in interest to Quellis. All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of the Company's unaudited condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the unaudited condensed consolidated financial statements and accompanying notes. Actual results could differ from such estimates.

The Company utilizes certain estimates to record expenses relating to research and development contracts. These contract estimates, which are primarily related to the length of service of each contract and the amount of service provided as of each measurement date, are determined by the Company based on input from internal project management, as well as from the Company's service providers.

Net Loss Per Share

Basic net loss per share is calculated by dividing net loss attributable by the weighted average shares outstanding during the period, without consideration for common stock equivalents. Diluted net loss per share is calculated by adjusting weighted average shares outstanding for the dilutive effect of common stock equivalents outstanding for the period, determined using the treasury-stock method. For purposes of the Company's dilutive net loss per share calculation, preferred stock, stock options and warrants to purchase common stock and preferred stock were considered to be common stock equivalents but were excluded from the calculation of diluted net loss per share, as their effect would be anti-dilutive; therefore, basic and diluted net loss per share were the same for all periods presented.

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The following common stock equivalents, including Series X Preferred Stock shown as common stock equivalents, were excluded from the calculation of diluted net loss per share for the periods indicated because including them would have had an anti-dilutive effect:

	Three Months Ended March 31,	
	2022	2021
Series X Preferred Stock	5,242,501	14,346,167
Stock options	1,962,650	271,887
Common stock warrants	1,530,176	1,063,148
Preferred stock warrants	—	467,500
	<u>8,735,327</u>	<u>16,148,702</u>

Cash, Cash Equivalents and Restricted Cash

Cash equivalents are short-term, highly liquid investments that are readily convertible into cash, with original maturities of three months or less. Cash equivalents are mainly comprised of money market accounts invested in U.S. Treasury securities, corporate debt securities, commercial paper and reverse repurchase agreements.

Restricted cash is comprised of deposits with a financial institution used to collateralize letters of credit related to the Company's lease arrangements. Restricted cash is presented as a component of prepaid expenses and other current assets and other long-term assets at March 31, 2022 and other long-term assets at March 31, 2021.

The reconciliation of cash, cash equivalents and restricted cash reported within the applicable condensed consolidated balance sheet that sum to the total of the same such amount shown in the condensed consolidated statement of cash flows is as follows (in thousands):

	March 31,	
	2022	2021
Cash and cash equivalents	\$ 46,687	\$ 146,920
Restricted cash	284	121
Total	<u>\$ 46,971</u>	<u>\$ 147,041</u>

Acquired In-Process Research and Development

The Company measures and recognizes asset acquisitions that are not deemed to be business combinations based on the cost to acquire the assets, which includes transaction costs. Goodwill is not recognized in asset acquisitions. In an asset acquisition, the cost allocated to acquire in-process research and development ("IPR&D") with no alternative future use is charged to expense at the acquisition date. Refer to Note 3, "*Acquisition of Quellis*" for a more detailed description of the accounting policy utilized for the recent asset acquisition.

Preferred Stock Discount

As discussed above, in February 2021, the Company issued Series X Preferred Stock in a private placement transaction. It was determined that this transaction resulted in recognition of a beneficial conversion feature, which was valued based on the difference between the price of the shares of common stock on the date of commitment and the conversion price on the closing date, resulting in a total value of \$19.6 million. Additionally, the Company incurred total issuance costs of \$5.7 million related to the private placement. Both of these features were recorded as a discount on Series X Preferred Stock recognized at the close of the transaction. These features are analogous to preferred dividends and are recorded as a non-cash return to holders of Series X Preferred Stock through additional paid in capital. The discount related to the beneficial conversion feature is recognized through the earliest possible date of conversion, which occurred upon stockholder approval of the conversion in June 2021. The issuance costs are recognized as a dividend at the time of conversion to common shares. As of March 31, 2022, \$24.4 million of the above amounts were accounted for as a non-cash dividend related to shares of Series X Preferred Stock, and \$0.9 million remained to be recognized upon future conversion.

Recent Accounting Pronouncements - Not Yet Adopted

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board ("FASB") or other standard setting bodies and adopted by the Company as of the specified effective date.

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In June 2016, the FASB issued Accounting Standards Update (“ASU”) 2016-13, *Financial Instruments-Credit Losses* (Topic 326). This standard requires a financial asset to be presented at amortized cost basis at the net amount expected to be collected. It also requires that credit losses relating to available-for-sale debt securities should be recorded through an allowance for credit losses. In November 2019, the FASB issued an amendment making this standard effective for annual reporting periods beginning after December 15, 2022 for smaller reporting companies. Early adoption is permitted. The Company is currently evaluating the impact that this standard will have on its consolidated financial statements as well as the timing of when this standard will be adopted.

Summary of Significant Accounting Policies

The Company’s significant accounting policies are described in Note 2, “*Summary of Significant Accounting Policies*” in the 2021 Annual Report on Form 10-K, and there were no significant changes to such policies in the three months ended March 31, 2022 that had a material impact on the Company’s results of operations or financial position.

3. Acquisition of Quellis

On January 28, 2021, the Company completed the Quellis Acquisition in accordance with the terms of the Merger Agreement as discussed in Note 1, “*Organization and Operations*”. Under the terms of the Merger Agreement, the Company issued 555,444 shares of common stock and 50,504 shares of Series X Preferred Stock. Each share of Series X Preferred Stock is convertible into 166.67 shares of common stock, subject to certain conditions.

The Company concluded that the Quellis Acquisition was not the acquisition of a business, as substantially all of the fair value of the non-monetary assets acquired was concentrated in a single identifiable asset, STAR-0215.

The Company determined that the cost to acquire the Quellis assets was \$170.7 million, based on the fair value of the equity consideration issued and including direct costs of the acquisition of \$1.8 million. The net assets acquired in connection with the Quellis Acquisition were recorded at their estimated fair values as of January 28, 2021, which is the date the Quellis Acquisition was completed. The following table summarizes the net assets acquired based on their estimated fair values as of January 28, 2021 (in thousands):

Acquired IPR&D	\$ 164,612
Cash and cash equivalents	8,307
Prepaid expenses and other assets	136
Accounts payable	(1,974)
Accrued liabilities	(400)
Net acquired tangible assets	<u>\$ 170,681</u>

In the estimation of fair value of the asset purchase consideration, the Company used the carrying value of the cash and cash equivalents, prepaid expenses, accounts payable and accrued liabilities as the most reliable indicator of fair value based on the associated short-term nature of the balances. The remaining fair value was attributable to the acquired IPR&D. As STAR-0215 had not, at the time of the Quellis Acquisition, received regulatory approval in any territory, the cost attributable to the IPR&D was expensed in the Company’s unaudited condensed consolidated statements of operations and comprehensive loss for the three months ended March 31, 2021 as the acquired IPR&D had no alternative future use, as determined by the Company in accordance with U.S. GAAP.

4. Financial Instruments

The tables below present information about the Company’s assets and liabilities that are measured at fair value on a recurring basis as of March 31, 2022 and December 31, 2021 and indicate the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value. In general, fair values determined by Level 1 inputs utilize observable inputs such as quoted prices in active markets for identical assets or liabilities. Fair values determined by Level 2 inputs utilize data points that are either directly or indirectly observable, such as quoted prices, interest rates and yield curves. Fair values determined by Level 3 inputs utilize unobservable data points for which there is little or no market data, which require the Company to develop its own assumptions for the asset or liability. There were no transfers between fair value measurement levels during the three months ended March 31, 2022 and 2021.

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The Company's investment portfolio may include fixed income securities that do not always trade on a daily basis. As a result, the pricing services used by the Company apply other available information as applicable through processes such as benchmark yields, benchmarking of like securities, sector groupings and matrix pricing to prepare valuations. The Company validates the prices provided by its third party pricing services by obtaining market values from other pricing sources and analyzing pricing data in certain instances. The Company also invests in certain reverse repurchase agreements which are collateralized by deposits in the form of U.S. Government Securities and Obligations for an amount no less than 102% of their value. The Company does not record an asset or liability for the collateral as the Company is not permitted to sell or re-pledge the collateral. The collateral has at least the prevailing credit rating of U.S. Government Treasuries and Agencies. The Company utilized a third-party custodian to manage the exchange of funds and ensure that collateral received is maintained at 102% of the value of the reverse repurchase agreements on a daily basis.

The Company accounted for warrants to purchase its stock pursuant to Accounting Standards Codification ("ASC") Topic 470, *Debt*, and ASC Topic 480, *Distinguishing Liabilities from Equity*, and classifies warrants for common stock and preferred stock as liabilities or equity. The warrants classified as liabilities are reported at their estimated fair value and any changes in fair value are reflected in research and development expense. The warrants classified as equity are reported at their estimated fair value with no subsequent remeasurement.

Below is a summary of assets and liabilities measured at fair value on a recurring basis (in thousands):

	As of March 31, 2022			
	Quoted Prices in Active Markets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Assets:				
Cash equivalents:				
Money market funds	\$ 8,145	\$ —	\$ —	\$ 8,145
Corporate debt securities	—	4,396	—	4,396
Commercial paper	—	3,996	—	3,996
Reverse repurchase agreements	—	3,000	—	3,000
Short term investments				
Corporate debt securities	—	17,121	—	17,121
Commercial paper	—	5,980	—	5,980
Yankee securities	—	4,029	—	4,029
Treasury bills	1,999	—	—	1,999
Reverse repurchase agreements	—	37,000	—	37,000
Total	\$ 10,144	\$ 75,522	\$ —	\$ 85,666
	As of December 31, 2021			
	Quoted Prices in Active Markets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Assets:				
Cash equivalents:				
Money market funds	\$ 1,853	\$ —	\$ —	\$ 1,853
Short-term investments:				
Reverse repurchase agreements	—	39,000	—	39,000
Total	\$ 1,853	\$ 39,000	\$ —	\$ 40,853

The carrying amounts reflected in the unaudited condensed consolidated balance sheets for cash, prepaid expenses and other current assets, accounts payable and accrued expenses approximate their fair values due to the short-term nature of these assets and liabilities. Items measured at fair value on a recurring basis include cash equivalents and short-term investments as of March 31, 2022 and December 31, 2021.

5. Short-Term Investments

The following table summarizes the short-term investments held at March 31, 2022 and December 31, 2021 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
March 31, 2022				
Corporate debt securities	\$ 17,157	\$ —	\$ (36)	\$ 17,121
Commercial paper	5,987	—	(7)	5,980
Yankee securities	4,039	—	(10)	4,029
Treasury bills	1,999	—	—	1,999
Reverse repurchase agreements	37,000	—	—	37,000
Total	\$ 66,182	\$ —	\$ (53)	\$ 66,129
December 31, 2021				
Reverse repurchase agreements	\$ 39,000	\$ —	\$ —	\$ 39,000
Total	\$ 39,000	\$ —	\$ —	\$ 39,000

The contractual maturities of all short-term investments held at March 31, 2022 and December 31, 2021 were one year or less. There were 15 short-term investments in an unrealized loss position at March 31, 2022 with an aggregate value of \$26.3 million. These investments were in a loss position for less than 12 months and the Company considered the loss to be temporary in nature. The Company considered the decline in market value for these securities to be primarily attributable to economic and market conditions. As of March 31, 2022, the Company did not intend to sell, and it was not likely that the Company would be required to sell the investments that were in an unrealized loss position before recovery of their amortized cost basis. Accordingly, the Company did not recognize any other-than-temporary impairments related to its short-term investments in an unrealized loss position. There were no short-term investments in an unrealized loss position at December 31, 2021.

Gross realized gains and losses on the sales of short-term investments are included in other income, net. Unrealized holding gains or losses for the period that have been included in accumulated other comprehensive income, as well as gains and losses reclassified out of accumulated other comprehensive income into other income, net were not material to the Company's condensed consolidated results of operations. The cost of investments sold or the amount reclassified out of the accumulated other comprehensive income into other income, net is based on the specific identification method for purposes of recording realized gains and losses. All proceeds in the three-month periods ended March 31, 2022 and 2021 related to maturities of underlying investments. The gains on proceeds from maturities of short-term investments were not material to the Company's condensed consolidated results of operations for the three months ended March 31, 2022 and 2021.

6. Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	March 31, 2022	December 31, 2021
Accrued contracted costs	\$ 2,073	\$ 760
Accrued compensation	713	1,958
Accrued professional fees	638	268
Accrued other	428	295
Total	\$ 3,852	\$ 3,281

7. Commitments

Future minimum payments required under the Company’s non-cancelable operating lease as of March 31, 2022 are summarized as follows (in thousands):

Period Ending December 31,	Amount
2022	\$ 188
Total lease payments	\$ 188
Less: imputed interest	(4)
Total operating lease liabilities	\$ 184

Rent expense was \$0.2 million for each of the three months ended March 31, 2022 and 2021. Lease payments were \$0.2 million for each of the three months ended March 31, 2022 and 2021, respectively.

On January 28, 2022, the Company entered into a sublease agreement (the “Sublease”) with Grant Thornton LLP (the “Sublandlord”), for new office space to replace its existing office space. The Sublease commenced on May 1, 2022 and will end on July 31, 2024 (or on such earlier date as the term may cease or expire as set forth in the Sublease). The Sublease will increase the future minimum payments in the table above from approximately \$0.2 million to approximately \$1.6 million.

8. Stockholders’ Equity

Preferred Stock

Under the Company’s Restated Certificate of Incorporation, the Company has 5,000,000 shares of preferred stock authorized for issuance, with a \$0.001 par value per share. Preferred stock may be issued from time to time in one or more series, each series to have such terms as stated or expressed in the resolutions providing for the issue of such series adopted by the Board of Directors of the Company. Preferred stock which may be redeemed, purchased or acquired by the Company may be reissued except as otherwise provided by law. As of March 31, 2022, the Company had 31,455 shares of Series X Preferred Stock outstanding. Each share of Series X Preferred Stock is convertible into 166.67 shares of common stock and therefore the number of shares of underlying common stock issuable upon conversion of the Series X Preferred Stock is 5,242,501. Refer to Note 1 , “*Organization and Operations*” regarding the Company’s issuance of Series X Preferred Stock in January 2021 and February 2021.

Outstanding Warrants

The following table presents information about warrants that are issued and outstanding at March 31, 2022:

Year Issued	Equity Instrument	Warrants Outstanding	Exercise Price	Date of Expiration
2018	Common Stock	699,962	\$ 72.00	6/21/2023
2019	Common Stock	331,858	\$ 37.50	2/7/2024
2021	Common Stock	498,356	\$ 2.10	12/14/2030
Total		1,530,176		
Weighted average exercise price			\$ 41.75	
Weighted average life in years				3.80

9. Reserved for Future Issuance

The Company has reserved for future issuance the following shares of common stock:

	March 31, 2022	December 31, 2021
Series X Preferred Stock	5,242,501	5,242,501
Warrants for the purchase of common stock	1,530,176	1,530,380
Options outstanding to purchase common stock	1,962,650	1,346,733
Options available for future issuance to purchase common stock	1,332,716	1,633,736
Shares reserved for the employee stock purchase plan	36,982	30,904
Total	<u>10,105,025</u>	<u>9,784,254</u>

10. Stock Incentive Plans

A summary of the Company's stock option activity and related information follows:

	Shares	Weighted- Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2021	1,346,733	\$ 22.25	9.02	\$ 168
Granted	650,150	\$ 6.48		
Cancelled or forfeited	(34,233)	\$ 17.56		
Outstanding at March 31, 2022	<u>1,962,650</u>	\$ 17.11	9.14	\$ 381
Vested and exercisable at March 31, 2022	<u>175,632</u>	\$ 58.41	7.27	\$ 228

There were no stock options exercised in the three months ended March 31, 2022 and 2021. The total grant date fair value of stock options vested for the three months ended March 31, 2022 and 2021 was \$0.6 million and \$0.5 million, respectively. The weighted-average grant date fair value of options granted to employees and non-employees for the three months ended March 31, 2022 and 2021 was \$4.05 and \$9.00, respectively.

At March 31, 2022, the total unrecognized compensation expense related to unvested stock option awards was \$11.9 million. The Company expects to recognize that cost over a weighted-average period of approximately 3.0 years.

On February 17, 2022, the Company's Board of Directors adopted the 2022 Inducement Stock Incentive Plan (the "Inducement Plan"). The Inducement Plan provides for the grant of nonstatutory stock options, stock appreciation rights, restricted stock, restricted stock units and other stock-based awards (collectively, the "stock awards") with respect to an aggregate of 300,000 shares of the Company's common stock. Awards under the Inducement Plan may only be granted to persons who (a) were not previously an employee or director of the Company or (b) are commencing employment with the Company following a bona fide period of non-employment, in either case as an inducement material to the individual's entering into employment with the Company and in accordance with the requirements of Nasdaq Stock Market Rule 5635(c)(4). As of March 31, 2022, there have been no grants issued under the Inducement Plan and 300,000 shares of common stock remained available for future issuance.

11. Subsequent Events

The Company considers events or transactions that occur after the balance sheet date but prior to the issuance of the financial statements to provide additional evidence for certain estimates and to identify matters that require additional disclosure. Subsequent events have been evaluated as required.

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

You should read the following discussion and analysis of our financial condition and results of operations together with our unaudited condensed consolidated financial statements and the related notes and other financial information included elsewhere in this Quarterly Report on Form 10-Q and the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2021, or the 2021 Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this Quarterly Report on Form 10-Q, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review the sections entitled "Risk Factors" and "Summary of the Material Risks Associated with Our Business" in our 2021 Annual Report on Form 10-K for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. This section provides additional information regarding our business, current developments, results of operations, cash flows, financial condition, contractual commitments and critical accounting policies and estimates that require significant judgement and have the most potential impact on our unaudited condensed consolidated financial statements. This discussion and analysis is intended to better allow investors to view the Company from management's perspective.

Overview

We are a biopharmaceutical company focused on the discovery, development and commercialization of novel therapeutics. Our mission is to bring hope with life-changing therapies to patients and families that are affected by rare and niche allergic and immunological diseases. Our lead product candidate is STAR-0215, a potential best-in-class monoclonal antibody inhibitor of plasma kallikrein in preclinical development for the treatment of hereditary angioedema, or HAE, a rare, debilitating and potentially life-threatening disease. STAR-0215 has the potential to be the most patient-friendly chronic treatment option for HAE, based on the preclinical data generated to date and the existing HAE treatment landscape.

In January 2021, we acquired Quellis Biosciences, Inc., or Quellis, including the STAR-0215 program, and announced a private placement that, upon closing in February 2021, resulted in gross proceeds to us of approximately \$110.0 million before deducting placement agent and other offering expenses, which we refer to as the February 2021 Financing. In November 2020, after we stopped the development of our edasalonexent program as a potential treatment for Duchenne Muscular Dystrophy, or DMD, we decided to explore and evaluate strategic options. The acquisition of Quellis was the result of our evaluation of strategic options.

In September 2021, we formally changed our name to Astria Therapeutics, Inc. from Catabasis Pharmaceuticals, Inc. The name "Astria" originates from the Greek word for star, demonstrating our commitment to patients who serve as our guiding stars.

HAE is a rare, debilitating and potentially life-threatening disease. The treatment options for patients with HAE have improved, however, there is remaining unmet medical need and the global market for HAE therapy is strong and growing. The vision for our lead program, STAR-0215, is to develop a best-in-class monoclonal antibody inhibitor of plasma kallikrein able to provide long-acting, effective attack prevention for HAE with dosing once every three months or longer. Targeted plasma kallikrein inhibition can prevent HAE attacks by suppressing the pathway that generates bradykinin and causes excessive swelling. STAR-0215 is currently in preclinical development and we expect to submit an Investigational New Drug application, or IND, for STAR-0215 in mid-2022 and plan to initiate a Phase 1a clinical trial shortly thereafter with initial results anticipated by year end 2022. We believe that this clinical trial has the opportunity to establish proof of concept for the differentiated profile of STAR-0215. We expect the Phase 1a clinical trial to be conducted in a single center with healthy volunteers and evaluate several single escalating dose cohorts with subcutaneous administration. Our goals for this trial with STAR-0215 are to demonstrate safety and tolerability, establish the prolonged half-life, demonstrate the duration of inhibition of plasma kallikrein activity and to refine dose and dosing regimen for studies in HAE patients. Assuming positive data from the Phase 1a trial, we plan to initiate a Phase 1b/2 trial in patients with HAE in 2023. We expect the Phase 1b/2 trial, if initiated, would be a randomized, placebo-controlled, global multi-center trial in HAE patients, and that the primary goals for the trial would be to demonstrate safety and tolerability, establish prolonged half-life, demonstrate inhibition of plasma kallikrein activity, and provide an initial assessment of the impact of STAR-0215 on HAE attack rate.

Our vision for STAR-0215 is supported by preclinical data showing potent inhibition of the production of bradykinin by plasma kallikrein and a long plasma half-life that could potentially enable patients to dose less frequently. Multiple experiments have confirmed that STAR-0215 is approximately 10-fold more potent than lanadelumab, a monoclonal antibody inhibitor of plasma kallikrein commercialized under the name TAKHZYRO and an approved preventative treatment for HAE, in inhibiting bradykinin production. In cynomolgus monkey studies, lanadelumab was observed to have a half-life of approximately 10 days, which is consistent with what has been reported in U.S. Food and Drug Administration, or FDA, review documents and publications for lanadelumab in non-human primates. STAR-0215 was administered at the same dose as lanadelumab and the observed half-life was approximately 34 days, which is about a three to four-fold longer half-life than observed for lanadelumab. We believe this could translate to a half-life of several months for STAR-0215 in humans. If this longer half-life is demonstrated in clinical trials, it has the potential to enable dosing once every three months or longer.

We presented preclinical data from the STAR-0215 program at the American College of Allergy, Asthma and Immunology, or ACAAI, Annual Scientific Meeting in November 2021, demonstrating the high potency of STAR-0215 for binding to and inhibition of plasma kallikrein on a different site than lanadelumab and supporting the ability of YTE technology to extend half-life. YTE modifications in STAR-0215 are designed to enable a longer duration of action. In cynomolgus monkeys dosed with STAR-0215, the YTE modifications protected STAR-0215 from antibody clearance leading to a more than three-fold increase in plasma half-life compared to an antibody without the YTE modifications. Additional preclinical data presented at the American Academy of Allergy, Asthma, and Immunology, or AAAAI, Annual Meeting in February 2022 demonstrated how STAR-0215 binds to plasma kallikrein. At the Fc Receptor and IgG Targeted Therapies Conference in April 2022, we presented pharmacokinetic modeling data supporting that STAR-0215 has the potential to effectively inhibit plasma kallikrein and prevent HAE attacks with subcutaneous dosing volumes appropriate for a self-injectable device dosed once every three months or longer. The preclinical and modeling data to date suggest that at equal or potentially lower doses STAR-0215 would have a significantly longer duration of action than lanadelumab and could result in STAR-0215 being an effective preventative therapy for patients with HAE due to inhibition of the pathologic activity of plasma kallikrein for an extended time period.

January 2021 Quellis Acquisition and February 2021 Financing

In January 2021, we acquired Quellis pursuant to an Agreement and Plan of Merger, or the Merger Agreement, by and among us, Cabo Merger Sub I, Inc., a Delaware corporation and our wholly owned subsidiary, or the First Merger Sub, Cabo Merger Sub II, LLC, a Delaware limited liability company and our wholly owned subsidiary, or the Second Merger Sub, and Quellis, or the Quellis Acquisition. Pursuant to the Merger Agreement, the First Merger Sub merged with and into Quellis, pursuant to which Quellis was the surviving entity and became a wholly owned subsidiary of ours, or the First Merger. Immediately following the First Merger, Quellis merged with and into the Second Merger Sub, pursuant to which the Second Merger Sub was the surviving entity, or the Second Merger and, together with the First Merger, the Merger. Under the terms of the Merger Agreement, at the closing of the Merger, we issued to the Quellis stockholders 555,444 shares of our common stock, and 50,504 shares of newly designated Series X Preferred Stock (as described below). In addition, we assumed outstanding Quellis stock options, which became options for 55,414 shares of our common stock, and assumed a warrant exercisable for Quellis common stock, which became a warrant to purchase 2,805 shares of Series X Preferred Stock at an exercise price of \$341.70 per share, and a warrant to purchase 30,856 shares of our common stock at an exercise price of \$2.10 per share. Upon stockholder approval of the Conversion Proposal (as defined below) on June 2, 2021, the warrant to purchase Series X Preferred Stock was converted into the right to purchase 467,500 shares of our common stock, at a per share exercise price of \$2.10 per share. We concluded that the Quellis Acquisition was not the acquisition of a business, as substantially all of the fair value of the non-monetary assets acquired was concentrated in a single identifiable asset, STAR-0215.

In January 2021, we also entered into a Stock Purchase Agreement, or the Purchase Agreement, with certain institutional and accredited investors pursuant to which we sold an aggregate of 35,573 shares of Series X Preferred Stock for an aggregate purchase price of \$110.0 million, or the February 2021 Financing. Our stockholders approved the conversion of the Series X Preferred Stock into shares of common stock in accordance with Nasdaq Listing Rule 5635(a), or the Conversion Proposal, at our Annual Meeting of Stockholders on June 2, 2021. On the fourth business day after the approval of the Conversion Proposal, each share of Series X Preferred Stock automatically converted into 166.67 shares of common stock, subject to certain beneficial ownership limitations, including that a holder of Series X Preferred Stock is prohibited from converting shares of Series X Preferred Stock into shares of common stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (as of March 31, 2022, these percentages are set at 4.99% to 9.99% and can be adjusted by the holder to a number between 4.99% and 19.99%) of the total number of shares of common stock issued and outstanding immediately after giving effect to such conversion. Shares of Series X Preferred Stock not converted automatically are thereafter subject to conversion at the option of the holder, subject to certain beneficial ownership limitations. As of April 29, 2022, 54,622 shares of Series X Preferred Stock have been converted into 9,103,664

shares of common stock and 31,455 shares of Series X Preferred Stock remained outstanding. Each share of Series X Preferred Stock is convertible into 166.67 shares of common stock and therefore the number of shares of underlying common stock issuable upon conversion of the outstanding shares Series X Preferred Stock is 5,242,501. Outstanding shares of Series X Preferred Stock are subject to conversion at the option of the holder.

Reverse Stock Split

On August 4, 2021, our Board of Directors approved a reverse stock split of our outstanding shares of common stock at a ratio of one-for-six (1:6). The reverse stock split became effective on August 19, 2021. The reverse stock split was approved by our stockholders at our Annual Meeting of Stockholders on June 2, 2021. All share and per share amounts of the common stock included in this Quarterly Report on Form 10-Q, including in the accompanying unaudited condensed consolidated financial statements, have been retrospectively adjusted to give effect to the reverse stock split for all periods presented, including reclassifying an amount equal to the reduction in par value to additional paid-in capital. As of April 29, 2022, we had 13,016,955 shares of outstanding common stock and approximately 31,455 shares of outstanding Series X Preferred Stock, which we issued in the Quellis Acquisition and the February 2021 Financing, which are convertible into 5,242,501 shares of common stock.

Financial Overview

Our business is almost entirely dependent on the success of STAR-0215, which is in the preclinical stage of development, and has only produced results in preclinical and nonclinical settings. Our net losses were \$15.3 million and \$170.1 million (including \$164.6 million of in-process research and development expenses) for the three months ended March 31, 2022 and 2021, respectively. As of March 31, 2022, we had an accumulated deficit of \$471.1 million. We have financed our operations to date primarily through private placements of preferred stock before we became a public company and our private placement of preferred stock in the February 2021 Financing, registered offerings of our common stock and our at-the-market programs, and have devoted substantially all of our financial resources and efforts to research and development, including preclinical studies and clinical development programs. As of March 31, 2022, we had \$112.8 million in cash, cash equivalents and short-term investments. We expect that our existing cash, cash equivalents and short-term investments are sufficient to support our operating expenses and capital expenditures through 2023. Advancing the development of STAR-0215 or any future product candidates will require a significant amount of capital. Our existing cash, cash equivalents and short-term investments will not be sufficient to fund STAR-0215 or any future product candidates through regulatory approval. We will need to obtain substantial additional funding to complete the development and commercialization of STAR-0215 or any future product candidates and support our continuing operations, future clinical trials and expansion of our pipeline. Furthermore, our operating plan may change as a result of many factors currently unknown to us, and we may need to seek additional financing to fund our long-term operations sooner than planned. See the section titled “Liquidity and Capital Resources” below for additional information.

Research and Development Expenses

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

- employee-related expenses including salaries, benefits and stock-based compensation expense;
- expenses incurred under agreements with third parties, including contract research organizations that conduct clinical trials and research and development and preclinical activities on our behalf;
- the cost of consultants;
- the cost of lab supplies and acquiring, developing and manufacturing study materials; and
- facilities and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance and other supplies.

Research and development costs are expensed as incurred. Nonrefundable advance payments for goods or services to be received in the future for use in research and development activities are deferred and capitalized. The capitalized amounts are expensed as the related goods are delivered or the services are performed.

We typically use our employee, consultant and infrastructure resources across our development programs. We track outsourced development costs by product candidate or development program, but we do not allocate personnel costs, other internal costs or external

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consultant costs to specific product candidates or development programs. We record our research and development expenses net of any research and development tax incentives we are entitled to receive from government authorities.

The following table summarizes our research and development expenses by program (in thousands):

	Three Months Ended March 31,	
	2022	2021
STAR-0215	\$ 6,269	\$ 458
Edasalonexent	64	456
Other research programs	301	—
Costs not directly allocated to programs:		
Employee expenses including cash compensation, benefits and stock-based compensation	1,375	1,227
Facilities	80	88
Consultants and professional expenses, including stock-based compensation	2,226	276
Other	43	88
Total costs not directly allocated to programs	3,724	1,679
Total research and development expenses	\$ 10,358	\$ 2,593

Based on the results of the Phase 3 PolarisDMD trial of edasalonexent for the treatment of DMD, in October 2020 we stopped all activities related to the development of edasalonexent, including the ongoing GalaxyDMD open-label extension trial, and wound down substantially all activities related to edasalonexent by mid-2021.

We expect to incur significant research and development expenses in the year ending December 31, 2022 and in future periods in connection with the preclinical and clinical activities related to the development of STAR-0215. Because of this, we expect that our research and development expenses over the next several quarters will be higher than the prior year periods. Development of STAR-0215 and any future product candidates is highly uncertain and we cannot reasonably estimate at this time the nature, timing and costs of the efforts that would be necessary to complete the development of any such product candidates. We are also unable to predict when, if ever, material net cash inflows would commence from any such product candidates. This is due to the fact that we would need to raise substantial additional capital to fund the clinical development of any such product candidates and the numerous risks and uncertainties associated with developing and commercializing product candidates, including the uncertainties of:

- establishing an appropriate safety profile with IND-enabling toxicology studies;
- successful enrollment in, and completion of clinical trials;
- feedback from the FDA and foreign regulatory authorities on planned trial designs, pre-clinical studies and manufacturing capabilities and plans;
- changes in the FDA and foreign regulatory approval processes or perspectives that may delay or prevent the approval of new products;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity;
- launching commercial sales, if we are able to obtain marketing approval, whether alone or in collaboration with others, and our ability to compete successfully with other products; and
- a continued acceptable safety profile following approval.

A change in the outcome of any of these variables with respect to the development of STAR-0215 or any future product candidate would significantly change the costs and timing associated with the development of that product candidate.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and other related costs, including stock-based compensation, for personnel in executive, finance, accounting, commercial, business development, legal and human resources functions. Other significant costs include facility costs not otherwise included in research and development expenses, legal fees relating to patent and corporate matters, and fees for accounting and consulting services.

We anticipate that in the near term our general and administrative expenses will remain relatively consistent with their current levels, although as we continue to develop STAR-0215 and potentially expand our pipeline to include other product candidates, our general and administrative expenses may increase.

Acquired In-process Research and Development Expense

Acquired in-process research and development (“IPR&D”) expense resulted from the Quellis Acquisition in January 2021. The acquisition cost allocated to acquire IPR&D with no alternative future use was recorded as expense at the acquisition date and no additional IPR&D expense relating to the Quellis Acquisition is expected to be reported in future periods.

Reduction in Workforce

In December 2020, following the decision to stop development of edasalonexent, we announced that we were reducing our workforce during the quarter ended December 31, 2020. The reduction resulted in total expenses for employee severance and employee benefits of \$0.6 million, of which \$0.2 million was recorded during the three months ended March 31, 2021. As of March 31, 2022, all severance and employee benefits related to the reduction of workforce has been paid.

Other Income (Expense), Net

Other income (expense), net consists of interest income earned on our cash, cash equivalents and short-term investments and net amortization expense on short-term investments, and gains and losses related to foreign currency fluctuations.

Critical Accounting Policies and Significant Judgments and Estimates

This discussion and analysis of our financial condition and results of operations is based on our financial statements, which we have prepared in accordance with United States generally accepted accounting principles. We believe that several accounting policies are important to understanding our historical and future performance. We refer to these policies as critical because these specific areas generally require us to make judgments and estimates about matters that are uncertain at the time we make the estimate, and different estimates—which also would have been reasonable—could have been used. On an ongoing basis, we evaluate our estimates and judgments. We base our estimates on historical experience and other market-specific or other relevant assumptions that we believe to be 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.

During the three months ended March 31, 2022, there were no material changes to our critical accounting policies as reported in our 2021 Annual Report on Form 10-K.

Results of Operations

We anticipate that our results of operations may fluctuate for the foreseeable future due to several factors, such as the progress of our research and development efforts and the timing and outcome of regulatory submissions.

Comparison of the Three Months Ended March 31, 2022 and 2021

The following table summarizes our results of operations for the three months ended March 31, 2022 and 2021, together with the dollar change in those items (in thousands):

	Three Months Ended March 31,		Period-to- Period Change
	2022	2021	
Operating expenses:			
Research and development	\$ 10,358	\$ 2,593	\$ 7,765
General and administrative	5,020	2,880	2,140
Acquired in-process research and development	—	164,612	(164,612)
Total operating expenses	15,378	170,085	(154,707)
Loss from operations	(15,378)	(170,085)	154,707
Other income, net	55	1	54
Net loss	\$ (15,323)	\$ (170,084)	\$ 154,761

Research and Development Expenses

Research and development expenses increased by \$7.8 million to \$10.4 million for the three months ended March 31, 2022 from \$2.6 million for the three months ended March 31, 2021, an increase of 299%. The substantial increase in research and development expenses was primarily attributable to a \$5.8 million increase in direct costs to support preclinical development of the STAR-0215 program, a \$2.0 million increase to professional service expenses primarily due to expense recognized on vested warrants inherited in the Quellis Acquisition as described in Note 1, “*Organization and Operations*”, a \$0.3 million increase in other research and programs, and a \$0.1 million increase in employee expenses. These increases were offset by a \$0.4 million decrease in costs to support the edasalonexent program due to stopping all development activities associated with the program.

General and Administrative Expenses

General and administrative expenses increased by \$2.1 million to \$5.0 million for the three months ended March 31, 2022 from \$2.9 million for the three months ended March 31, 2021, an increase of 74%. The increase was attributable to a \$0.7 million increase in professional services expense primarily due to new product planning and business development activities, a \$0.6 million increase in employee related costs, a \$0.5 million increase in stock-based compensation expense, a \$0.2 million increase in our Delaware franchise tax fee, and a \$0.1 million increase in insurance expense.

Acquired In-process Research and Development Expense

Acquired IPR&D expense was \$164.6 million for the three months ended March 31, 2021. Acquired IPR&D expense resulted from the Quellis Acquisition in January 2021. The acquisition cost allocated to acquire IPR&D with no alternative future use was recorded as an expense as of the closing date of the Quellis Acquisition. No acquired IPR&D expenses were incurred for the three months ended March 31, 2022.

Other Income, Net

Other income, net increased by \$54,000 to \$55,000 for the three months ended March 31, 2022 from \$1,000 for the three months ended March 31, 2021. The increase was primarily attributable to an increase in interest and investment income due to higher interest yields and an increase in our interest-earning assets.

Liquidity and Capital Resources

From our inception through March 31, 2022, we raised an aggregate of \$426.0 million through private placements of preferred stock before we became a public company and our private placement of preferred stock in the February 2021 Financing, registered offerings of our common stock and our at-the-market programs. As of March 31, 2022, we had cash, cash equivalents and short-term investments of \$112.8 million. We expect that our existing cash, cash equivalents and short-term investments are sufficient to support our operating expenses and capital expenditures through 2023. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we anticipate.

We will need to obtain substantial additional funding to complete the development and commercialization of STAR-0215 or any future product candidates and support our continuing operations, future clinical trials and expansion of our pipeline. In addition, STAR-0215 or any future product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of product candidates that we do not expect to be commercially available for years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all. The terms of any financing may adversely affect the holdings or the rights of our stockholders. Market volatility, inflation, interest rate fluctuations and concerns related to the COVID-19 pandemic may have a significant impact on the availability of funding sources and the terms on which any funding may be available. If we fail to raise capital as, and when, needed, we may be unable to continue our operations at planned levels and be forced to modify our business strategies and reduce or terminate our operations.

February 2021 Financing

On January 28, 2021, we entered into the Purchase Agreement and sold an aggregate of 35,573 shares of Series X Preferred Stock on the February 1, 2021 closing date for gross proceeds of approximately \$110.0 million, and net proceeds of \$104.3 million.

At-the-Market Offering

We had entered into various sales agreements with Cowen and Company LLC, or Cowen, pursuant to which we could issue and sell shares of common stock, under at-the-market offering programs. On May 20, 2021, we terminated our sales agreement with Cowen. On June 30, 2021, we entered into an Open Market Sale AgreementSM with Jefferies LLC, or Jefferies, pursuant to which we can issue and sell shares of common stock, of up to \$25.0 million under at-the-market offering programs (collectively, with the Cowen at-the-market offering program, the ATM Programs). We pay the sales agent commissions of 3% of the gross proceeds from any common stock sold through the ATM Programs. As of March 31, 2022, we have not sold any shares of common stock pursuant to the Jefferies agreement. There was also no activity from the ATM Programs during the three months ended March 31, 2021.

Cash Flows

Comparison of the Three Months Ended March 31, 2022 and 2021

The following table provides information regarding our cash flows for the three months ended March 31, 2022 and 2021 (in thousands):

	Three Months Ended March 31,	
	2022	2021
Net cash used in operating activities	\$ (12,559)	\$ (8,716)
Net cash (used in) provided by investing activities	(27,099)	26,445
Net cash provided by financing activities	—	104,261
Net (decrease) increase in cash, cash equivalents and restricted cash	<u>\$ (39,658)</u>	<u>\$ 121,990</u>

Net Cash Used in Operating Activities

Net cash used in operating activities was \$12.6 million for the three months ended March 31, 2022 and consisted primarily of a net loss of \$15.3 million adjusted for stock-based compensation expense of \$1.2 million and expense recognized for warrants of \$1.5 million.

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Net cash used in operating activities was \$8.7 million for the three months ended March 31, 2021 and consisted primarily of a net loss of \$170.1 million adjusted for the non-cash portion of acquired IPR&D of \$164.6 million and other non-cash items such as stock-based compensation expense of \$0.4 million and a net increase in operating assets of \$3.6 million, which resulted primarily from a decrease in accrued expenses of \$2.7 million and a decrease in accounts payable of \$1.7 million, partially offset by a decrease in prepaid expenses of \$0.8 million.

Net Cash (Used in) Provided by Investing Activities

Net cash used in investing activities was \$27.1 million for the three months ended March 31, 2022 and consisted primarily of proceeds from purchases of short-term investments of \$81.7 million offset by maturities of short-term investments of \$54.6 million. Net cash provided by investing activities was \$26.4 million for the three months ended March 31, 2021 and consisted primarily of proceeds from maturities of short-term investments of \$20.0 million and cash acquired in the Quellis Acquisition of \$6.4 million.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was \$104.3 million during the three months ended March 31, 2021, which was attributable to net proceeds of \$104.3 million from the February 2021 Financing.

Funding Requirements

Our primary uses of capital are for compensation and related expenses, manufacturing costs for preclinical and clinical materials, third party preclinical research and development services, legal and other regulatory expenses and general overhead.

As of March 31, 2022, we had an accumulated deficit of \$471.1 million. We have been primarily involved with research and development activities and have incurred operating losses and negative cash flows from operations since our inception.

As of March 31, 2022, we had available cash, cash equivalents and short-term investments of \$112.8 million. We expect that our existing cash, cash equivalents and short-term investments are sufficient to support our operating expenses and capital expenditures through 2023.

Our estimate as to how long we expect our cash, cash equivalents and short-term investments to be able to fund our operations is based on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with research, development and commercialization of biotechnology products, we are unable to estimate the exact amount of our operating capital requirements. Further, changing circumstances, some of which may be beyond our control, could cause us to consume capital significantly faster than we currently anticipate, and we may need to seek additional funds sooner than planned. Our future funding requirements will depend on many factors, including:

- the progress, timing, costs and results of clinical trials of, and research and preclinical development efforts for, STAR-0215 and any future product candidates, including potential future clinical trials;
- our ability to enter into and the terms and timing of any additional collaborations, licensing or other arrangements that we may establish;
- the number and characteristics of future product candidates that we pursue and their development requirements;
- the outcome, timing and costs of seeking regulatory approvals;
- the costs of commercialization activities for any of our product candidates that receive marketing approval to the extent such costs are not the responsibility of any future collaborators, including the costs and timing of establishing product sales, marketing, market access, distribution, supply chain and manufacturing capabilities, and scaling up the manufacturing of drug substance and drug product to clinical and commercial scale, securing all raw materials necessary to conduct such scale-up and successfully completing all other activities related thereto;
- if we obtain marketing approval of any of our product candidates, revenues, if any, received from commercial sales of our product candidates;
- if we obtain marketing approval of any of our product candidates, our ability to successfully compete against other approved products that are approved or used as treatments for the indications for which our products are approved, including with respect to STAR-0215 in HAE;
- our headcount growth and associated costs;

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- the costs of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against intellectual property related claims;
- the progress, timing, costs and results of clinical trials of, and research and preclinical development efforts for, STAR-0215 and any future product candidates, including potential future clinical trials;
- the impact of the COVID-19 pandemic on our operations, business and prospects; and
- the costs of operating as a public company.

Identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, STAR-0215 or any future product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of medicines that we do not expect to be commercially available for years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. We do not have any committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, our stockholders' ownership interests will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. Debt financing, if available, would result in periodic payment obligations and may involve agreements that include restrictive covenants that limit our ability to take specific actions, such as incurring debt, making capital expenditures or declaring dividends, that could adversely impact our ability to conduct our business.

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

Material Cash Requirements from Known Contractual Obligations

The following table summarizes our significant contractual obligations as of payment due date by period at March 31, 2022:

(In thousands)	Payments due by period			
	Total	Less than 1 Year	1 - 3 Years	More than 3 Years
Operating lease obligations (1)	1,625	731	894	—
Payments under vendor agreements (2)	766	766	—	—
Total contractual cash obligations	\$ 2,391	\$ 1,497	\$ 894	\$ —

(1) Represents future minimum lease payments under our non-cancelable operating leases. The minimum lease payments above do not include any related common area maintenance charges or real estate taxes.

(2) Represents future milestone payments under vendor agreements if certain clinical milestones related to the planned Phase 1a clinical trials of the STAR-0215 program are met.

As of March 31, 2022, material contractual obligations included our facility leases pursuant to which we will make payments of \$1.6 million. These payments include those pursuant to our current facility lease until its expiration in June 2022 as well as a new sublease we entered into in January 2022, as described in Note 7, "Commitments", commencing in May 2022 through its expiration in June 2024. As of March 31, 2022, also have material contractual obligations to certain vendors to which we will make payments of \$0.8 million if certain clinical milestones related to the planned Phase 1a clinical trials of STAR-0215 are met.

We enter into agreements in the normal course of business with vendors for preclinical research studies and other services and products for operating purposes. We have not included these payments in the table of contractual obligations above since the contracts are cancelable at any time by us, generally upon 60 days' prior written notice, and therefore we believe that our non-cancelable obligations under these agreements are not material.

Item 4. Controls and Procedures

Management’s Evaluation of our Disclosure Controls and Procedures

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, or the Exchange Act) that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is (1) recorded, processed, summarized, and reported within the time periods specified in the U.S. Securities and Exchange Commission’s rules and forms and (2) accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our principal executive officer and principal financial officer have concluded based upon the evaluation described above that, as of March 31, 2022, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

During the three months ended March 31, 2022, there were no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15(d)-15(f) promulgated under the Exchange Act, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1A. Risk Factors

Careful consideration should be given to the factors discussed in Part I, Item 1A, Risk Factors, in our 2021 Annual Report on Form 10-K, which could materially affect our business, financial condition or future results, in addition to the information set forth in this Quarterly Report on Form 10-Q.

Item 6. Exhibits

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth on the Exhibits Index below:

Exhibit Number	Exhibit
10.1	Sublease Agreement, dated as of January 28, 2022, by and between Grant Thornton LLP and the Registrant (incorporated by reference to Exhibit 10.19 to the Registrant's Current Report on Form 10-K (File No. 001-37467) filed with the SEC on March 10, 2022)
10.2*	2022 Inducement Stock Incentive Plan (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K (File No. 001-37467) filed with the SEC on February 22, 2022)
10.3*	Form of Nonstatutory Stock Option Agreement under the 2022 Inducement Stock Incentive Plan (incorporated by reference to Exhibit 99.2 to the Registrant's Current Report on Form 8-K (File No. 001-37467) filed with the SEC on February 22, 2022)
10.4*	Amended and Restated 2015 Stock Incentive Plan (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K (File No. 001-37467) filed with the SEC on December 15, 2021)
10.5*	Form of Incentive Stock Option Agreement under 2015 Stock Incentive Plan
10.6*	Form of Nonstatutory Stock Option Agreement under 2015 Stock Incentive Plan
10.7*	2015 Employee Stock Purchase Plan
10.8*	Amended and Restated Executive Severance Benefits Plan effective October 7, 2020
31.1	Certification of principal executive officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of principal financial officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of The Sarbanes-Oxley Act of 2002, by the Registrant's principal executive officer and principal financial officer
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Presentation Linkbase Document
104	Cover Page Data File (the cover page XBRL tags are embedded within the iXBRL document).

* Management contract or compensatory plan arrangement.

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.

Astria Therapeutics, Inc.

Date: May 12, 2022

By: /s/ NOAH C. CLAUSER

Noah C. Clauser

Chief Financial Officer (Principal Financial Officer)



ASTRIA THERAPEUTICS, INC.
INCENTIVE STOCK OPTION AGREEMENT

Astria Therapeutics, Inc. (the “Company”) hereby grants the following stock option pursuant to its Amended and Restated 2015 Stock Incentive Plan. The terms and conditions attached hereto are also a part hereof.

Notice of Grant

Name of optionee (the “Participant”):	
Grant Date:	
Number of shares of the Company’s Common Stock subject to this option (“Shares”):	
Option exercise price per Share:	
Number, if any, of Shares that vest immediately on the grant date:	
Shares that are subject to vesting schedule:	
Vesting Start Date:	
Final Exercise Date:	

Vesting Schedule:

Date	Options Vesting
All vesting is dependent on the Participant remaining an Eligible Participant, as provided herein.	

This option satisfies in full all commitments that the Company has to the Participant with respect to the issuance of stock, stock options or other equity securities.

ASTRIA THERAPEUTICS, INC.

 Signature of Participant

 Street Address

 City/State/Zip Code

By: _____

Incentive Stock Option Agreement
Incorporated Terms and Conditions

1. Grant of Option.

This agreement evidences the grant by the Company, on the grant date (the "Grant Date") set forth in the Notice of Grant that forms part of this agreement (the "Notice of Grant"), to the Participant of an option to purchase, in whole or in part, on the terms provided herein and in the Company's Amended and Restated 2015 Stock Incentive Plan (as amended from time to time, the "Plan"), the number of Shares set forth in the Notice of Grant of common stock, \$0.001 par value per share, of the Company ("Common Stock"), at the exercise price per Share set forth in the Notice of Grant. Unless earlier terminated, this option shall expire at 5:00 p.m., Eastern time, on the Final Exercise Date set forth in the Notice of Grant (the "Final Exercise Date").

It is intended that the option evidenced by this agreement shall be an incentive stock option as defined in Section 422 of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code") to the maximum extent permitted by law. Except as otherwise indicated by the context, the term "Participant", as used in this option, shall be deemed to include any person who acquires the right to exercise this option validly under its terms.

2. Vesting Schedule.

This option will become exercisable ("vest") in accordance with the vesting schedule set forth in the Notice of Grant.

The right of exercise shall be cumulative so that to the extent the option is not exercised in any period to the maximum extent permissible it shall continue to be exercisable, in whole or in part, with respect to all Shares for which it is vested until the earlier of the Final Exercise Date or the termination of this option under Section 3 hereof or the Plan.

3. Exercise of Option.

(a) Form of Exercise. Each election to exercise this option shall be in writing, in the form of the Stock Option Exercise Notice attached as Annex A, signed by the Participant, and received by the Company at its principal office, accompanied by this agreement, or in such other form (which may be electronic) as is approved by the Company, together with payment in full in the manner provided in the Plan. The Participant may purchase less than the number of shares covered hereby, provided that no partial exercise of this option may be for any fractional share.

(b) Continuous Relationship with the Company Required. Except as otherwise provided in this Section 3, this option may not be exercised unless the Participant, at the time he or she exercises this option, is, and has been at all times since the Grant Date, an employee, director or officer of, or consultant or advisor to, the Company or any other entity the employees, officers, directors, consultants, or advisors of which are eligible to receive option grants under the Plan (an "Eligible Participant").

(c) Termination of Relationship with the Company. If the Participant ceases to be an Eligible Participant for any reason, then, except as provided in paragraphs (d) and (e) below, the right to exercise this option shall terminate three months after such cessation (but in no event after the Final Exercise Date), provided that this option shall be exercisable only to the extent that the Participant was entitled to exercise this option on the date of such cessation. Notwithstanding the foregoing, if the Participant, prior to the Final Exercise Date, violates the non-competition or confidentiality provisions of any employment contract, confidentiality and nondisclosure agreement or other agreement between the Participant and the Company, the right to exercise this option shall terminate immediately upon such violation.

(d) Exercise Period Upon Death or Disability. If the Participant dies or becomes disabled (within the meaning of Section 22(e)(3) of the Code) prior to the Final Exercise Date while he or she is an Eligible Participant and the Company has not terminated such relationship for "cause" as specified in paragraph (e) below, this option shall be exercisable, within the period of one year following the date of death or disability of the Participant, by the Participant (or in the case of death by an authorized transferee), provided that this option shall be exercisable only to the extent that this option was exercisable by the Participant on the date of his or her death or disability, and further provided that this option shall not be exercisable after the Final Exercise Date.

(e) Termination for Cause. If, prior to the Final Exercise Date, the Participant's employment is terminated by the Company for Cause (as defined in the Plan), the right to exercise this option shall terminate immediately upon the effective date of such termination of employment.

4. Tax Matters.

(a) Withholding. No Shares will be issued pursuant to the exercise of this option unless and until the Participant pays to the Company, or makes provision satisfactory to the Company for payment of, any federal, state or local withholding taxes required by law to be withheld in respect of this option.

(b) Disqualifying Disposition. If the Participant disposes of Shares acquired upon exercise of this option within two years from the Grant Date or one year after such Shares were acquired pursuant to exercise of this option, the Participant shall notify the Company in writing of such disposition.

5. Transfer Restrictions.

This option may not be sold, assigned, transferred, pledged or otherwise encumbered by the Participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the lifetime of the Participant, this option shall be exercisable only by the Participant.

6. Provisions of the Plan.

This option is subject to the provisions of the Plan (including the provisions relating to amendments to the Plan), a copy of which is furnished to the Participant with this option.

ASTRIA THERAPEUTICS, INC.

Stock Option Exercise Notice

Astria Therapeutics, Inc.
One Hundred High Street
Floor 28
Boston, MA 02110

Dear Sir or Madam:

I, _____ (the "Participant"), hereby irrevocably exercise the right to purchase _____ shares of the Common Stock, \$0.001 par value per share (the "Shares"), of Astria Therapeutics, Inc. (the "Company") at \$____ per share pursuant to the Company's Amended and Restated 2015 Stock Incentive Plan, as amended from time to time, and a stock option agreement with the Company dated _____ (the "Option Agreement"). Enclosed herewith is a payment of \$____, the aggregate purchase price for the Shares. The certificate for the Shares should be registered in my name as it appears below or, if so indicated below, jointly in my name and the name of the person designated below, with right of survivorship.

Dated: _____

Signature _____
Print Name:

Address:

Name and address of persons in whose name the Shares are to be jointly registered (if applicable):



ASTRIA THERAPEUTICS, INC.
NONSTATUTORY STOCK OPTION AGREEMENT

Astria Therapeutics, Inc. (the “Company”) hereby grants the following stock option pursuant to its 2015 Stock Incentive Plan, as amended. The terms and conditions attached hereto are also a part hereof.

Notice of Grant

Name of optionee (the “Participant”):	
Grant Date:	
Number of shares of the Company’s Common Stock subject to this option (“Shares”):	
Option exercise price per Share:	
Number, if any, of Shares that vest immediately on the grant date:	
Shares that are subject to vesting schedule:	
Vesting Start Date:	
Final Exercise Date:	

Vesting Schedule:

All vesting is dependent on the Participant remaining an Eligible Participant, as provided herein.

This option satisfies in full all commitments that the Company has to the Participant with respect to the issuance of stock, stock options or other equity securities.

ASTRIA THERAPEUTICS, INC.

 Signature of Participant

By: _____

 Street Address

 City/State/Zip Code

Nonstatutory Stock Option Agreement
Incorporated Terms and Conditions

1. Grant of Option.

This agreement evidences the grant by the Company, on the grant date (the "Grant Date") set forth in the Notice of Grant that forms part of this agreement (the "Notice of Grant"), to the Participant of an option to purchase, in whole or in part, on the terms provided herein and in the Company's 2015 Stock Incentive Plan (as amended from time to time, the "Plan"), the number of Shares set forth in the Notice of Grant of common stock, \$0.001 par value per share, of the Company ("Common Stock"), at the exercise price per Share set forth in the Notice of Grant. Unless earlier terminated, this option shall expire at 5:00 p.m., Eastern time, on the Final Exercise Date set forth in the Notice of Grant (the "Final Exercise Date").

It is intended that the option evidenced by this agreement shall not be an incentive stock option as defined in Section 422 of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code"). Except as otherwise indicated by the context, the term "Participant", as used in this option, shall be deemed to include any person who acquires the right to exercise this option validly under its terms.

2. Vesting Schedule.

This option will become exercisable ("vest") in accordance with the vesting schedule set forth in the Notice of Grant.

The right of exercise shall be cumulative so that to the extent the option is not exercised in any period to the maximum extent permissible it shall continue to be exercisable, in whole or in part, with respect to all Shares for which it is vested until the earlier of the Final Exercise Date or the termination of this option under Section 3 hereof or the Plan.

3. Exercise of Option.

(a) Form of Exercise. Each election to exercise this option shall be in writing, in the form of the Stock Option Exercise Notice attached as Annex A, signed by the Participant, and received by the Company at its principal office, accompanied by this agreement, or in such other form (which may be electronic) as is approved by the Company, together with payment in full in the manner provided in the Plan. The Participant may purchase less than the number of shares covered hereby, provided that no partial exercise of this option may be for any fractional share.

(b) Continuous Relationship with the Company Required. Except as otherwise provided in this Section 3, this option may not be exercised unless the Participant, at the time he or she exercises this option, is, and has been at all times since the Grant Date, an employee, director or officer of, or consultant or advisor to, the Company or any other entity the employees, officers, directors, consultants, or advisors of which are eligible to receive option grants under the Plan (an "Eligible Participant").

(c) Termination of Relationship with the Company. If the Participant ceases to be an Eligible Participant for any reason, then, except as provided in paragraphs (d) and (e) below, the right to exercise this option shall terminate three months after such cessation (but in no event after the Final Exercise Date), provided that this option shall be exercisable only to the extent that the Participant was entitled to exercise this option on the date of such cessation. Notwithstanding the foregoing, if the Participant, prior to the Final Exercise Date, violates the non-competition or confidentiality provisions of any employment contract, confidentiality and nondisclosure agreement or other agreement between the Participant and the Company, the right to exercise this option shall terminate immediately upon such violation.

(d) Exercise Period Upon Death or Disability. If the Participant dies or becomes disabled (within the meaning of Section 22(e)(3) of the Code) prior to the Final Exercise Date while he or she is an Eligible Participant and the Company has not terminated such relationship for "cause" as specified in paragraph (e) below, this option shall be exercisable, within the period of one year following the date of death or disability of the Participant, by the Participant (or in the case of death by an authorized transferee), provided that this option shall be exercisable only to the extent that this option was exercisable by the Participant on the date of his or her death or disability, and further provided that this option shall not be exercisable after the Final Exercise Date.

(e) Termination for Cause. If, prior to the Final Exercise Date, the Participant's employment or other relationship with the Company is terminated by the Company for Cause (as defined in the Plan), the right to exercise this option shall terminate immediately upon the effective date of such termination of employment or other relationship.

4. Withholding.

No Shares will be issued pursuant to the exercise of this option unless and until the Participant pays to the Company, or makes provision satisfactory to the Company for payment of, any federal, state or local withholding taxes required by law to be withheld in respect of this option.

5. Transfer Restrictions.

This option may not be sold, assigned, transferred, pledged or otherwise encumbered by the Participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the lifetime of the Participant, this option shall be exercisable only by the Participant.

6. Provisions of the Plan.

This option is subject to the provisions of the Plan (including the provisions relating to amendments to the Plan), a copy of which is furnished to the Participant with this option.

ASTRIA THERAPEUTICS, INC.

Stock Option Exercise Notice

Astria Therapeutics, Inc.
One Hundred High Street
Floor 28
Boston, MA 02110

Dear Sir or Madam:

I, _____ (the "Participant"), hereby irrevocably exercise the right to purchase _____ shares of the Common Stock, \$0.001 par value per share (the "Shares"), of Astria Therapeutics, Inc. (the "Company") at \$____ per share pursuant to the Company's 2015 Stock Incentive Plan, as amended, and a stock option agreement with the Company dated _____ (the "Option Agreement"). Enclosed herewith is a payment of \$____, the aggregate purchase price for the Shares. The certificate for the Shares should be registered in my name as it appears below or, if so indicated below, jointly in my name and the name of the person designated below, with right of survivorship.

Dated: _____

Signature _____

Print Name:

Address:

Name and address of persons in whose name the Shares are to be jointly registered (if applicable):



ASTRIA THERAPEUTICS, INC.

2015 EMPLOYEE STOCK PURCHASE PLAN*

The purpose of this Plan is to provide eligible employees of Astria Therapeutics, Inc. (the "Company") and certain of its subsidiaries with opportunities to purchase shares of the Company's common stock, \$0.001 par value (the "Common Stock"), commencing at such time as the Company's Board of Directors (the "Board") shall determine. Subject to adjustment under Section 15 hereof, the number of shares of Common Stock that have been approved for this purpose is the sum of:

- (a) 3,039 shares of Common Stock; plus
- (b) an annual increase to be added on the first day of each fiscal year, commencing on January 1, 2016 and ending on December 31, 2026, equal to the least of (i) 6,078 shares of Common Stock, (ii) 1% of the outstanding shares on such date and (iii) an amount determined by the Board.

This Plan is intended to qualify as an "employee stock purchase plan" as defined in Section 423 of the Internal Revenue Code of 1986, as amended (the "Code"), and the regulations issued thereunder, and shall be interpreted consistent therewith.

1. Administration. The Plan will be administered by the Board or by a Committee appointed by the Board (the "Committee"). The Board or the Committee has authority to make rules and regulations for the administration of the Plan and its interpretation and decisions with regard thereto shall be final and conclusive.

2. Eligibility. All employees of the Company and all employees of any subsidiary of the Company (as defined in Section 424(f) of the Code) designated by the Board or the Committee from time to time (a "Designated Subsidiary"), are eligible to participate in any one or more of the offerings of Options (as defined in Section 9) to purchase Common Stock under the Plan provided that:

- (a) they are customarily employed by the Company or a Designated Subsidiary for more than 20 hours a week and for more than five months in a calendar year;
- (b) they have been employed by the Company or a Designated Subsidiary for at least six (6) months prior to enrolling in the Plan; and
- (c) they are employees of the Company or a Designated Subsidiary on the first day of the applicable Plan Period (as defined below).

No employee may be granted an Option hereunder if such employee, immediately after the Option is granted, owns 5% or more of the total combined voting power or value of the stock of the Company or any subsidiary. For purposes of the preceding sentence, the attribution rules of Section 424(d) of the Code shall apply in determining the stock ownership of an employee,

and all stock that the employee has a contractual right to purchase shall be treated as stock owned by the employee.

The Company retains the discretion to determine which eligible employees may participate in an offering pursuant to and consistent with Treasury Regulation Sections 1.423-2(e) and (f).

3. Offerings. The Company will make one or more offerings (“Offerings”) to employees to purchase stock under this Plan. Offerings will begin at such time as the Board shall determine. Each Offering will consist of a six-month period (a “Plan Period”) during which payroll deductions will be made and held for the purchase of Common Stock at the end of the Plan Period. The Board or the Committee may, at its discretion, choose a different Plan Period of not more than twelve (12) months for subsequent Offerings.

4. Participation. An employee eligible on the first day of any Plan Period of any Offering may participate in such Offering by completing and forwarding either a written or electronic payroll deduction authorization form to the employee’s appropriate payroll office at least 15 days prior to the commencement of the applicable Plan Period. The form will authorize a regular payroll deduction from the Compensation received by the employee during the Plan Period. Unless an employee files a new form or withdraws from the Plan, his or her deductions and purchases will continue at the same rate for future Offerings under the Plan as long as the Plan remains in effect. The term “Compensation” means the amount of money reportable on the employee’s Federal Income Tax Withholding Statement, excluding overtime, shift premium, incentive or bonus awards, allowances and reimbursements for expenses such as relocation allowances for travel expenses, income or gains associated with the grant or vesting of restricted stock, income or gains on the exercise of Company stock options or stock appreciation rights, and similar items, whether or not shown or separately identified on the employee’s Federal Income Tax Withholding Statement but including, in the case of salespersons, sales commissions to the extent determined by the Board or the Committee.

5. Deductions. The Company will maintain payroll deduction accounts for all participating employees. With respect to any Offering made under this Plan, an employee may authorize a payroll deduction in any percentage amount up to a maximum of 15% (in whole percentages) of the Compensation he or she receives during the Plan Period or such shorter period during which deductions from payroll are made. The Board or the Committee may, at its discretion, designate a lower maximum contribution rate. The minimum payroll deduction is such percentage of Compensation as may be established from time to time by the Board or the Committee.

6. Deduction Changes. An employee may decrease or discontinue his or her payroll deduction once during any Plan Period, by filing either a written or electronic new payroll deduction authorization form. However, an employee may not increase his or her payroll deduction during a Plan Period. If an employee elects to discontinue his or her payroll deductions during a Plan Period, but does not elect to withdraw his or her funds pursuant to Section 8 hereof, funds deducted prior to his election to discontinue will be applied to the purchase of Common Stock on the Exercise Date (as defined below).

7. Interest. Interest will not be paid on any employee accounts, except to the extent that the Board or the Committee, in its sole discretion, elects to credit employee accounts with interest at such rate as it may from time to time determine.

8. Withdrawal of Funds. An employee may at any time prior to the close of business on the fifteenth business day prior to the end of a Plan Period and for any reason permanently draw out the balance accumulated in the employee's account and thereby withdraw from participation in an Offering. Partial withdrawals are not permitted. The employee may not begin participation again during the remainder of the Plan Period during which the employee withdrew his or her balance. The employee may participate in any subsequent Offering in accordance with terms and conditions established by the Board or the Committee.

9. Purchase of Shares.

(a) Number of Shares. On the first day of each Plan Period, the Company will grant to each eligible employee who is then a participant in the Plan an option (an "Option") to purchase on the last business day of such Plan Period (the "Exercise Date") at the applicable purchase price (the "Option Price") up to that whole number of shares of Common Stock determined by multiplying \$2,083 by the number of full months in the Plan Period and dividing the result by the closing price (as determined below) on the first day of such Plan Period; provided, however, that no employee may be granted an Option which permits his or her rights to purchase Common Stock under this Plan and any other employee stock purchase plan (as defined in Section 423(b) of the Code) of the Company and its subsidiaries, to accrue at a rate which exceeds \$25,000 of the fair market value of such Common Stock (determined at the date such Option is granted) for each calendar year in which the Option is outstanding at any time.

(b) Option Price. The Board or the Committee shall determine the Option Price for each Plan Period, including whether such Option Price shall be determined based on the lesser of the closing price of the Common Stock on (i) the first business day of the Plan Period or (ii) the Exercise Date, or shall be based solely on the closing price of the Common Stock on the Exercise Date; provided, however, that such Option Price shall be at least 85% of the applicable closing price. In the absence of a determination by the Board or the Committee, the Option Price will be 85% of the lesser of the closing price of the Common Stock on (i) the first business day of the Plan Period and (ii) the Exercise Date. The closing price shall be (a) the closing price (for the primary trading session) on any national securities exchange on which the Common Stock is listed or (b) the average of the closing bid and asked prices in the over-the-counter-market, whichever is applicable, as published in The Wall Street Journal or another source selected by the Board or the Committee. If no sales of Common Stock were made on such a day, the price of the Common Stock shall be the reported price for the next preceding day on which sales were made.

(c) Exercise of Option. Each employee who continues to be a participant in the Plan on the Exercise Date shall be deemed to have exercised his or her Option at the Option Price on such date and shall be deemed to have purchased from the Company the number of whole shares of Common Stock reserved for the purpose of the Plan that his or her accumulated payroll deductions on such date will pay for, but not in excess of the maximum numbers determined in the manner set forth above.

(d) Return of Unused Payroll Deductions. Any balance remaining in an employee's payroll deduction account at the end of a Plan Period will be automatically refunded to the employee, except that any balance that is less than the purchase price of one share of Common Stock will be carried forward into the employee's payroll deduction account for the following Offering, unless the employee elects not to participate in the following Offering under the Plan, in which case the balance in the employee's account shall be refunded.

10. Issuance of Certificates. Certificates representing shares of Common Stock purchased under the Plan may be issued only in the name of the employee, in the name of the employee and another person of legal age as joint tenants with rights of survivorship, or (in the Company's sole discretion) in the name of a brokerage firm, bank, or other nominee holder designated by the employee. The Company may, in its sole discretion and in compliance with applicable laws, authorize the use of book entry registration of shares in lieu of issuing stock certificates.

11. Rights on Retirement, Death or Termination of Employment. If a participating employee's employment ends before the last business day of a Plan Period, no payroll deduction shall be taken from any pay then due and owing to the employee and the balance in the employee's account shall be paid to the employee. In the event of the employee's death before the last business day of a Plan Period, the Company shall, upon notification of such death, pay the balance of the employee's account (a) to the executor or administrator of the employee's estate or (b) if no such executor or administrator has been appointed to the knowledge of the Company, to such other person(s) as the Company may, in its discretion, designate. If, before the last business day of the Plan Period, the Designated Subsidiary by which an employee is employed ceases to be a subsidiary of the Company, or if the employee is transferred to a subsidiary of the Company that is not a Designated Subsidiary, the employee shall be deemed to have terminated employment for the purposes of this Plan.

12. Optionees Not Stockholders. Neither the granting of an Option to an employee nor the deductions from his or her pay shall make such employee a stockholder of the shares of Common Stock covered by an Option under this Plan until he or she has purchased and received such shares.

13. Options Not Transferable. Options under this Plan are not transferable by a participating employee other than by will or the laws of descent and distribution, and are exercisable during the employee's lifetime only by the employee.

14. Application of Funds. All funds received or held by the Company under this Plan may be combined with other corporate funds and may be used for any corporate purpose.

15. Adjustment for Changes in Common Stock and Certain Other Events.

(a) Changes in Capitalization. In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of Common Stock other than an ordinary cash dividend, (i) the number and class of securities available under this Plan, (ii) the share limitations set forth in Section 9, and (iii) the Option

Price shall be equitably adjusted to the extent determined by the Board or the Committee.

(b) Reorganization Events.

(1) Definition. A “Reorganization Event” shall mean: (a) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or is cancelled, (b) any transfer or disposition of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange or other transaction or (c) any liquidation or dissolution of the Company.

(2) Consequences of a Reorganization Event on Options. In connection with a Reorganization Event, the Board or the Committee may take any one or more of the following actions as to outstanding Options on such terms as the Board or the Committee determines: (i) provide that Options shall be assumed, or substantially equivalent Options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), (ii) upon written notice to employees, provide that all outstanding Options will be terminated immediately prior to the consummation of such Reorganization Event and that all such outstanding Options will become exercisable to the extent of accumulated payroll deductions as of a date specified by the Board or the Committee in such notice, which date shall not be less than ten (10) days preceding the effective date of the Reorganization Event, (iii) upon written notice to employees, provide that all outstanding Options will be cancelled as of a date prior to the effective date of the Reorganization Event and that all accumulated payroll deductions will be returned to participating employees on such date, (iv) in the event of a Reorganization Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share surrendered in the Reorganization Event (the “Acquisition Price”), change the last day of the Plan Period to be the date of the consummation of the Reorganization Event and make or provide for a cash payment to each employee equal to (A) (1) the Acquisition Price times (2) the number of shares of Common Stock that the employee’s accumulated payroll deductions as of immediately prior to the Reorganization Event could purchase at the Option Price, where the Acquisition Price is treated as the fair market value of the Common Stock on the last day of the applicable Plan Period for purposes of determining the Option Price under Section 9(b) hereof, and where the number of shares that could be purchased is subject to the limitations set forth in Section 9(a), minus (B) the result of multiplying such number of shares by such Option Price, (v) provide that, in connection with a liquidation or dissolution of the Company, Options shall convert into the right to receive liquidation proceeds (net of the Option Price thereof) and (vi) any combination of the foregoing.

For purposes of clause (i) above, an Option shall be considered assumed if, following consummation of the Reorganization Event, the Option confers the right to purchase, for each share of Common Stock subject to the Option immediately prior to the consummation of the Reorganization Event, the consideration (whether cash, securities or other property) received as a result of the Reorganization Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Reorganization Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if the

consideration received as a result of the Reorganization Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise of Options to consist solely of such number of shares of common stock of the acquiring or succeeding corporation (or an affiliate thereof) that the Board determines to be equivalent in value (as of the date of such determination or another date specified by the Board) to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Reorganization Event.

16. Amendment of the Plan. The Board may at any time, and from time to time, amend or suspend this Plan or any portion thereof, except that (a) if the approval of any such amendment by the shareholders of the Company is required by Section 423 of the Code, such amendment shall not be effected without such approval, and (b) in no event may any amendment be made that would cause the Plan to fail to comply with Section 423 of the Code.

17. Insufficient Shares. If the total number of shares of Common Stock specified in elections to be purchased under any Offering plus the number of shares purchased under previous Offerings under this Plan exceeds the maximum number of shares issuable under this Plan, the Board or the Committee will allot the shares then available on a pro-rata basis.

18. Termination of the Plan. This Plan may be terminated at any time by the Board. Upon termination of this Plan all amounts in the accounts of participating employees shall be promptly refunded.

19. Governmental Regulations. The Company's obligation to sell and deliver Common Stock under this Plan is subject to listing on a national stock exchange (to the extent the Common Stock is then so listed or quoted) and the approval of all governmental authorities required in connection with the authorization, issuance or sale of such stock.

20. Governing Law. The Plan shall be governed by Delaware law except to the extent that such law is preempted by federal law.

21. Issuance of Shares. Shares may be issued upon exercise of an Option from authorized but unissued Common Stock, from shares held in the treasury of the Company, or from any other proper source.

22. Notification upon Sale of Shares. Each employee agrees, by entering the Plan, to promptly give the Company notice of any disposition of shares purchased under the Plan where such disposition occurs within two years after the date of grant of the Option pursuant to which such shares were purchased.

23. Grants to Employees in Foreign Jurisdictions. The Company may, to comply with the laws of a foreign jurisdiction, grant Options to employees of the Company or a Designated Subsidiary who are citizens or residents of such foreign jurisdiction (without regard to whether they are also citizens of the United States or resident aliens (within the meaning of Section 7701(b)(1)(A) of the Code)) with terms that are less favorable (but not more favorable) than the terms of Options granted under the Plan to employees of the Company or a Designated

Subsidiary who are resident in the United States. Notwithstanding the preceding provisions of this Plan, employees of the Company or a Designated Subsidiary who are citizens or residents of a foreign jurisdiction (without regard to whether they are also citizens of the United States or resident aliens (within the meaning of Section 7701(b)(1)(A) of the Code)) may be excluded from eligibility under the Plan if (a) the grant of an Option under the Plan to a citizen or resident of the foreign jurisdiction is prohibited under the laws of such jurisdiction or (b) compliance with the laws of the foreign jurisdiction would cause the Plan to violate the requirements of Section 423 of the Code. The Company may add one or more appendices to this Plan describing the operation of the Plan in those foreign jurisdictions in which employees are excluded from participation or granted less favorable Options.

25. Authorization of Sub-Plans. The Board may from time to time establish one or more sub-plans under the Plan with respect to one or more Designated Subsidiaries, provided that such sub-plan complies with Section 423 of the Code.

26. Withholding. If applicable tax laws impose a tax withholding obligation, each affected employee shall, no later than the date of the event creating the tax liability, make provision satisfactory to the Board for payment of any taxes required by law to be withheld in connection with any transaction related to Options granted to or shares acquired by such employee pursuant to the Plan. The Company may, to the extent permitted by law, deduct any such taxes from any payment of any kind otherwise due to an employee.

27. Effective Date and Approval of Shareholders. The Plan shall become effective upon the closing of our initial public offering.

* Reflects the name change from Catabasis Pharmaceuticals, Inc. to Astria Therapeutics, Inc. effective September 8, 2021, and the reverse stock splits effective on June 11, 2015, December 28, 2018, and August 19, 2021.



ASTRIA THERAPEUTICS, INC.

Amended and Restated Severance Benefits Plan

1. Establishment of Plan. Astria Therapeutics, Inc., a Delaware corporation, hereby establishes this amended and restated unfunded severance benefits plan (the "Plan") that is intended to be a welfare benefit plan within the meaning of Section 3(1) of ERISA. The Plan is in effect for Covered Employees who experience a Covered Termination occurring after the Effective Date and before the termination of this Plan. This Plan supersedes any and all (i) severance plans and separation policies applying to Covered Employees that may have been in effect before the Effective Date with respect to any termination that would, under the terms of this Plan, constitute a Covered Termination and (ii) the provisions of any agreements between any Covered Employee and the Company that provide for severance benefits solely as such agreements relate to severance benefits.

2. Purpose. The purpose of the Plan is to establish the conditions under which Covered Employees will receive the severance benefits described herein if employment with the Company (or its successor in a Change in Control (as defined below)) terminates under the circumstances specified herein. The severance benefits paid under the Plan are intended to assist employees in making a transition to new employment and are not intended to be a reward for prior service with the Company.

3. Definitions. For purposes of this Plan,

(a) "Base Salary," shall mean, for any Covered Employee, such Covered Employee's base rate of pay as in effect immediately before a Covered Termination (or prior to the Change of Control, if greater) and exclusive of any bonuses, overtime pay, shift differentials, "adders," any other form of premium pay, or other forms of compensation.

(b) "Benefits Continuation" shall have the meaning set forth in Section 8(a) hereof.

(c) "Board" shall mean the Board of Directors of the Company.

(d) "Cause" shall mean any of: (a) your conviction of, or plea of guilty or nolo contendere to, any crime involving dishonesty or moral turpitude or any felony; or (b) a good faith finding by the Board that you have (i) engaged in dishonesty, willful misconduct or gross negligence that has a material adverse effect on the Company, (ii) committed an act that materially injures or would reasonably be expected to materially injure the reputation, business or business relationships of the Company, (iii) materially breached the terms of any restrictive covenants or confidentiality agreement with the Company (and not cured the same within any cure period applicable to such covenants or confidentiality agreement), or (iv) failed or refused to comply in any material respect with the Company's material policies or procedures and in a manner that materially

injures or would reasonably be expected to materially injure the reputation, business or business relationships of the Company, provided that in the case of clause (iv) you were given written notice of such violation or failure by the Board and a period of 30 days to cure (provided that the Board reasonably determines that such violation or failure is curable).

(e) “Change in Control” shall mean the occurrence of any of the following events, provided that such event or occurrence constitutes a change in the ownership or effective control of the Company, or a change in the ownership of a substantial portion of the assets of the Company, as defined in Treasury Regulation §§1.409A-3(i)(5)(v), (vi) and (vii): (i) the acquisition by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934 (the “Exchange Act”) (a “Person”) of beneficial ownership of any capital stock of the Company if, after such acquisition, such Person beneficially owns (within the meaning of Rule 13d-3 under the Exchange Act) 50% or more of either (x) the then-outstanding shares of common stock of the Company (the “Outstanding Company Common Stock”) or (y) the combined voting power of the then-outstanding securities of the Company entitled to vote generally in the election of directors (the “Outstanding Company Voting Securities”); provided, however, that for purposes of this subsection (i), the following acquisitions shall not constitute a Change in Control: (1) any acquisition directly from the Company or (2) any acquisition by any entity pursuant to a Business Combination (as defined below) which complies with clauses (x) and (y) of subsection (iii) of this definition; or (ii) a change in the composition of the Board that results in the Continuing Directors (as defined below) no longer constituting a majority of the Board (or, if applicable, the Board of Directors of a successor corporation to the Company), where the term “Continuing Director” means at any date a member of the Board (x) who was a member of the Board on the date of the initial adoption of the Plan by the Board or (y) who was nominated or elected subsequent to such date by at least a majority of the directors who were Continuing Directors at the time of such nomination or election or whose election to the Board was recommended or endorsed by at least a majority of the directors who were Continuing Directors at the time of such nomination or election; provided, however, that there shall be excluded from this clause (y) any individual whose initial assumption of office occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents, by or on behalf of a person other than the Board; or (iii) the consummation of a merger, consolidation, reorganization, recapitalization or share exchange involving the Company or a sale or other disposition of all or substantially all of the assets of the Company (a “Business Combination”), unless, immediately following such Business Combination, each of the following two conditions is satisfied: (x) all or substantially all of the individuals and entities who were the beneficial owners of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 50% of the then-outstanding shares of common stock and the combined voting power of the then-outstanding securities entitled to vote generally in the election of directors, respectively,

of the resulting or acquiring corporation in such Business Combination (which shall include, without limitation, a corporation which as a result of such transaction owns the Company or substantially all of the Company's assets either directly or through one or more subsidiaries) (such resulting or acquiring corporation is referred to herein as the "Acquiring Corporation") in substantially the same proportions as their ownership of the Outstanding Company Common Stock and Outstanding Company Voting Securities, respectively, immediately prior to such Business Combination and (y) no Person (excluding any employee benefit plan (or related trust) maintained or sponsored by the Company or by the Acquiring Corporation) beneficially owns, directly or indirectly, 50% or more of the then-outstanding shares of common stock of the Acquiring Corporation, or of the combined voting power of the then-outstanding securities of such corporation entitled to vote generally in the election of directors (except to the extent that such ownership existed prior to the Business Combination); or (iv) the liquidation or dissolution of the Company.

(f) "Change in Control Termination" shall mean a termination of the Covered Employee's employment by the Company without Cause or by the Covered Employee for Good Reason, in either case within the 12 months following a Change in Control.

(g) "COBRA" shall mean the Consolidated Omnibus Budget Reconciliation Act.

(h) "Code" shall mean the Internal Revenue Code of 1986, as amended.

(i) "Company" shall mean Astria Therapeutics, Inc. or, following a Change in Control, any successor thereto.

(j) "Compensation Committee" shall mean the Compensation Committee of the Board.

(k) "Covered Employees" shall mean all Regular Full-Time Employees (both exempt and non-exempt) who (i) are Executives as of the Effective Date or (ii) become Executives after the Effective Date and are designated by the Board or the Compensation Committee to be a Covered Employee under this Plan, who experience a Covered Termination and who are not designated as ineligible to receive severance benefits under the Plan as provided in Section 5 hereof. For the avoidance of doubt, neither Temporary Employees nor Part-Time Employees are eligible for severance benefits under the Plan. An employee's full-time, part-time or temporary status for the purpose of this Plan is determined by the Plan Administrator upon review of the employee's status immediately before termination. Any person who is classified by the Company as an independent contractor or third party employee is not eligible for severance benefits even if such classification is modified retroactively.

(l) "Covered Termination" shall mean (i) a Non-Change in Control Termination or (ii) a Change in Control Termination.

- (m) “Effective Date” shall mean October 7, 2020.
- (n) “ERISA” shall mean the Employee Retirement Income Security Act of 1974, as amended.
- (o) “Executive” shall mean any employee of the Company holding the title of Vice President or above.

(p) “Good Reason” is defined as: (i) a material diminution in the employee’s base compensation; (ii) a material diminution in the employee’s authority, duties, or responsibilities; (iii) a material change in the geographic location at which the employee must perform the services; or (iv) any other action or inaction that constitutes a material breach by the Company of any agreement under which the employee provides services; provided, however, that in any case the employee has not consented to the condition which would otherwise give rise to a Good Reason. In order to establish a “Good Reason” for terminating employment, an employee must provide written notice to the Company of the existence of the condition giving rise to the Good Reason, which notice must be provided within 90 days of the initial existence of such condition, the Company must fail to cure the condition within 30 days thereafter, and an employee’s termination of employment must occur no later than one year following the initial existence of the condition giving rise to Good Reason.

(q) “Non-Change in Control Termination” shall mean a termination of the Covered Employee’s employment by the Company without Cause or by the Covered Employee for Good Reason prior to or more than 12 months following a Change in Control.

(r) “Other C-Level Officer” shall mean any Executive (other than the Chief Executive Officer) designated by the Board or the Compensation Committee as an Other C-Level Officer for purposes of the Plan, including Other C-Level Officers who were designated as such prior to the Effective Date.

(s) “Part-Time Employees” shall mean employees who are not Regular Full-Time Employees and are treated as such by the Company.

(t) “Participants” shall mean Covered Employees.

(u) “Plan Administrator” shall have the meaning set forth in Section 15 hereof.

(v) “Release” shall have the meaning set forth in Section 6 hereof.

(w) “Release Effective Date” shall have the meaning set forth in Section 13(c)(i) hereof.

(x) “Regular Full-Time Employees” shall mean employees, other than Temporary Employees, normally scheduled to work at least 40 hours a week unless the Company’s local practices, as from time to time in force, whether or not in writing, establish a different hours threshold for regular full-time employees.

(y) “Severance Pay” shall have the meaning set forth in Section 7 hereof.

(z) “Severance Period” shall mean the applicable severance period determined under the chart in Section 7 hereof based on the type of Covered Termination and the title/role of the Covered Employee.

(aa) “Temporary Employees” are employees treated as such by the Company, whether or not in writing.

4. Coverage. A Covered Employee may be entitled to receive severance benefits under the Plan if such employee experiences a Covered Termination. In order to receive severance benefits under the Plan, Covered Employees must meet the eligibility and other requirements provided below in Sections 5 and 6 of the Plan.

5. Eligibility for Severance Benefits. The following employees will *not* be eligible for severance benefits, except to the extent specifically determined otherwise by the Plan Administrator: (a) an employee who is terminated for Cause; (b) an employee who retires, terminates employment as a result of an inability to perform his or her duties due to physical or mental disability or dies; (c) an employee who voluntarily terminates his or her employment, except in the case of a Covered Termination for Good Reason; (d) an employee who is employed for a specific period of time in accordance with the terms of a written employment agreement; and (e) an employee who promptly becomes employed by another member of the controlled group of entities of which the Company (or its successor in the Change in Control) is a member as defined in Sections 414(b) and (c) of the Code.

6. Release; Timing of Severance Benefits. Receipt of any severance benefits under the Plan requires that the Covered Employee: (a) comply with the provisions of any applicable noncompetition, nonsolicitation, and other obligations to the Company; and (b) execute and deliver a suitable waiver and release under which the Covered Employee releases and discharges the Company and its affiliates from and on account of any and all claims that relate to or arise out of the employment relationship between the Company and the Covered Employee (the “Release”) which Release becomes binding within 60 days following the Covered Employee’s termination of employment. The Severance Pay will be paid in accordance with the terms of the Plan and the Company’s regular pay practices in effect from time to time and the Benefits Continuation will be paid in the amount and at the time premium payments are made by other participants in the Company’s health benefit plans with the same coverage. The payments shall be made or commence on the first payroll date after the Release Effective Date.

7. Cash Severance. A Covered Employee entitled to severance benefits under this Plan shall be entitled to the continuation of such employee’s monthly Base Salary for the

Severance Period indicated below (“Severance Pay”), based upon his or her title/role.

Title/Role of Covered Employee	Non-Change in Control Termination Severance Period	Change in Control Termination Severance Period
Chief Executive Officer	12 months	18 months
Other C-Level Officer	12 months	12 months
Vice Presidents (of any level) who are not Other C-Level Officers	Six months	Nine months

For purposes of this Section 7 and Section 8 below, a Covered Employee’s title/role shall be such employee’s title/role immediately prior to the Covered Termination or, if such employee’s title/role was changed in connection with the Change in Control, immediately prior to the Change in Control.

8. Other Severance Benefits. In addition to the foregoing Severance Pay, the severance benefits under the Plan shall include the following benefits:

(a) Company contributions to the cost of COBRA coverage on behalf of the Covered Employee and any applicable dependents for no longer than the Covered Employee’s applicable Severance Period if the Covered Employee elects COBRA coverage, and only so long as such coverage continues in force. Such costs shall be determined on the same basis as the Company’s contribution to Company-provided health and dental insurance coverage in effect for an active employee with the same coverage elections; provided that if the Covered Employee commences new employment and is eligible for a new group health plan, the Company’s continued contributions toward health and dental coverage shall end when the new employment begins (“Benefits Continuation”).

(b) Any unpaid annual bonus in respect to any completed bonus period which has ended prior to the date of the Participant’s Covered Termination and which the Board or the Compensation Committee deems granted to the Participant in its discretion pursuant to the Company’s contingent compensation program, payable at the same time as annual bonuses are paid to other employees of the Company or, if later, upon the Release Effective Date.

(c) In the case of the Chief Executive Officer upon a Covered Termination, a bonus amount equal to one-half of the average annual bonus paid to the Chief Executive by the Company over the three calendar years preceding the calendar year in which such Covered Termination occurs, which bonus shall be prorated by multiplying the amount

by a fraction, the numerator of which is the number of days in the calendar year in which such termination of employment occurs that have elapsed since January 1 through the date of such termination and the denominator of which is 365, payable in a lump sum on the Release Effective Date.

9. Equity Awards. In the case of a Change in Control Termination, any unvested equity awards shall become fully vested and exercisable, or free from forfeiture or repurchase, effective upon the Release Effective Date. Except as set forth in the foregoing sentence, the treatment of a Covered Employee's equity awards with the Company upon a Covered Termination shall be dictated by the terms of the applicable award agreements.

10. Recoupment. If a Covered Employee fails to comply with the terms of the Plan, including the provisions of Section 6 above, the Company may require payment to the Company of any benefits described in Sections 7 and 8 above that the Covered Employee has already received to the extent permitted by applicable law and with the "value" determined in the sole discretion of the Plan Administrator. Payment is due in cash or by check within 10 days after the Company provides notice to a Covered Employee that it is enforcing this provision. Any benefits described in Sections 7 and 8 above not yet received by such Covered Employee will be immediately forfeited.

11. Death. If a Participant dies after the date of his or her Covered Termination but before all payments or benefits to which such Participant is entitled pursuant to the Plan have been paid or provided, payments will be made to any beneficiary designated by the Participant prior to or in connection with such Participant's Covered Termination or, if no such beneficiary has been designated, to the Participant's estate. For the avoidance of doubt, if a Participant dies during such Participant's applicable Severance Period, Benefits Continuation will continue for the Participant's applicable dependents for the remainder of the Participant's Severance Period.

12. Withholding. The Company may withhold from any payment or benefit under the Plan: (a) any federal, state, or local income or payroll taxes required by law to be withheld with respect to such payment; (b) such sum as the Company may reasonably estimate is necessary to cover any taxes for which the Company may be liable and which may be assessed with regard to such payment; and (c) such other amounts as appropriately may be withheld under the Company's payroll policies and procedures from time to time in effect.

13. Section 409A. It is expected that the payments and benefits provided under this Plan will be exempt from the application of Section 409A of the Code, and the guidance issued thereunder ("Section 409A"). The Plan shall be interpreted consistent with this intent to the maximum extent permitted and generally, with the provisions of Section 409A. A termination of employment shall not be deemed to have occurred for purposes of any provision of this Plan providing for the payment of any amounts or benefits upon or following a termination of employment (which amounts or benefits constitute nonqualified deferred compensation within the meaning of Section 409A) unless such termination is also a "separation from service" within the meaning of Section 409A and, for purposes of any such provision of this Plan, references to a

“termination,” “termination of employment” or like terms shall mean “separation from service”. Neither the Participant nor the Company shall have the right to accelerate or defer the delivery of any payment or benefit except to the extent specifically permitted or required by Section 409A.

Notwithstanding the foregoing, to the extent the severance payments or benefits under this Plan are subject to Section 409A, the following rules shall apply with respect to distribution of the payments and benefits, if any, to be provided to Participants under this Plan:

(a) Each installment of the payments and benefits provided under this Plan will be treated as a separate “payment” for purposes of Section 409A. Whenever a payment under this Plan specifies a payment period with reference to a number of days (*e.g.*, “payment shall be made within 10 days following the date of termination”), the actual date of payment within the specified period shall be in the Company’s sole discretion. Notwithstanding any other provision of this Plan to the contrary, in no event shall any payment under this Plan that constitutes “non-qualified deferred compensation” for purposes of Section 409A be subject to transfer, offset, counterclaim or recoupment by any other amount unless otherwise permitted by Section 409A.

(b) Notwithstanding any other payment provision herein to the contrary, if the Company or appropriately-related affiliates become publicly-traded and a Covered Employee is deemed on the date of termination to be a “specified employee” within the meaning of that term under Code Section 409A(a)(2)(B) with respect to such entity, then each of the following shall apply:

(i) With regard to any payment that is considered “non-qualified deferred compensation” under Section 409A payable on account of a “separation from service,” such payment shall be made on the date which is the earlier of (A) the day following the expiration of the six month period measured from the date of such “separation from service” of the Covered Employee, and (B) the date of the Covered Employee’s death (the “Delay Period”) to the extent required under Section 409A. Upon the expiration of the Delay Period, all payments delayed pursuant to this provision (whether otherwise payable in a single sum or in installments in the absence of such delay) shall be paid to or for the Covered Employee in a lump sum, and all remaining payments due under this Plan shall be paid or provided for in accordance with the normal payment dates specified herein; and

(ii) To the extent that any benefits to be provided during the Delay Period are considered “non-qualified deferred compensation” under Section 409A payable on account of a “separation from service,” and such benefits are not otherwise exempt from Section 409A, the Covered Employee shall pay the cost of such benefits during the Delay Period, and the Company shall reimburse the Covered Employee, to the extent that such costs would otherwise have been paid by the Company or to the extent that such benefits would otherwise have been

provided by the Company at no cost to the Covered Employee, the Company's share of the cost of such benefits upon expiration of the Delay Period. Any remaining benefits shall be reimbursed or provided by the Company in accordance with the procedures specified in this Plan.

(c) To the extent that severance benefits pursuant to this Plan are conditioned upon a Release, the Covered Employee shall forfeit all rights to such payments and benefits unless such release is signed and delivered (and no longer subject to revocation, if applicable) within 60 days following the date of the termination of the Covered Employee's employment with the Company. If the Release is no longer subject to revocation as provided in the preceding sentence, then the following shall apply:

(i) To the extent any severance benefits to be provided are not "non-qualified deferred compensation" for purposes of Section 409A, then such benefits shall commence upon the first scheduled payment date immediately after the date the Release is executed and no longer subject to revocation (the "Release Effective Date"). The first such cash payment shall include all amounts that otherwise would have been due prior thereto under the terms of this Agreement applied as though such payments commenced immediately upon the termination of the Covered Employee's employment with the Company, and any payments made after the Release Effective Date shall continue as provided herein. The delayed benefits shall in any event expire at the time such benefits would have expired had such benefits commenced immediately following the termination of the Covered Employee's employment with the Company.

(ii) To the extent any such severance benefits to be provided are "non-qualified deferred compensation" for purposes of Section 409A, then the Release must become irrevocable within 60 days of the date of termination and benefits shall be made or commence upon the date provided in Section 6, provided that if the 60th day following the termination of the Covered Employee's employment with the Company falls in the calendar year following the calendar year containing the date of termination, the benefits will be made no earlier than the first business day of that following calendar year. The first such cash payment shall include all amounts that otherwise would have been due prior thereto under the terms of this Agreement had such payments commenced immediately upon the termination of Covered Employee's employment with the Company, and any payments made after the first such payment shall continue as provided herein. The delayed benefits shall in any event expire at the time such benefits would have expired had such benefits commenced immediately following the termination of the Covered Employee's employment with the Company.

(d) The Company makes no representations or warranties and shall have no liability to any Participant or any other person, other than with respect to payments made by the Company in violation of the provisions of this Plan, if any provisions of or

payments under this Plan are determined to constitute deferred compensation subject to Section 409A of the Code but not to satisfy the conditions of that section.

14. Section 280G. Notwithstanding any other provision of this Plan, except as set forth in Section 14(b), in the event that the Company undergoes a “Change in Ownership or Control” (as defined below), the following provisions shall apply:

(a) The Company shall not be obligated to provide to the Covered Employee any portion of any “Contingent Compensation Payments” (as defined below) that the Covered Employee would otherwise be entitled to receive to the extent necessary to eliminate any “excess parachute payments” (as defined in Section 280G(b)(1) of the Code) for the Covered Employee. For purposes of this Section 14, the Contingent Compensation Payments so eliminated shall be referred to as the “Eliminated Payments” and the aggregate amount (determined in accordance with Treasury Regulation Section 1.280G-1, Q/A-30 or any successor provision) of the Contingent Compensation Payments so eliminated shall be referred to as the “Eliminated Amount.”

(b) Notwithstanding the provisions of Section 14(a), no such reduction in Contingent Compensation Payments shall be made if (1) the Eliminated Amount (computed without regard to this sentence) exceeds (2) 100% of the aggregate present value (determined in accordance with Treasury Regulation Section 1.280G-1, Q/A-31 and Q/A-32 or any successor provisions) of the amount of any additional taxes that would be incurred by the Covered Employee if the Eliminated Payments (determined without regard to this sentence) were paid to the Covered Employee (including state and federal income taxes on the Eliminated Payments, the excise tax imposed by Section 4999 of the Code payable with respect to all of the Contingent Compensation Payments in excess of the Covered Employee’s “base amount” (as defined in Section 280G(b)(3) of the Code), and any withholding taxes). The override of such reduction in Contingent Compensation Payments pursuant to this Section 14(b) shall be referred to as a “Section 14(b) Override.” For purpose of this paragraph, if any federal or state income taxes would be attributable to the receipt of any Eliminated Payment, the amount of such taxes shall be computed by multiplying the amount of the Eliminated Payment by the maximum combined federal and state income tax rate provided by law.

(c) For purposes of this Section 14 the following terms shall have the following respective meanings:

(i) “Change in Ownership or Control” shall mean a change in the ownership or effective control of the Company or in the ownership of a substantial portion of the assets of the Company determined in accordance with Section 280G(b)(2) of the Code.

(ii) “Contingent Compensation Payment” shall mean any payment (or

benefit) in the nature of compensation that is made or made available (under this Agreement or otherwise) to a “disqualified individual” (as defined in Section 280G(c) of the Code) and that is contingent (within the meaning of Section 280G(b)(2)(A)(i) of the Code) on a Change in Ownership or Control of the Company.

(d) Any payments or other benefits otherwise due to the Covered Employee following a Change in Ownership or Control that could reasonably be characterized (as determined by the Company) as Contingent Compensation Payments (the “Potential Payments”) shall not be made until the dates provided for in this Section 14(d). Within 30 days after each date on which the Covered Employee first becomes entitled to receive (whether or not then due) a Contingent Compensation Payment relating to such Change in Ownership or Control, the Company shall determine and notify the Covered Employee (with reasonable detail regarding the basis for its determinations) (1) which Potential Payments constitute Contingent Compensation Payments, (2) the Eliminated Amount and (3) whether the Section 14(b) Override is applicable. Within 30 days after delivery of such notice to the Covered Employee, the Covered Employee shall deliver a response to the Company (the “Covered Employee Response”) stating either (A) that the Covered Employee agrees with the Company’s determination pursuant to the preceding sentence or (B) that the Covered Employee disagrees with such determination, in which case the Covered Employee shall set forth (x) which Potential Payments should be characterized as Contingent Compensation Payments, (y) the Eliminated Amount, and (z) whether the Section 14(b) Override is applicable. In the event that the Covered Employee fails to deliver a Covered Employee Response on or before the required date, the Company’s initial determination shall be final. If the Covered Employee states in the Covered Employee Response that the Covered Employee agrees with the Company’s determination, the Company shall make the Potential Payments to the Covered Employee within three business days following delivery to the Company of the Covered Employee Response (except for any Potential Payments which are not due to be made until after such date, which Potential Payments shall be made on the date on which they are due). If the Covered Employee states in the Covered Employee Response that the Covered Employee disagrees with the Company’s determination, then, for a period of 60 days following delivery of the Covered Employee Response, the Covered Employee and the Company shall use good faith efforts to resolve such dispute. If such dispute is not resolved within such 60-day period, such dispute shall be settled exclusively by arbitration in Boston, Massachusetts, in accordance with the rules of the American Arbitration Association then in effect. Judgment may be entered on the arbitrator’s award in any court having jurisdiction. The Company shall, within three business days following delivery to the Company of the Covered Employee Response, make to the Covered Employee those Potential Payments as to which there is no dispute between the Company and the Covered Employee regarding whether they should be made (except for any such Potential Payments which are not due to be made until after such date, which Potential Payments shall be made on the date on which they are due). The balance of the Potential Payments shall be made within three business days following the resolution of

such dispute.

(e) The Contingent Compensation Payments to be treated as Eliminated Payments shall be determined by the Company by determining the Contingent Compensation Payment Ratio (as defined below) for each Contingent Compensation Payment and then reducing the Contingent Compensation Payments in order beginning with the Contingent Compensation Payment with the highest Contingent Compensation Payment Ratio. For Contingent Compensation Payments with the same Contingent Compensation Payment Ratio, such Contingent Compensation Payment shall be reduced based on the time of payment of such Contingent Compensation Payments with amounts having later payment dates being reduced first. For Contingent Compensation Payments with the same Contingent Compensation Payment Ratio and the same time of payment, such Contingent Compensation Payments shall be reduced on a pro rata basis (but not below zero) prior to reducing Contingent Compensation Payment with a lower Contingent Compensation Payment Ratio. The term “Contingent Compensation Payment Ratio” shall mean a fraction the numerator of which is the value of the applicable Contingent Compensation Payment that must be taken into account by the Covered Employee for purposes of Section 4999(a) of the Code, and the denominator of which is the actual amount to be received by the Covered Employee in respect of the applicable Contingent Compensation Payment. For example, in the case of an equity grant that is treated as contingent on the Change in Ownership or Control because the time at which the payment is made or the payment vests is accelerated, the denominator shall be determined by reference to the fair market value of the equity at the acceleration date, and not in accordance with the methodology for determining the value of accelerated payments set forth in Treasury Regulation Section 1.280G-1 Q/A-24(b) or (c).

(f) The provisions of this Section 14 are intended to apply to any and all payments or benefits available to the Covered Employee under this Plan or any other agreement or plan of the Company under which the Covered Employee receives Contingent Compensation Payments

15. Plan Administration.

(a) **Plan Administrator.** The Plan Administrator shall be the Board or the Compensation Committee; provided, however, that the Board or the Compensation Committee may in its sole discretion appoint a new Plan Administrator to administer the Plan following a Change in Control. The Plan Administrator shall also serve as the Named Fiduciary of the Plan under ERISA. The Plan Administrator shall be the “administrator” within the meaning of Section 3(16) of ERISA and shall have all the responsibilities and duties contained therein.

The Plan Administrator can be contacted at the following address:

Astria Therapeutics, Inc.

(b) **Decisions, Powers and Duties.** The general administration of the Plan and the responsibility for carrying out its provisions shall be vested in the Plan Administrator. The Plan Administrator shall have such powers and authority as are necessary to discharge such duties and responsibilities which also include, but are not limited to, interpretation and construction of the Plan, the determination of all questions of fact, including, without limit, eligibility, participation and benefits, the resolution of any ambiguities and all other related or incidental matters, and such duties and powers of the plan administration which are not assumed from time to time by any other appropriate entity, individual or institution. The Plan Administrator may adopt rules and regulations of uniform applicability in its interpretation and implementation of the Plan.

The Plan Administrator shall discharge its duties and responsibilities and exercise its powers and authority in its sole discretion and in accordance with the terms of the controlling legal documents and applicable law, and its actions and decisions that are not arbitrary and capricious shall be binding on any employee, any employee's spouse or other dependent or beneficiary and any other interested parties whether or not in being or under a disability.

16. Indemnification. To the extent permitted by law, all employees, officers, directors, agents and representatives of the Company shall be indemnified by the Company and held harmless against any claims and the expenses of defending against such claims, resulting from any action or conduct relating to the administration of the Plan, whether as a member of the Compensation Committee or otherwise, except to the extent that such claims arise from gross negligence, willful neglect, or willful misconduct.

17. Plan Not an Employment Contract. The Plan is not a contract between the Company and any employee, nor is it a condition of employment of any employee. Nothing contained in the Plan gives, or is intended to give, any employee the right to be retained in the service of the Company, or to interfere with the right of the Company to discharge or terminate the employment of any employee at any time and for any reason. No employee shall have the right or claim to benefits beyond those expressly provided in this Plan, if any. All rights and claims are limited as set forth in the Plan.

18. Severability. In case any one or more of the provisions of this Plan (or part thereof) shall be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect the other provisions hereof, and this Plan shall be construed as if such invalid, illegal or unenforceable provisions (or part thereof) never had been contained herein.

19. Non-Assignability. No right or interest of any Covered Employee in the Plan shall be assignable or transferable in whole or in part either directly or by operation of law or otherwise, including, but not limited to, execution, levy, garnishment, attachment, pledge or bankruptcy.

20. Integration with Other Pay or Benefits Requirements. The severance payments and benefits provided for in the Plan are the maximum benefits that the Company will pay to Covered Employees on a Covered Termination, except to the extent otherwise specifically provided in a separate agreement. To the extent that the Company owes any amounts in the nature of severance benefits under any other program, policy or plan of the Company that is not otherwise superseded by this Plan, or to the extent that any federal, state or local law, including, without limitation, so-called “plant closing” laws, requires the Company to give advance notice or make a payment of any kind to an employee because of that employee’s involuntary termination due to a layoff, reduction in force, plant or facility closing, sale of business, or similar event, the benefits provided under this Plan or the other arrangement shall either be reduced or eliminated to avoid any duplication of payment. The Company intends for the benefits provided under this Plan to partially or fully satisfy any and all statutory obligations that may arise out of an employee’s involuntary termination for the foregoing reasons and the Company shall so construe and implement the terms of the Plan.

21. Amendment or Termination. The Board may amend, modify, or terminate the Plan at any time in its sole discretion; provided, however, that (a) any such amendment, modification or termination made prior to a Change in Control that adversely affects the rights of any Covered Employee shall be unanimously approved by the Board, (b) no such amendment, modification or termination may affect the rights of a Covered Employee then receiving payments or benefits under the Plan without the consent of such person, and (c) no such amendment, modification or termination made after a Change in Control shall be effective until the date that is one year following such Change in Control. The Board, with the support of the Compensation Committee, intends to review the Plan at least annually.

22. Governing Law. The Plan and the rights of all persons under the Plan shall be construed in accordance with and under applicable provisions of ERISA, and the regulations thereunder, and the laws of the Commonwealth of Massachusetts (without regard to conflict of laws provisions) to the extent not preempted by federal law.

CERTIFICATION

I, Jill C. Milne, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Astria Therapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 12, 2022

/s/ JILL C. MILNE, PH.D.

Jill C. Milne, Ph.D.

President and Chief Executive Officer (Principal Executive Officer)

CERTIFICATION

I, Noah C. Clauser, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Astria Therapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 12, 2022

/s/ NOAH C. CLAUSER

Noah C. Clauser

Chief Financial Officer (Principal Financial Officer)

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

In connection with the Quarterly Report on Form 10-Q of Astria Therapeutics, Inc. (the "Company") for the period ended March 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned officers of the Company hereby certify, pursuant to 18 U.S.C. Section 1350, 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: May 12, 2022

/s/ JILL C. MILNE, PH.D.

Jill C. Milne, Ph.D.

President and Chief Executive Officer (Principal Executive Officer)

Date: May 12, 2022

/s/ NOAH C. CLAUSER

Noah C. Clauser

Chief Financial Officer (Principal Financial Officer)
