

ASTRIA THERAPEUTICS, INC.

Shares of Common Stock

Pre-Funded Warrants to Purchase Shares of Common Stock

Common Stock Warrants to Purchase Shares of Common Stock

This free writing prospectus relates only to the public offering by Astria Therapeutics, Inc. of shares of common stock, pre-funded warrants to purchase shares of common stock and common stock warrants to purchase shares of common stock described below and should be read together with the base prospectus, dated May 23, 2023, included in our Registration Statement on Form S-3 (Registration No. 333-271848) filed on May 11, 2023 with the U.S. Securities and Exchange Commission, including the documents incorporated by reference therein (the “Base Prospectus”). This free writing prospectus supplements the Base Prospectus primarily to reflect the terms of the pre-funded warrants and common stock warrants being the being offered by us.

The information in this communication supersedes the information in the Base Prospectus to the extent inconsistent with the information in the Base Prospectus. Unless the context otherwise indicates, references in this prospectus to “our company,” “we,” “our” and “us” refer collectively to Astria Therapeutics, Inc., a Delaware corporation, and its consolidated subsidiaries.

Issuer: Astria Therapeutics, Inc.

Securities Offered: We are offering (i) shares of our common stock and accompanying common stock warrants to purchase shares of our common stock and (ii), in lieu of shares of our common stock to certain investors that so choose, pre-funded warrants to purchase shares of our common stock and accompanying common stock warrants to purchase shares of our common stock.

Terms of Pre-Funded Warrants Offered: *Term and Exercisability*

The pre-funded warrants are exercisable at any time after their original issuance. The pre-funded warrants will expire on the date the warrant is exercised in full. The pre-funded warrants will be exercisable solely by means of a cashless exercise at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice, in which case the holder would receive upon such cashless exercise the net number of shares of our common stock determined according to the formula set forth in the pre-funded warrant. No fractional shares of our common stock will be issued in connection with the exercise of a pre-funded warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the last trade price of our common stock on the exercise date.

Exercise Limitations

We may not effect the exercise of any pre-funded warrant, and a holder will not be entitled to exercise any portion of any pre-funded warrant that, upon giving effect to or immediately prior to such exercise, would cause: (1) the aggregate number of shares of our common stock beneficially owned by such holder (together with its affiliates) to exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise; or (2) the combined voting power of our securities beneficially owned by such holder (together with its affiliates) to exceed 9.99% of the combined voting power of all of our securities outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. However, any holder of a pre-funded warrant may increase or decrease such percentage to any other percentage not in excess of 19.99% provided that any such increase will not be effective until the 61st day after notice from the holder is delivered to us.

Exercise Price

The exercise price of our common stock purchasable upon the exercise of the pre-funded warrants is \$0.001 per share. The exercise price of the pre-funded warrants and the number of shares of our common stock issuable upon exercise of the pre-funded warrants are subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock, as well as upon any distribution of assets, including cash, stock or other property, to our stockholders. The exercise price of the pre-funded warrants will not be adjusted below the par value of our common stock.

Transferability

Subject to applicable laws, the pre-funded warrants may be offered for sale, sold, transferred or assigned without our consent.

Fundamental Transactions

Upon the consummation of a fundamental transaction (as described in the pre-funded warrants, and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our assets, our consolidation or merger with or into another person in which we are not the surviving entity, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power of our outstanding common stock), the holders of the pre-funded warrants will be entitled to receive, upon exercise of the pre-funded warrants, the same kind and amount of securities, cash or other property that such holders would have received had they exercised the pre-funded warrants immediately prior to such fundamental transaction, without regard to any limitations on exercise contained in the pre-funded warrants. Notwithstanding the foregoing, in the event of a fundamental transaction where the consideration consists solely of cash, solely of marketable securities or a combination of cash and marketable securities, then each pre-funded warrant shall automatically be deemed to be exercised in full in a cashless exercise effective immediately prior to and contingent upon the consummation of such fundamental transaction.

No Rights as a Stockholder

Except by virtue of such holder's ownership of shares of our common stock, and except for the right to participate in certain dividends and distributions, the holder of a pre-funded warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until such holder receives shares of our common stock upon the due exercise of a pre-funded warrant.

Terms of Common Stock Warrants Offered:

Term and Exercisability

The common stock warrants are exercisable at any time after their original issuance and may be exercised until the date that is five years after the original issuance date. Except as noted below, the common stock warrants will be exercisable solely by means of a cash exercise at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice and the exercise price.

Cashless Exercise

If, at the time a holder exercises its common stock warrants, a registration statement registering the issuance of the shares of common stock underlying the common stock warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the common stock warrants. No fractional shares will be issued upon the exercise of the warrant. We will, at our election, either pay a cash adjustment in respect of any such final fraction in an amount equal to such fraction multiplied by the exercise price or round up to the next whole share.

Exercise Limitations

We may not effect the exercise of any common stock warrant, and a holder will not be entitled to exercise any portion of any common stock warrant that, upon giving effect to or immediately prior to such exercise, would cause: (1) the aggregate number of shares of our common stock beneficially owned by such holder (together with its affiliates) to exceed 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise; or (2) the combined voting power of our securities beneficially owned by such holder (together with its affiliates) to exceed 4.99% of the combined voting power of all of our securities outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the common stock warrants. However, any holder of a common stock warrant may increase or decrease such percentage to any other percentage not in excess of 9.99% provided that any such increase will not be effective until the 61st day after notice from the holder is delivered to us.

Exercise Price

The exercise price per share of our common stock purchasable upon the exercise of the common stock warrants is 125% of the closing price of the common stock on the date of pricing. The exercise price of the common stock warrants and the number of shares of our common stock issuable upon exercise of the common stock warrants are subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock, as well as upon any distribution of assets, including cash, stock or other property, to our stockholders. The exercise price of the common stock warrants will not be adjusted below the par value of our common stock.

Transferability

Subject to applicable laws, the common stock warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing

There is no established public trading market for the common stock warrants, and we do not expect a market to develop. We do not intend to list the common stock warrants on The Nasdaq Global Market, any other national securities exchange or any other nationally recognized trading system.

Fundamental Transactions

In the event of a fundamental transaction, as described in the common stock warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the common stock warrants will be entitled to receive upon exercise of the common stock warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the common stock warrants immediately prior to such fundamental transaction. In addition, in the event of a fundamental transaction which is approved by our board of directors, the holders of the common stock warrants have the right to require us or a successor entity to redeem the common stock warrant for cash in the amount of the Black-Scholes value of the unexercised portion of the common stock warrant on the date of the consummation of the fundamental transaction. In the event of a fundamental transaction which is not approved by our board of directors, the holders of the common stock warrants have the right to require us or a successor entity to redeem the common stock warrant for the consideration paid in the fundamental transaction in the amount of the Black Scholes value of the unexercised portion of the common stock warrant on the date of the consummation of the fundamental transaction.

No Rights as a Stockholder

Except by virtue of such holder's ownership of shares of our common stock, and except for the right to participate in certain dividends and distributions, the holder of a common stock warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until such holder receives shares of our common stock upon the due exercise of a common stock warrant.

Exchange Listing:

Our common stock is listed on The Nasdaq Global Market under the symbol "ATXS." There is no established public trading market for the pre-funded warrants or the common stock warrants, and we do not expect a market to develop. We do not intend to list the pre-funded warrants or the common stock warrants on The Nasdaq Global Market or any other national securities exchange or nationally recognized trading system.

Use of Proceeds and Estimated Cash Runway:

We plan to use the net proceeds from this offering for research and development activities, including clinical development of STAR-0215 and preclinical and clinical development of STAR-0310, and for working capital and other general corporate purposes. General corporate purposes may include repayment and refinancing of debt, and working capital and capital expenditures.

This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development efforts, the status of and results from clinical trials, the timing of regulatory submissions and the outcome of regulatory review, as well as any collaborations that we may enter into with third parties for our product candidates, and any unforeseen cash needs. As a result, management will retain broad discretion over the allocation of the net proceeds from this offering.

Based upon our current operating plan, we estimate that the net proceeds from this offering, together with our existing cash, cash equivalents and short-term investments, will enable us to fund our operating expenses and capital expenditure requirements into 2026. Our current operating plan includes the development of STAR-0215 and STAR-0310, including (i) for STAR-0215, support for all program activities up to the initiation of the planned Phase 3 pivotal trial and (ii) for STAR-0310, the upfront payment of \$15.0 million to the licensor in connection with the in-license of STAR-0310, the anticipated submission of the investigational new drug application and the initiation and completion of the planned Phase 1a clinical trial of healthy subjects (and any related anticipated milestone payments). We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. See the “Risk Factors” section of the prospectus supplement and the documents incorporated by reference for a discussion of the risks affecting our business that could have an adverse effect on our available capital resources. We do not expect that our existing cash, cash equivalents and short-term investments and net proceeds from this offering alone will be sufficient to enable us to fund the completion of the development of any of our product candidates, including STAR-0215 and STAR-0310.

The issuer has filed a registration statement (including the Base Prospectus) with the U.S. Securities and Exchange Commission (the “SEC”) for the offering to which this communication relates. Before you invest, you should read the Base Prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. Copies of the final prospectus supplement for this offering may be obtained, when available, for free by visiting EDGAR on the SEC website at www.sec.gov or by contacting Jefferies LLC, Attention: Equity Syndicate Prospectus Department, 520 Madison Avenue, New York, NY 10022, by telephone at (877) 821-7388, or by email at Prospectus_Department@Jefferies.com or Evercore Group L.L.C., Attention: Equity Capital Markets, 55 East 52nd Street, 35th Floor, New York, NY 10055, or by telephone at (888) 474-0200, or by email at ecm.prospectus@evercore.com.