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

Post-Effective Amendment No. 2
to
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

MUSTANG BIO, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2836
(Primary Standard Industrial
Classification Code Number)

47-3828760
(I.R.S. Employer
Identification Number)

95 Sawyer Road, Suite 110
Waltham, Massachusetts 02453
(781) 652-4500

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Manuel Litchman, M.D.
President, Chief Executive Officer and Interim Chief Financial Officer
Mustang Bio, Inc.
95 Sawyer Road, Suite 110
Waltham, Massachusetts 02453
(781) 652-4500

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Rakesh Gopalan
David S. Wolpa
Alexander T. Yarbrough
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Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

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 ☐
Non-accelerated filer ☒

Accelerated filer ☐
Smaller reporting company ☒
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

This Post-Effective Amendment No. 2 (this “Amendment”) to the Registration Statement on Form S-1, as amended (File No. 333-284299) (the “Original Registration Statement”), of Mustang Bio, Inc. (the “Company”) is being filed pursuant to the undertakings in the Original Registration Statement to update and supplement the information contained in the Original Registration Statement, which was originally declared effective by the Securities and Exchange Commission (the “SEC”) on February 5, 2025.

The Original Registration Statement, as amended by this Amendment, pertains solely to the registration of 6,697,889 shares of common stock, par value \$0.0001 per share, underlying warrants previously issued by the Company in connection with its public offering that closed on February 10, 2025. The issuance of the shares of common stock upon exercise of such warrants was initially registered on the Original Registration Statement.

This Amendment is being filed to update the financial and other information contained in the Original Registration Statement and the prospectus contained therein. No additional securities are being registered under this Amendment.

All applicable registration fees were paid at the time of the original filing of the Original Registration Statement.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is prohibited.

SUBJECT TO COMPLETION, DATED APRIL 4, 2025

PRELIMINARY PROSPECTUS



6,697,889 Shares of Common Stock Issuable Upon Exercise of Previously Issued Warrants

This prospectus relates to the offer and sale by Mustang Bio, Inc., a Delaware corporation, of up to 6,697,889 shares of common stock underlying certain outstanding pre-funded warrants (the “Pre-Funded Warrants”), series C-1 common warrants (the “Series C-1 Warrants”), series C-2 common warrants (the “Series C-2 Warrants”) and placement agent warrants (the “Placement Agent Warrants,” and together with the Pre-Funded Warrants, the Series C-1 Warrants and the Series C-2 Warrants, the “Warrants”) previously issued by us in our “best efforts” public offering that closed on February 10, 2025. The Series C-1 Warrants and C-2 Warrants have an exercise price of \$3.01. The Series C-1 Warrants expire five years from the effective date of stockholder approval of the issuance of the Warrants (the “Warrant Stockholder Approval”). The Series C-2 Warrants expire twenty-four months from the date of the Warrant Stockholder Approval. The Pre-Funded Warrants have an exercise price of \$0.0001 and expire when exercised in full. The Placement Agent Warrants have an exercise price of \$3.7625 per share and expire on February 5, 2030. The issuance of the Warrants and the shares of common stock underlying the Warrants was previously registered on a Registration Statement on Form S-1 (File No. 333-284299).

We will receive proceeds from our issuance of common stock upon any cash exercise of the Warrants. However, we are unable to predict the timing or amount of Warrants exercised. If all of the Warrants are exercised for cash (meaning we issue the maximum possible number of shares of common stock upon exercise of the Warrants), we will receive gross cash proceeds of approximately \$16.6 million. Any proceeds received from the exercise of the Warrants will be used for working capital and other general corporate purposes.

Our common stock is listed on the Nasdaq Capital Market under the symbol “MBIO”. On April 3, 2025, the last reported sale price of our common stock on the Nasdaq Capital Market was \$1.34 per share.

We are a “smaller reporting company” as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and may elect to comply with reduced public company reporting requirements in future filings. See “Prospectus Summary—Implications of Being a Smaller Reporting Company.”

Additionally, we are a “controlled company” as defined under the Listing Rules of The Nasdaq Stock Market LLC, because our existing controlling stockholder, Fortress Biotech, Inc., is able to control a majority of the total voting power of our common stock.

Investing in our securities involves risks. Before deciding whether to invest in our securities, you should consider carefully the risks that we have described on page 8 of this prospectus under the caption “Risk Factors” and under similar captions in the documents incorporated by reference into this prospectus.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2025

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ABOUT THIS PROSPECTUS

The registration statement we filed with the Securities and Exchange Commission (the “SEC”) includes exhibits that provide more detail of the matters discussed in this prospectus. You should read this prospectus, including any documents we incorporate by reference, and the related exhibits filed with the SEC before making your investment decision. You should rely only on the information provided in this prospectus and the documents we incorporate by reference. You should not assume that the information contained in this prospectus, incorporated by reference into this prospectus, or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document, even if it is delivered, or securities are sold, on a later date. This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been or will be filed as exhibits to the registration statement of which this prospectus forms a part, and you may obtain copies of those documents as described in this prospectus under the heading “Where You Can Find More Information.”

When we refer to “Mustang,” “we,” “our,” “us” and the “Company” in this prospectus, we mean Mustang Bio, Inc., unless otherwise specified. When we refer to “you,” we mean the potential holders of the applicable securities.

Solely for convenience, tradenames referred to in this prospectus appear without the ® and ™ symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable owner will not assert its rights, to these tradenames.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary is not complete and does not contain all of the information you should consider in making your investment decision. Before investing in our common stock, you should carefully read the entire prospectus and the documents incorporated by reference herein, including the risks of investing in our securities discussed under the heading “Risk Factors” and “Special Note Regarding Forward-Looking Statements” in this prospectus and under similar captions in documents incorporated by reference into this prospectus. You should also carefully read our financial statements and the exhibits to the registration statement of which this prospectus forms a part. Unless the context otherwise requires, the terms “Mustang” “Mustang Bio” “the Company,” “we,” “us,” “our” and similar references in this prospectus refer to Mustang Bio, Inc., the registrant on the cover page of the registration statement of which this prospectus forms a part.

Our Business

Overview and Product Candidate Development

We are a clinical-stage biopharmaceutical company focused on translating today’s medical breakthroughs into potential cures for difficult-to-treat cancers. We aim to acquire rights to these technologies by licensing or otherwise acquiring an ownership interest in the technologies, funding their research and development and eventually either out-licensing or bringing the technologies to market.

Our pipeline is currently focused in two core areas: CAR T therapies for hematologic malignancies and CAR T therapies for solid tumors. For these therapies we have partnered with world class research institutions, including the City of Hope National Medical Center, Fred Hutchinson Cancer Center, and Nationwide Children’s Hospital.

Corporate Information

We are a majority-controlled subsidiary of Fortress Biotech, Inc. We were incorporated under the laws of the State of Delaware on March 13, 2015. Our principal executive offices are located at 95 Sawyer Road, Suite 110, Waltham, Massachusetts 02453, and our telephone number is 781-652-4500. We maintain a website on the Internet at www.mustangbio.com and our e-mail address is info@mustangbio.com. Information on our website, or any other website, is not incorporated by reference in this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Implications of Being a Smaller Reporting Company

We are a “smaller reporting company” as defined in the Securities Exchange Act of 1934, as amended (the “Exchange Act”). We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as (i) the market value of our voting and non-voting common stock held by non-affiliates is less than \$250 million measured on the last business day of our second fiscal quarter or (ii) our annual revenue is less than \$100 million during the most recently completed fiscal year and the market value of our voting and non-voting common stock held by non-affiliates is less than \$700 million measured on the last business day of our second fiscal quarter. Specifically, as a smaller reporting company, we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Reports on Form 10-K and have reduced disclosure obligations regarding executive compensation, and if we are a smaller reporting company with less than \$100 million in annual revenue, we would not be required to obtain an attestation report on internal control over financial reporting issued by our independent registered public accounting firm.

THE OFFERING

Issuance of Common Stock Underlying the Warrants	Up to 6,697,889 shares of common stock
Use of proceeds:	We will receive proceeds from our issuances of common stock upon any cash exercise of the Warrants. However, we are unable to predict the timing or amount of Warrants exercised. If all of the Warrants are exercised for cash (meaning we issue the maximum possible number of shares of common stock upon exercise of the Warrants), we will receive gross cash proceeds of approximately \$16.6 million. Any proceeds received from the exercise of the Warrants will be used for working capital and other general corporate purposes. See “ <i>Use of Proceeds</i> ” on page 11.
Risk factors	An investment in our securities involves a high degree of risk and could result in a loss of your entire investment. Prior to making an investment decision, you should carefully consider all of the information in this prospectus and, in particular, you should evaluate the risk factors set forth under the caption “ <i>Risk Factors</i> ” on page 8, and the other information included and incorporated by reference in this prospectus.
Nasdaq Capital Market symbol	Our common stock is listed on the Nasdaq Capital Market under the symbol “MBIO”.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before deciding whether to purchase our securities, including the shares of common stock offered by this prospectus, you should carefully consider the risks described under “Risk Factors” in our [Annual Report on Form 10-K for the fiscal year ended December 31, 2024](#) any subsequent Quarterly Report on Form 10-Q and our other filings with the SEC, all of which are incorporated by reference herein. The occurrence of any of these risk factors could materially and adversely affect our business, financial condition, results of operations and prospects. In such an event, the market price of our securities could decline and you may lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. Some of the statements in the following risk factors constitute forward-looking statements. Please see the section titled “Special Note Regarding Forward-Looking Statements.”

A resale of a substantial number of shares of common stock issued upon exercise of the Warrants by the holders of the Warrants could cause the price of our common stock to decline.

The shares of common stock underlying the Warrants represent a large percentage of the outstanding shares of our common stock, and, following the effectiveness of the post-effective amendment to the registration statement of which this prospectus forms a part and the issuance of shares of common stock underlying the Warrants upon exercise of the Warrants, such shares of common stock may be resold by such holders in the public market without restriction. If the holders of such shares sell, or the market perceives that our stockholders intend to sell for various reasons, substantial amounts of the shares of common stock underlying the Warrants in the public market, the price of our common stock may decline. Additionally, such conditions may make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any documents we incorporate by reference may contain forward-looking statements about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical or current facts included in this prospectus and the documents that we incorporate by reference are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “design,” “due,” “estimate,” “expect,” “goal,” “intend,” “may,” “objective,” “plan,” “positioned,” “potential,” “predict,” “seek,” “should,” “target,” “will,” “would” and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. In addition, statements that “we believe” or similar statements reflect our beliefs and opinions on the relevant subject. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those expressed in, or implied by these, forward-looking statements and therefore, you should not unduly rely on such statements, including, but not limited to:

- expected losses;
- expectations for increases or decreases in expenses;
- the substantial doubt expressed about our ability to continue as a going concern;
- expectations for future capital requirements;
- expectations for generating revenue or becoming profitable on a sustained basis;
- expectations for the clinical and pre-clinical development, manufacturing, regulatory approval, and commercialization of our pharmaceutical product candidates or any other products we may acquire or in-license;
- use of clinical research centers and other contractors;
- expectations for incurring capital expenditures to expand our research and development and manufacturing capabilities;
- expectations or ability to enter into marketing and other partnership agreements;

- expectations or ability to enter into product acquisition and in-licensing transactions;
- expectations or ability to build our own commercial infrastructure to manufacture, market and sell our product candidates, if approved;
- expectations for the acceptance of our product candidates, if approved, by doctors, patients or payors;
- ability to compete against other companies and research institutions;
- ability to secure adequate protection for our intellectual property;
- ability to attract and retain key personnel;
- ability to obtain reimbursement for our products, if approved;
- estimates of the sufficiency of our existing cash and cash equivalents and investments to finance our operating requirements, including expectations regarding the value and liquidity of our investments; and
- stock price and the volatility of the equity markets, including as a result of economic and geopolitical conditions.

We have based these forward-looking statements largely on our current expectations, estimates, forecasts, and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy, and financial needs. In light of the significant uncertainties in these forward-looking statements, you should not rely upon forward-looking statements as predictions of future events. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we cannot guarantee that the future results, levels of activity, performance, or events and circumstances reflected in the forward-looking statements will be achieved or occur at all. You should refer to the section entitled “*Risk Factors*” in this prospectus and the documents we incorporate by reference for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. Except as required by law, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

You should read this prospectus, the documents incorporated by reference in this prospectus, and the documents filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements by these cautionary statements.

USE OF PROCEEDS

We will receive the exercise price per share for each Warrant exercised for cash. However, we are unable to predict the timing or amount of Warrants exercised. If all of the Warrants are exercised for cash (meaning we issue the maximum possible number of shares of common stock upon exercise of the Warrants), we will receive gross cash proceeds of approximately \$16.6 million. Any proceeds received from the exercise of the Warrants will be used for working capital and other general corporate purposes.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is not complete and may not contain all the information you should consider before investing in our capital stock. This description is summarized from, and qualified in its entirety by reference to, our amended and restated certificate of incorporation, as amended, and our amended and restated bylaws, copies of which are attached as exhibits to the registration statement of which this prospectus forms a part, which are incorporated by reference herein.

Capital Stock

We are authorized to issue 200,000,000 shares of common stock, par value of \$0.0001 per share, of which 1,000,000 shares are designated as Class A common stock, and 2,000,000 of preferred stock, \$0.0001 par value per share, of which 250,000 are designated as Class A Preferred Stock.

Common Stock

The holders of common stock are entitled to one vote per share held.

As of April 3, 2025, there were 2,798,046 shares of our common stock outstanding held by 57 stockholders of record.

The undesignated preferred stock may be issued from time to time in one or more series. Our Board of Directors is authorized to determine or alter the dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions, if any), the redemption price or prices, the liquidation preferences and other designations, powers, preferences and relative, participating, optional or other special rights, if any, and the qualifications, limitations and restrictions granted to or imposed upon any wholly unissued series of preferred stock, and to fix the number of shares of any series of preferred stock (but not below the number of shares of any such series then outstanding).

Class A Common Stock

The holders of Class A common stock are entitled to the number of votes equal to the number of whole shares of common stock into which the shares of Class A Common Shares held by such holder are convertible, subject to certain adjustments inclusive of the impacts of any stock splits. For a period of ten years from issuance, the holders of the Class A common stock have the right to appoint one member of the Board of Directors of Mustang. To date, the holders of Class A common stock have not yet appointed such director.

Class A Preferred Stock

The Class A Preferred Stock is identical to undesignated common stock other than as to voting rights, conversion rights, and the PIK dividend right.

The holders of the outstanding shares of Class A Preferred Stock receive on each January 1 (each a “PIK Dividend Payment Date”) after the original issuance date of the Class A Preferred Stock until the date all outstanding Class A Preferred Stock is converted into common stock or redeemed (and the purchase price is paid in full), pro rata per share dividends paid in additional fully paid and non-assessable shares of common stock such that the aggregate number of shares of common stock issued pursuant to such PIK dividend is equal to 2.5% of the Corporation’s fully-diluted outstanding capitalization on the date that is one business day prior to any PIK Dividend Payment Date (“PIK Record Date”). In the event the Class A Preferred Stock converts into common stock, the holders shall receive all PIK dividends accrued through the date of such conversion. No dividend or other distribution shall be paid, or declared and set apart for payment (other than dividends payable solely in capital stock on the capital stock) on the shares of common stock until all PIK dividends on the Class A Preferred Stock shall have been paid or declared and set apart for payment. All dividends are non-cumulative.

On any matter presented to the stockholders for their action or consideration at any meeting of stockholders (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Class A Preferred Stock shall be entitled to cast for each share of Class A Preferred Stock held by such holder as of the record date for determining stockholders entitled to vote on such matter, the number of votes that is equal to one and one-tenth (1.1) times a fraction, the numerator of which is the sum of (A) the number of shares of outstanding common stock and (B) the whole shares of common stock in to which the shares of outstanding Class A common stock and the Class A Preferred Stock are convertible, and the denominator of which is number of shares of outstanding Class A Preferred Stock. Thus, the Class A Preferred Stock will at all times constitute a voting majority.

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Each share of Class A Preferred Stock is convertible, at the option of the holder, into one fully paid and nonassessable share of common stock, subject to certain adjustments inclusive of the impacts of any stock splits. If we, at any time effects a subdivision or combination of our outstanding common stock (by any stock split, stock dividend, recapitalization, reverse stock split or otherwise), the applicable conversion ratio in effect immediately before that subdivision is proportionately decreased or increased, as applicable, so that the number of shares of common stock issuable on conversion of each share of Class A Preferred Stock shall be increased or decreased, as applicable, in proportion to such increase or decrease in the aggregate number of shares of common stock outstanding. Additionally, if any reorganization, recapitalization, reclassification, consolidation or merger involving the Company occurs in which the common stock (but not the Class A Preferred Stock) is converted into or exchanged for securities, cash or other property, then each share of Class A Preferred Stock becomes convertible into the kind and amount of securities, cash or other property which a holder of the number of shares of our common stock issuable upon conversion of one share of the Class A Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction.

Additional Features

Other features of our capital stock include:

- *Dividend Rights.* The holders of outstanding shares of our common stock, including Class A common stock, are entitled to receive dividends out of funds legally available at the times and in the amounts that our Board of Directors may determine. All dividends are non-cumulative.
- *Voting Rights.* The holders of our common stock are entitled to one vote for each share of common stock held on all matters submitted to a vote of the stockholders, including the election of directors. Our certificate of incorporation and bylaws do not provide for cumulative voting rights.
- *No Preemptive or Similar Rights.* The holders of our common stock have no preemptive, conversion, or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock.
- *Right to Receive Liquidation Distributions.* Upon our liquidation, dissolution, or winding-up, the assets legally available for distribution to our stockholders would be distributable ratably among the holders of our common stock, including Class A common stock, outstanding at that time after payment of other claims of creditors, if any.
- *Fully Paid and Non-Assessable.* All of the outstanding shares of our common stock, including Class A common stock, and the Class A Preferred Stock are duly issued, fully paid and non-assessable.

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PLAN OF DISTRIBUTION AND DETERMINATION OF OFFERING PRICE

We will deliver shares of our common stock offered hereby upon the exercise of the Warrants we issued in connection with our “best efforts” public offering that closed on February 10, 2025. The form of Warrant contains instructions for exercise. In order to exercise any of the Warrants, the holder must deliver to us the information required in the applicable form of Warrant, along with payment for the exercise price of the shares to be purchased. We will then deliver shares of our common stock in the manner described in the applicable form of Warrant, copies of which are filed as exhibits to the registration statement of which this prospectus is a part.

Each Warrant is exercisable for one share of our common stock. The Pre-Funded Warrants have an exercise price of \$0.0001 per share. The Series C-1 Warrants and C-2 Warrants have an exercise price of \$3.01 per share. The Placement Agent Warrants have an exercise price of \$3.7625 per share.

Upon compliance by any holder with the instructions for exercise contained in the applicable form of Warrant, we will, within the time allotted by the applicable form of Warrant, issue to the holder shares of common stock, free of a restrictive legend. Shares of common stock that are held by affiliates will be issued free of legend but will be deemed “control securities” (as such term is defined in Rule 144 under the Securities Act).

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LEGAL MATTERS

The validity of the securities offered in this prospectus has been passed upon for us by Troutman Pepper Locke LLP, Charlotte, North Carolina.

EXPERTS

Our financial statements as of December 31, 2024 and 2023, and for each of the years in the two-year period then ended, have been incorporated by reference herein in reliance upon the report of KPMG LLP, independent registered public accounting firm, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the December 31, 2024 financial statements contains an explanatory paragraph that states the Company's expectation to generate operating losses and negative operating cash flows in the future, and the need for additional funding to support its planned operations raise substantial doubt about its ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of that uncertainty.

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INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The following documents filed with the SEC are incorporated by reference into this prospectus:

- [our Annual Report on Form 10-K for the year ended December 31, 2024, filed with the SEC on March 28, 2025 \(the "Annual Report"\)](#);
- our Current Reports on Form 8-K, filed with the SEC on [January 2, 2025](#), [January 10, 2025](#), [January 17, 2025](#), [February 11, 2025](#), [February 13, 2025](#), [February 21, 2025](#), [February 27, 2025](#) and [March 5, 2025](#) (other than any portions deemed furnished and not filed); and
- the description of our common stock contained in our registration statement on [Form 8-A, filed with the SEC on August 21, 2017](#), including any amendments thereto or reports filed for the purposes of updating this description, including Exhibit 4.2 to the Annual Report.

We also incorporate by reference all documents we file pursuant to Section 13(a), 13(c), 14 or 15 of the Exchange Act (other than any portions of filings that are furnished rather than filed pursuant to Items 2.02 and 7.01 of a Current Report on Form 8-K) after the date of the initial registration statement of which this prospectus is a part and prior to effectiveness of such registration statement. All documents we file in the future pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of the offering are also incorporated by reference and are an important part of this prospectus.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

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WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus is part of a registration statement we filed with the SEC. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You should rely only on the information contained in this prospectus or incorporated by reference into this prospectus. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any jurisdiction where the offer is not permitted. You should assume that the information contained in this prospectus, or any document incorporated by reference in this prospectus, is accurate only as of the date of those respective documents, regardless of the time of delivery of this prospectus or any sale of our securities.

We are subject to the informational requirements of the Exchange Act and in accordance therewith we file annual, quarterly, and other reports, proxy statements and other information with the Commission under the Exchange Act. Such reports, proxy statements and other information, including the Registration Statement, and exhibits and schedules thereto, are available to the public through the Commission's website at www.sec.gov.

We make available free of charge on or through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we electronically file such material with or otherwise furnish it to the Commission. The registration statement and the documents referred to under "*Incorporation of Certain Information by Reference*" are also available on our website www.mustangbio.com.

We have not incorporated by reference into this prospectus the information on, or that may be accessed through, our website is not part of, and you should not consider it to be a part of this prospectus.

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6,697,889 Shares of Common Stock Issuable Upon Exercise of Previously Issued Warrants



MUSTANG BIO, INC.

PROSPECTUS

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table indicates the expenses to be incurred in connection with the offering described in this registration statement, other than Placement Agent fees, all of which will be paid by us. All amounts are estimated except the SEC registration fee and the Financial Industry Regulatory Authority, Inc. (“FINRA”) filing fee.

Item	Amount
SEC registration fee	\$ 3,766
FINRA filing fee	5,390
Legal fees and expenses	\$ 150,000
Accounting fees and expenses	\$ 125,000
Miscellaneous expenses	5,844
Total	\$ 290,000

Item 14. Indemnification of Directors and Officers.

Under the General Corporation Law of the State of Delaware (the “DGCL”), a corporation may include provisions in its certificate of incorporation that will relieve its directors of monetary liability for breaches of their fiduciary duty to the corporation, except under certain circumstances, including a breach of the director’s duty of loyalty, acts or omissions of the director not in good faith or which involve intentional misconduct or a knowing violation of law, the approval of an improper payment of a dividend or an improper purchase by the corporation of stock or any transaction from which the director derived an improper personal benefit. Our amended and restated Certificate of Incorporation, as amended, eliminates the personal liability of directors to us or our stockholders for monetary damages for breach of fiduciary duty as a director with certain limited exceptions set forth in the DGCL.

Section 145 of the DGCL grants to corporations the power to indemnify each officer and director against liabilities and expenses incurred by reason of the fact that he or she is or was an officer or director of the corporation if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. Our amended and restated certificate of incorporation, as amended, and amended and restated bylaws, as amended, provide for indemnification of each of our officers and directors to the fullest extent permitted by the DGCL. Section 145 of the DGCL also empowers corporations to purchase and maintain insurance on behalf of any person who is or was an officer or director of the corporation against liability asserted against or incurred by him in any such capacity, whether or not the corporation would have the power to indemnify such officer or director against such liability under the provisions of Section 145 of the DGCL.

Item 15. Recent Sales of Unregistered Securities.

The following list sets forth information as to all unregistered securities we have sold since January 1, 2022 through the date of the prospectus that is a part of this registration statement:

October 2023 Private Placement

On October 26, 2023, we entered into a Securities Purchase Agreement (the “Purchase Agreement”) with an institutional accredited investor, for a private placement offering of warrants to purchase 51,764 shares of common stock. Pursuant to the Purchase Agreement, we agreed to issue and sell the warrants at an offering price of \$5.25 per warrant to purchase one share of common stock. The warrants have an exercise price of \$79.00 per share (subject to adjustment as set forth in the warrants), were exercisable immediately upon issuance and will expire five and one-half (5.5) years thereafter. The warrants contain standard anti-dilution adjustments to the exercise price including for share splits, share dividend, rights offerings and pro rata distributions. This private placement closed on October 30, 2023, concurrently with an offering to the same institutional accredited investor that was registered under the Securities Act. The gross proceeds to us from the private placement, before deducting placement agent fees and other estimated offering expenses payable by the Company, were approximately \$0.32 million. H.C. Wainwright & Co., LLC (“Wainwright”) acted as the exclusive placement agent in connection with the private placement under an engagement, between the Company and Wainwright. Pursuant to the Engagement Letter, Wainwright was paid a cash fee equal to 7.0% of the gross proceeds received by us in the Offerings, a management fee equal to 1.0% of the gross proceeds of the Offering, \$75,000 for non-accountable expenses and a clearing fee of \$15,950. In addition, under the terms of the Engagement Letter, we issued to Wainwright (or its designees) warrants to purchase up to 3,104 shares of Common Stock (the “Wainwright Warrants”). The Wainwright Warrants have substantially the same terms as the Warrants, except that the Wainwright Warrants will expire five (5) years from the commencement of the sales of the Offerings and have an exercise price of \$106.25 per share (subject to customary adjustment as set forth in the Wainwright Warrants). The 2023 Warrants were offered and sold in reliance on the exemption from registration provided by Section 4(a)(2) of the Securities Act. The investor also represented that it qualified as an “accredited investor” within the meaning of Rule 501 of Regulation D.

June 2024 Private Placement

On June 19, 2024, we entered into a purchase agreement (the “June 2024 Purchase Agreement”) with an institutional accredited investor, for the issuance and sale of warrants (the “June 2024 Warrants”) to purchase up to 122,600 shares of our common stock. Pursuant to the June 2024 Purchase Agreement, we agreed to issue and sell the June 2024 Warrants at an offering price of \$20.50 per warrant to purchase one share of common stock. The June 2024 Warrants have an exercise price of \$20.50 per share (subject to adjustment as set forth in the June 2024 Warrants), were exercisable immediately upon issuance and will expire five and one-half (5.5) years from the date on which the June 2024 Warrants become exercisable. The June 2024 Warrants contain standard anti-dilution adjustments to the exercise price including for share splits, share dividend, rights offerings and pro rata distributions. This offering closed on June 21, 2024, concurrently with a registered direct offering with the same institutional accredited investor that was registered under the Securities Act. The gross proceeds to us from the private placement, before deducting placement agent fees and other estimated offering expenses payable by us, were approximately \$2.51 million. Wainwright acted as the placement agent in connection with the private placement pursuant to an engagement agreement, between us and Wainwright. Wainwright was paid a cash fee equal to 7.0% of the gross proceeds received us in the offerings, a management fee equal to 1.0% of the gross proceeds of the offerings, \$75,000 for non-accountable expenses and a clearing fee of \$15,950. In addition, under the terms of the engagement letter with Wainwright, we issued to Wainwright (or its designees) warrants to purchase up to 7,355 shares of our common stock. The warrants issued to Wainwright have substantially the same terms as the June 2024 Warrants, except that the Wainwright warrants will expire five (5) years from the commencement of the sales of the offerings and have an exercise price of \$25.625 per share (subject to customary adjustment as set forth in the Wainwright warrants). The June 2024 Warrants were offered and sold in reliance on the exemption from

registration provided by Section 4(a)(2) of the Securities Act. The investor also represented that it qualified as an “accredited investor” within the meaning of Rule 501 of Regulation D.

October 2024 Private Placement

On October 24, 2024, we entered into an inducement offer letter agreement (the “Inducement Letter”) with an institutional accredited investor which held certain outstanding (i) Series A-1 Warrants to purchase up to an aggregate of 337,552 shares of common stock, (ii) Series A-2 Warrants to purchase up to an aggregate of 337,552 shares of common stock, and (iii) Series A-3 Warrants to purchase up to an aggregate of 337,552 shares of common stock, originally issued to the Investor on May 2, 2024 (collectively, the “May 2024 Warrants”). The May 2024 Warrants had an exercise price of \$11.85 per share. Pursuant to the Inducement Letter, the Investor agreed to exercise in full, for cash, the Series A-3 Warrants (the “Existing Warrants”) at the exercise price of \$11.85 per share in consideration for our agreement to issue in a private placement (x) new Series B-1 Warrants to purchase 337,552 shares of common stock and (y) new Series B-2 Warrants to purchase 337,552 shares of common stock (collectively, the “New Warrants”). In addition, we issued to Wainwright or its designees placement agent warrants to purchase 20,251 shares of common stock. The placement agent warrants have the same terms as the Series B-1 Warrants, except that the placement agent warrants have an exercise price equal to \$14.815 per share. The transactions contemplated by the Inducement Letter closed on October 25, 2024. We received aggregate gross proceeds of approximately \$4 million from the exercise of the Existing Warrants by the investor, before deducting placement agent fees and other expenses payable by us. The New Warrants were offered and sold in reliance on the exemption from registration provided by Section 4(a)(2) of the Securities Act. The investor also represented that it qualified as an “accredited investor” within the meaning of Rule 501 of Regulation D.

Item 16. Exhibits and financial statement schedules.

(a) Exhibits.

The exhibits listed below are filed as part of this registration statement.

The exhibits to the Registration Statement are listed in the Exhibit Index attached hereto and incorporated by reference herein.

Exhibit No.	Description	Form	File Number	Date	Exhibit No.	Filed Herewith
1.1	At Market Issuance Sales Agreement, dated July 27, 2018, between the Company, B. Riley FBR, Inc., Cantor Fitzgerald & Co., National Securities Corporation, and Oppenheimer & Co. Inc.	8-K	001-38191	July 27, 2018	1.1	
1.2	Amendment No. 1 to At Market Issuance Sales Agreement, dated July 20, 2020, between the Company, B. Riley FBR, Inc., Cantor Fitzgerald & Co., National Securities Corporation and Oppenheimer & Co. Inc.	8-K	001-38191	July 24, 2020	1.2	
1.3	Amendment No. 2 to At Market Issuance Sales Agreement, dated December 31, 2020, between the Company, B. Riley Securities, Inc., Cantor Fitzgerald & Co., National Securities Corporation, Oppenheimer & Co. Inc. and H.C. Wainwright & Co., LLC, (incorporated by reference to the Exhibit 1.1 of the Registrant’s Current Report on Form 8-K (file No. 001-38191) filed with the SEC on December 31, 2020).	8-K	001-38191	December 31, 2020	1.1	
1.4	Amendment No. 3 to At Market Issuance Sales Agreement, dated April 14, 2023, between the Registrant B. Riley Securities, Inc., Cantor Fitzgerald & Co. and H.C. Wainwright & Co., LLC	8-K	001-38191	April 20, 2023	1.1	
1.5	At the Market Offering Agreement, dated May 31, 2024, by and between the Company and H.C. Wainwright & Co., LLC	8-K	001-38191	June 6, 2024	1.2	
2.1#	Asset Purchase Agreement, dated May 18, 2023, between the Company and uBriGene (Boston) Biosciences, Inc.	8-K	001-38191	May 22, 2023	1.1	
2.2	First Amendment to Asset Purchase Agreement, dated June 29, 2023, between the Company and uBriGene (Boston) Biosciences, Inc.	8-K	001-38191	June 30, 2023	2.2	
2.3	Second Amendment to Asset Purchase Agreement, dated July 28, 2023, between the Company and uBriGene (Boston) Biosciences, Inc.	8-K	001-38191	July 31, 2023	2.3	
3.1	Amended and Restated Certificate of Incorporation of Mustang Bio, Inc. (formerly Mustang Therapeutics, Inc.), dated July 26, 2016	10-12G	000-5568	July 28, 2016	3.1	
3.2	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Mustang Bio, Inc., dated June 14, 2018	10-Q	001-38191	August 13, 2018	3.1	
3.3	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Mustang Bio, Inc., dated September 30, 2019	8-K	001-38191	September 30, 2019	3.1	
3.4	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Mustang Bio, Inc., dated December 4, 2020	8-K	001-38191	December 4, 2020	3.1	
3.5	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Mustang Bio, Inc., dated June 17, 2021	8-K	001-38191	June 22, 2021	3.1	

3.6	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Mustang Bio, Inc., dated July 5, 2022	8-K	001-38191	July 7, 2022	3.1	
3.7	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Mustang Bio, Inc., dated April 3, 2023	8-K	001-38191	April 3, 2023	3.1	
3.8	Amended and Restated Bylaws of Mustang Bio, Inc.	8-K	001-38191	April 3, 2023	3.2	
4.1	Specimen certificates evidencing shares of common stock, Class A common stock and Class A preferred stock	10-12G	000-5568	July 28, 2016	4.1	
4.2	Form of Warrant Agreement	10-12G	000-5568	July 28, 2016	4.2	
4.3	Common Stock Warrant issued by Mustang Bio, Inc. to NSC Biotech Venture Fund I, LLC, dated July 5, 2016	10-12G	000-5568	July 28, 2016	10.5	
4.4	Warrant to Purchase Common Stock issued to Runway Growth Finance Corp., dated March 4, 2022	8-K	001-38191	March 8, 2022	4.1	

4.5	Form of October Pre-funded Warrant	8-K	001-38191	October 30, 2023	4.1
4.6	Form of October Warrant	8-K	001-38191	October 30, 2023	4.2
4.7	Form of October Wainwright Warrant	8-K	001-38191	October 30, 2023	4.3
4.8	Form of May 2024 Pre-Funded Warrant	8-K	001-38191	May 2, 2024	4.1
4.9	Form of May 2024 Series A-1, A-2, and A-3 Warrant	8-K	001-38191	May 2, 2024	4.2
4.10	Form of May 2024 Placement Agent Warrant	8-K	001-38191	May 2, 2024	4.3
4.11	Form of June 2024 Pre-funded Warrant	8-K	001-38191	June 24, 2024	4.1
4.12	Form of June 2024 Warrant	8-K	001-38191	June 24, 2024	4.2
4.13	Form of June 2024 Wainwright Warrant	8-K	001-38191	June 24, 2024	4.3
4.14	Form of Series B-1 Warrant	8-K	001-38191	October 25, 2024	4.1
4.15	Form of Series B-2 Warrant	8-K	001-38191	October 25, 2024	4.2
4.16	Form of October 2024 Wainwright Warrant	8-K	001-38191	October 25, 2024	4.3
4.17	Form of Series C-1 and C-2 Warrant	8-K	001-38191	February 11, 2025	4.2
4.18	Form of Pre-Funded Warrant	8-K	001-38191	February 11, 2025	4.1
4.19	Form of Placement Agent Warrant	8-K	001-38191	February 11, 2025	4.3
5.1	Opinion of Troutman Pepper Locke LLP	S-1/A	333-284299	February 5, 2025	5.1
10.1	Second Amended and Restated Founders Agreement between Fortress Biotech, Inc. and Mustang Bio, Inc., dated July 26, 2016	10-12G	000-55668	July 28, 2016	10.1
10.2	Management Services Agreement between Fortress Biotech, Inc. and Mustang Bio, Inc., dated March 13, 2015	10-12G	000-55668	July 28, 2016	10.2
10.3	Future Advance Promissory Note to Fortress Biotech, Inc., dated May 5, 2016	10-12G	000-55668	July 28, 2016	10.3
10.4	Promissory Note to NSC Biotech Venture Fund I, LLC, dated July 5, 2016	10-12G	000-55668	July 28, 2016	10.4
10.5#	License Agreement by and between Mustang Bio, Inc. and City of Hope, dated March 17, 2015	10-12G	000-55668	July 28, 2016	10.6
10.6	Sponsored Research Agreement by and between Mustang Bio, Inc. and City of Hope, dated March 17, 2015	10-12G	000-55668	July 28, 2016	10.7
10.7	Agreement by and between Mustang Bio, Inc. and Chord Advisors, LLC, dated April 8, 2016	10-12G	000-55668	July 28, 2016	10.10

10.8	Board Advisory Services Agreement by and between Mustang Bio, Inc. and Caribe BioAdvisors, LLC	10-K	000-55668	March 31, 2017	10.11
10.9#	Exclusive License Agreement by and between Mustang Bio, Inc. and The Regents of the University of California, dated March 17, 2017	10-Q	000-55668	August 14, 2017	10.4
10.10#	Exclusive License Agreement (IV/ICV) by and between Mustang Bio, Inc. and City of Hope, dated February 17, 2017	10-Q	000-55668	August 14, 2017	10.5
10.11#	Amended and Restated Exclusive License Agreement (CD123) by and between Mustang Bio, Inc. and City of Hope, dated February 17, 2017	10-K	001-38191	March 31, 2017	10.14
10.12#	Amended and Restated Exclusive License Agreement (IL13Ra2) by and between Mustang Bio, Inc. and City of Hope, dated February 17, 2017	10-K	000-55668	March 31, 2017	10.15
10.13#	Amended and Restated Exclusive License Agreement (Spacer) by and between Mustang Bio, Inc. and City of Hope, dated February 17, 2017	10-K	000-55668	March 31, 2017	10.16
10.14†	Employment Agreement between Manuel Litchman and Mustang Bio, Inc., effective as of April 24, 2017	8-K	000-55668	April 24, 2017	10.1
10.15#	License Agreement (CSI) by and between Mustang Bio, Inc. and City of Hope, dated May 31, 2017	10-Q/A	001-38191	November 14, 2017	10.1
10.16#	License Agreement (PSCA) by and between Mustang Bio, Inc. and City of Hope, dated May 31, 2017	10-Q/A	001-38191	November 14, 2017	10.2
10.17#	License Agreement (HER2) by and between Mustang Bio, Inc. and City of Hope, dated May 31, 2017	10-Q/A	001-38191	November 14, 2017	10.3
10.18	Lease Agreement by and between Mustang Bio, Inc. and WCS - 377 Plantation Street, Inc., dated October 27, 2017	10-Q	001-38191	November 14, 2017	10.1
10.19	Sublease Agreement by and between Mustang Bio, Inc., and The Paul Reverse Life Insurance Company, dated June 14, 2022	10-K	001-38191	March 30, 2023	10.22
10.20	First Amendment to Sublease Agreement by and between Mustang Bio, Inc. and The Paul Reverse Life Insurance Company, dated October 25, 2022	10-K	001-38191	March 30, 2023	10.23
10.21	Second Amendment to Sublease, dated April 27, 2023, between the Company and The Paul Reverse Life Insurance Company	8-K	001-38191	July 20, 2023	10.2
10.22	Third Amendment to Sublease, dated June 15, 2023, between the Company and The Paul Reverse Life Insurance Company	8-K	001-38191	July 20, 2023	10.3
10.23†	Mustang Bio, Inc. 2016 Incentive Plan†	10-12G	000-55668	July 28, 2016	10.8
10.24†	Mustang Bio, Inc. Non-Employee Directors Compensation Plan †	10-12G	000-55668	July 28, 2016	10.9
10.25†	Amendment to Mustang Bio, Inc. 2016 Incentive Plan	DEF 14A	001-38191	April 30, 2018	N/A
10.26†	Second Amendment to the Mustang Bio, Inc. 2016 Equity Incentive Plan, dated June 17, 2021 †	8-K	001-38191	June 22, 2021	10.1

10.27†	Third Amendment to Mustang Bio, Inc. 2016 Equity Incentive Plan, dated June 21, 2022 †	8-K	001-38191	June 24, 2022	10.1
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10.28†	Form of Option Agreement under the Mustang Bio, Inc. 2016 Incentive Plan	10-K	001-3891	March 11, 2024	10.28
10.29†	Form of Restricted Stock Unit Agreement under the Mustang Bio, Inc. 2016 Incentive Plan	10-K	001-3891	March 11, 2024	10.29
10.30†	Form of Director Stock Award Agreement under the Mustang Bio, Inc. Non-Employee Directors Compensation Plan	10-K	001-3891	March 11, 2024	10.30
10.31†	Mustang Bio, Inc. 2019 Employee Stock Purchase Plan †	10-Q	001-3891	August 9, 2019	10.1
10.32†	Amendment to the Mustang Bio, Inc. 2019 Employee Stock Purchase Plan, dated June 17, 2021 †	8-K	001-38191	June 22, 2021	10.2
10.33†	Amendment No. 2 to the Mustang Bio, Inc. 2019 Employee Stock Purchase Plan, dated June 21, 2023 †	8-K	001-38191	June 21, 2023	10.1
10.34	Loan and Security Agreement by and between Mustang Bio, Inc., the Borrower, the Lenders, and Runway Growth Finance Corp. (as agent), dated March 4, 2022	8-K	001-38191	March 8, 2022	99.1
10.35	First Amendment to Loan and Security Agreement by and between Mustang Bio, Inc., the Borrower, the Lenders and Runway Growth Finance Corp. (as agent), dated December 7, 2022	8-K	001-38191	December 13, 2022	10.1
10.36	Consulting Agreement by and between Mustang Bio, Inc. and Danforth Advisors, LLC dated March 17, 2022	8-K	001-38191	April 22, 2022	99.1
10.37	Manufacturing Services Agreement, dated July 28, 2023, between the Company and uBriGene (Boston) Biosciences, Inc.	8-K	001-38191	July 31, 2023	10.1
10.38	Sub-Contracting Manufacturing Services Agreement, dated July 28, 2023, between the Company and uBriGene (Boston) Biosciences, Inc.	8-K	001-38191	July 31, 2023	10.2
10.39	Form of Securities Purchase Agreement, dated October 26, 2023, by and between the Company and the purchaser party thereto	8-K	001-38191	October 30, 2023	10.1
10.40	Form of Securities Purchase Agreement, dated April 29, 2024, by and between the Company and the purchaser party thereto	8-K	001-38191	May 2, 2024	10.1
10.41	Warrant Agreement Amendment, dated April 29, 2024, by and between the Company and the holder thereto	8-K	001-38191	May 2, 2024	10.2
10.42	Form of Securities Purchase Agreement, dated June 19, 2024, by and between the Company and the purchaser party thereto	8-K	001-38191	June 24, 2024	10.1
10.43#	Asset Purchase Agreement, dated June 27, 2024, by and between the Company and uBriGene (Boston) Biosciences, Inc.	8-K	001-38191	July 3, 2024	1.1
10.44	Form of Investor Inducement Agreement	8-K	001-38191	October 25, 2024	10.1
10.45†	Form of Indemnification Agreement	8-K	001-38191	October 25, 2024	10.2
10.46	Form of Securities Purchase Agreement	8-K	001-38191	February 11, 2025	10.1

10.47	Bill of Sale and Surrender Agreement, dated January 31, 2025, by and between Mustang Bio, Inc. and AbbVie Bioresearch Center Inc.	8-K	001-38191	February 27, 2025	2.1
10.48	First Amendment to Lease Agreement, dated February 7, 2025, by and between Mustang Bio, Inc. and WCS - 377 Plantation Street, Inc.	8-K	001-38191	February 27, 2025	10.1
23.1	Consent of Independent Registered Public Accounting Firm, KPMG LLP				X
23.2	Consent of Troutman Pepper Locke LLP (included in Exhibit 5.1)	S-1/A	333-284299	February 5, 2025	5.1
24.1	Power of Attorney	S-1	333-284299	January 15, 2025	24.1
107	Filing Fee Table	S-1/A	333-284299	February 5, 2025	107

Portions of this Exhibit have been omitted pursuant to Item 601(b)(1)(iv) of Regulation S-K.

† Management contract or compensatory plan.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the U.S. Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

- (5) That for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (7) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (8) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to any charter provision, by law or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Waltham, Commonwealth of Massachusetts, on April 4, 2025.

Mustang Bio, Inc.

By: /s/ Manuel Litchman, M.D.
Manuel Litchman, M.D.
Chief Executive Officer, Interim Chief Financial
Officer and President

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Manuel Litchman, M.D.</u> Manuel Litchman, M.D.	President, Chief Executive Officer, Interim Chief Financial Officer and Director (Principal Executive Officer and Principal Financial and Accounting Officer)	April 4, 2025
<u>*</u> Michael S. Weiss	Chairman of the Board of Directors and Executive Chairman	April 4, 2025
<u>*</u> Adam Chill	Director	April 4, 2025
<u>*</u> Neil Herskowitz	Director	April 4, 2025
<u>*</u>		

<div>David Jin</div>	Director	April 4, 2025
<div>*</div> <div>Lindsay A. Rosenwald, M.D.</div>	Director	April 4, 2025
<div>*</div> <div>Michael Zelefsky, M.D.</div>	Director	April 4, 2025
<div>*By: /s/ Manuel Litchman, M.D.</div> <div>Manuel Litchman, M.D.</div> <div>Attorney-in-fact</div>		



KPMG LLP
Two Financial Center
60 South Street
Boston, MA 02111

Consent of Independent Registered Public Accounting Firm

We consent to the use of our report dated March 28, 2025, with respect to the financial statements of Mustang Bio, Inc., incorporated herein by reference, and to the reference to our firm under the heading "Experts" in the prospectus.

KPMG LLP

Boston, Massachusetts
April 4, 2025
