

Prospectus Supplement dated June 19, 2024
(To Prospectus dated June 12, 2024)



MUSTANG BIO, INC.

This prospectus supplement supplements and amends certain information contained in the prospectus dated June 12, 2024 (the “ATM Prospectus”), relating to the offer and sale of shares of our common stock, par value \$0.0001 per share (the “common stock”) through H.C. Wainwright & Co., LLC (“Wainwright”), as sales agent, in “at the market offerings” as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, pursuant to the At the Market Offering Agreement with Wainwright dated as of May 31, 2024 (the “ATM Agreement”).

Our common stock is traded on The Nasdaq Capital Market under the symbol “MBIO”. The last sale price of our common stock on June 18, 2024 was \$0.85 per share on The Nasdaq Capital Market. Under the ATM Prospectus, we initially registered up to \$5,600,000 of our common stock for offer and sale pursuant to the ATM Agreement. From June 12, 2024 through the date of this prospectus supplement, we have not sold any shares of common stock under the ATM Prospectus.

The purpose of this prospectus supplement is to suspend the ATM Agreement and to terminate the continuous offering by us under the ATM Prospectus effective on June 19, 2024. We will not make any sales of our common stock pursuant to the ATM Agreement unless and until a new prospectus supplement is filed with the Securities and Exchange Commission; however, the ATM Agreement remains in full force and effect.

The date of this prospectus supplement is June 19, 2024.
