

PROSPECTUS SUPPLEMENT No. 1
(To the Prospectus dated August 23, 2023 and
the Prospectus Supplement, dated September 1, 2023)

Up to \$7,000,000

Common Stock



MAIA Biotechnology, Inc.

This prospectus supplement (this “Supplement”) amends and supplements the prospectus supplement dated September 1, 2023 (the “Original Prospectus Supplement”). This Supplement should be read in conjunction with the Original Prospectus Supplement and the Prospectus dated August 23, 2023 (the “Original Prospectus”), which was included in our Registration Statement on Form S-3 (File No. 333-273984). This Supplement is qualified in its entirety by reference to the Original Prospectus Supplement and the Original Prospectus, except to the extent that the information herein amends or supersedes the information contained in the Original Prospectus Supplement.

We filed the Original Prospectus Supplement to register the offer and sale of shares of our common stock, par value \$0.0001 per share (the “Common Stock”), from time to time pursuant to the terms of our sales agreement, dated September 1, 2023 (the “Sales Agreement”), with ThinkEquity LLC (the “Agent”), as our sales agent thereunder. In accordance with the terms of the Sales Agreement, we were initially authorized to offer and sell shares of our Common Stock having an aggregate offering price of up to \$7,000,000 from time to time through the Agent. As of the date of this Supplement, we have sold an aggregate of 758,388 shares of our Common Stock through the Agent under the Sales Agreement, resulting in gross proceeds of \$1,667,084.40.

On November 15, 2023, we suspended sales of our Common Stock pursuant to the Sales Agreement and provided notice to the Agent that we are terminating the Sales Agreement and the “at-the-market” offering to which it relates, which termination will be effective 10 days after November 15, 2023 in accordance with the terms of the Sales Agreement. We are filing this Supplement to amend and supplement the information in the Original Prospectus Supplement to report the termination of the Sales Agreement and the “at-the-market” offering to which it relates and to terminate the Original Prospectus Supplement, which termination will be effective 10 days after November 15, 2023 in accordance with the terms of the Sales Agreement.

Our Common Stock is traded on NYSE American under the symbol “MAIA.” On November 14, 2023, the last reported sale price of our Common Stock was \$1.86 per share.

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

ThinkEquity

The date of this prospectus supplement is November 15, 2023.