Prospectus Supplement No. 1 (To prospectus dated April 24, 2023)

2,222,200 Shares of Common Stock



MAIA Biotechnology, Inc.

This prospectus supplements the prospectus dated April 24, 2023 relating to the offering of 2,222,200 shares of common stock, \$0.0001 par value per share of MAIA Biotechnology, Inc. ("MAIA," "we," "our," "us," or the "Company"). You should read this prospectus supplement in conjunction with the prospectus, and this prospectus supplement is qualified by reference to the prospectus, except to the extent that the information contained in this prospectus supplement supersedes the information contained in the prospectus. This prospectus supplement is not complete without, and may not be utilized except in connection with, the prospectus, including any amendments or additional supplements thereto.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 15 of the prospectus. Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus supplement No. 1 is being filed solely to correct an inadvertent error which appeared in the prospectus. The information contained in the fourth bullet point on page 68 of the prospectus under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations – Overview" is deleted in its entirety and replaced with the following:

• In the First Quarter 2020, we filed a provisional patent application for THIO in sequential combination with checkpoint inhibitors, covering all tumor types. The patent has not been allowed to date, but if it is allowed will have an expiration date in 2041, excluding any patent term adjustment or patent extension.

Except as set forth above, the prospectus remains unchanged.

The date of this prospectus supplement is April 26, 2023