

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM S-8

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

MAIA Biotechnology, Inc.
(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

83-1495913
(I.R.S. Employer
Identification No.)

444 West Lake Street, Suite 1700
Chicago, IL 60606
(312) 416-8592
(Address of Principal Executive Offices, Including Zip Code)

MAIA Biotechnology, Inc. 2021 Equity Incentive Plan, as amended
(Full Title of the Plans)

Vlad Vitoc
Chief Executive Officer
c/o MAIA Biotechnology, Inc.
444 West Lake Street, Suite 1700
Chicago, IL 60606
(312) 416-8592
(Name, Address, and Telephone Number, Including Area Code, of Agent For Service)

With a copy to:

Richard A. Friedman, Esq.
Sheppard, Mullin, Richter & Hampton LLP
30 Rockefeller Plaza
New York, NY 10012
Telephone: (212) 653-8700
Facsimile: (212) 653-8701

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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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.

This Registration Statement will become effective upon filing in accordance with Rule 462(a) under the Securities Act.

**PART I
STATEMENT OF INCORPORATION BY REFERENCE**

This Registration Statement on Form S-8, relating to the MAIA Biotechnology 2021 Equity Incentive Plan, as amended (the “2021 Plan”) of MAIA Biotechnology, Inc. (the “Company”), is being filed for the purpose of registering additional securities of the same class as other securities for which Registration Statements on Form S-8 relating to the 2021 Plan have previously been filed and is effective and consists only of those items required by General Instruction E to Form S-8. Accordingly, this Registration Statement incorporates by reference the contents of (i) the Registration Statement on [Form S-8](#), File No. 333-266453, filed with the Securities and Exchange Commission on August 1, 2022, by the Company, relating to the 2021 Plan; (ii) the Registration Statement on [Form S-8](#) File No. 333-273086 filed with the Securities and Exchange Commission on June 30, 2023 relating to the 2021 Plan and (iii) the Registration Statement on [Form S-8](#), File No. 333-278828, filed with the Securities and Exchange Commission on April 19, 2024, by the Company, relating to the 2021 Plan (the “Prior Registration Statements”), except for Items 3 and 8 , which are being updated by this Registration Statement.

This Registration Statement is being filed for the purpose of registering an additional 2,250,000 shares of common stock, par value \$0.0001 per share (“Common Stock”) that were reserved for issuance under the 2021 Plan. In addition, the 2021 Plan provides that shares issued under the 2021 Plan that are forfeit or expire are available for future grants of awards under the 2021 Plan and an additional 225,000 shares of Common Stock are being registered hereunder for that purpose, for an aggregate of 2,475,000 shares of Common Stock being registered hereunder.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of documents by reference.

The following documents filed by the Company with the Securities and Exchange Commission (“SEC”) pursuant to the Securities Act and the Securities Exchange Act of 1934, as amended (the “Exchange Act”), are incorporated herein by reference:

- The Company’s Annual Report on [Form 10-K](#) for the year ended December 31, 2024, filed with the SEC on March 21, 2025;
- The Company’s Current Reports on Form 8-K filed with the SEC on [February 5, 2025](#); [February 6, 2025](#); [February 19, 2025](#); [February 25, 2025](#); [February 27, 2025](#); [March 19, 2025](#); [March 21, 2025](#); and [March 26, 2025](#) (other than any portions thereof deemed furnished and not filed);
- The Company’s Preliminary Proxy Statement on [Schedule 14A](#), filed with the SEC on March 28, 2025;
- The description of the Company’s common stock par value \$0.0001 per share, contained in [Exhibit 4.1](#) to our Annual Report on Form 10-K filed with the SEC on March 21, 2025, including any amendment or report filed for the purpose of updating such description; and
- All other reports and documents filed by the Company pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that relate to such items) subsequent to the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered hereby have been sold or that deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing such reports and documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement herein or in any subsequently filed document that also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not constitute a part of this Registration Statement, except as so modified or superseded.

Item 8. Exhibits.

Exhibit Number	Description of Exhibit
4.1	Amended and Restated Certificate of Incorporation of MAIA Biotechnology, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant’s Current Report on Form 8-K filed on August 1, 2022).
4.2	Amended and Restated Bylaws of MAIA Biotechnology, Inc. (incorporated by reference to Exhibit 3.2 to the Registrant’s Current Report on Form 8-K filed on August 1, 2022).
4.3	Specimen Certificate representing shares of Common Stock. (incorporated by reference to Exhibit 4.1 to the Registrant’s Registration Statement on Form S-1 filed on April 11, 2022).
5.1*	Opinion of Sheppard Mullin Richter & Hampton LLP.
23.1*	Consent of Grant Thornton LLP, Independent Registered Public Accounting Firm.
23.2*	Consent of Sheppard Mullin Richter & Hampton LLP (included in legal opinion filed as Exhibit 5.1).
24.1*	Power of Attorney (included on signature pages).
99.1	MAIA Biotechnology, Inc. 2021 Equity Incentive Plan (incorporated by reference to Exhibit 99.3 to the Registrant’s Registration Statement on Form S-8 filed on August 1, 2022).
99.2	Amendment No. 1 to MAIA Biotechnology, Inc. 2021 Equity Incentive Plan (incorporated by reference to Exhibit 99.2 of the Registrant’s Registration Statement on Form S-8 filed on June 30, 2023).
99.3	Form of Incentive Stock Option Award under 2021 Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to the Registrant’s Quarterly Report on Form 10-Q filed on August 22, 2022).
99.4	Form of Non-qualified Stock Option Award under 2021 Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to the Registrant’s Quarterly Report on Form 10-Q filed on August 22, 2022).
99.5	Form of Director and Consultant Non-qualified Stock Option Award under 2021 Equity Incentive Plan (incorporated by reference to Exhibit 10.6 to the Registrant’s Quarterly Report on Form 10-Q filed on August 22, 2022).
107*	Filing Fee Table.

* Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Chicago, State of Illinois, on the 28th day of March, 2025.

MAIA BIOTECHNOLOGY, INC.

By: /s/ Vlad Vitoc
Vlad Vitoc,
Chief Executive Officer and Chairman

POWER OF ATTORNEY

We, the undersigned officers and directors of MAIA Biotechnology, Inc., hereby severally constitute and appoint Vlad Vitoc and Jeffrey Himmelreich, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution in each of them for him or her and in his or her name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement (or any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Vlad Vitoc</u> Vlad Vitoc	Chief Executive Officer, Director (Principal Executive Officer)	March 28, 2025
<u>/s/ Jeffrey Himmelreich</u> Jeffrey Himmelreich	Head of Finance (Principal Accounting and Financial Officer)	March 28, 2025
<u>/s/ Steven Chaouki</u> Steven Chaouki	Director	March 28, 2025
<u>/s/ Ramiro Guerrero</u> Ramiro Guerrero	Director	March 28, 2025
<u>/s/ Louie Ngar Yee</u> Louie Ngar Yee	Director	March 28, 2025
<u>/s/ Cristian Luput</u> Cristian Luput	Director	March 28, 2025
<u>/s/ Stan V. Smith</u> Stan V. Smith	Director	March 28, 2025
<u>/s/ Jean-Manassé Theagène</u> Jean-Manassé Theagène	Director	March 28, 2025



Sheppard, Mullin, Richter & Hampton LLP
30 Rockefeller Plaza
New York, New York 10112-0015
212.653.8700 main
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March 28, 2025

VIA ELECTRONIC MAIL

MAIA Biotechnology, Inc.
444 West Lake Street, Suite 1700,
Chicago, IL, 60606

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the filing by MAIA Biotechnology, Inc., a Delaware corporation (the “Company”), of a Registration Statement on Form S-8 (the “Registration Statement”) under the Securities Act of 1933, as amended (the “Securities Act”), with the U.S. Securities and Exchange Commission (the “Commission”), covering 2,475,000 shares (the “Shares”) of the Company’s common stock, par value \$0.0001 per share (the “Common Stock”), which may be issued pursuant to the Company’s 2021 Equity Incentive Plan, as amended (the “Plan”).

This opinion (this “Opinion”) is being furnished in accordance with the requirements of Item 8 of Form S-8 and Item 601(b)(5)(i) of Regulation S-K.

In connection with this Opinion, we have reviewed and relied upon the Registration Statement, the Company’s Amended and Restated Certificate of Incorporation, as in effect on the date hereof (the “Certificate of Incorporation”), the Company’s Amended and Restated Bylaws, as in effect on the date hereof (the “Bylaws” and together with the Certificate of Incorporation, the “Charter Documents”), the proceedings taken by the Company with respect to the authorization and adoption of the Plan, resolutions adopted by the board of directors of the Company, and such other documents, records, certificates, memoranda and other instruments as we deem necessary as a basis for this Opinion.

With respect to the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, and the conformity to the original of all documents submitted to us as certified or reproduced copies. We have also assumed that the Shares will be uncertificated in accordance with the Delaware General Corporation Law, and the transfer agent therefor will register the purchaser thereof as the registered owner of any uncertificated Shares on its stock transfer books and records. We have further assumed that (a) shares of Common Stock currently reserved for issuance under the Plan will remain available for the issuance of the Shares, and (b) neither the Company’s Charter Documents nor any of the proceedings relating to either the Plan or any of the award agreements relating to the Shares will be rescinded, amended or otherwise modified prior to the issuance of the Shares. We have also obtained from public officials and officers of the Company certificates or comparable documents as to certain factual matters and, insofar as this Opinion is based on matters of fact, we have relied on such certificates and comparable documents without independent investigation. We have made such other investigations as we have deemed relevant and necessary in connection with the opinions hereinafter set forth.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when issued and sold in the manner referred to in the Plan and against proper payment and consideration thereof and pursuant to the agreements that accompany the Plan, will be legally and validly issued, fully paid and nonassessable.

We consent to the filing of this Opinion as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

We express no opinion as to matters governed by any laws other than the Delaware General Corporation Law and reported decisions of the Delaware courts interpreting such law.

This Opinion is rendered as of the date first written above, and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein. Our opinion is expressly limited to the matters set forth above, and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Shares, the Plan, the award agreements related to the Shares, or the Registration Statement.

Respectfully Submitted,

/s/ Sheppard, Mullin, Richter & Hampton LLP

SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

SMRH:4857-3965-1497.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated March 21, 2025, with respect to the consolidated financial statements of MAIA Biotechnology, Inc. included in the Annual Report on Form 10-K for the year ended December 31, 2024, which is incorporated by reference in this Registration Statement. We consent to the incorporation by reference of the aforementioned report in this Registration Statement.

/s/ GRANT THORNTON LLP

Charlotte, North Carolina
March 28, 2025

Calculation of Filing Fee Tables

Form S-8
(Form Type)MAIA Biotechnology, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered(1)	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, \$0.0001 par value per share	Other(3)	2,475,000(2)	\$ 1.61505(3)	\$ 3,997,248.75	\$ 0.0001531	\$ 611.98
	Total Offering Amount				\$ 3,997,248.75		\$
	Total Fees Previously Paid						—
	Total Fee Offsets						—
	Net Fee Due						\$ 611.98

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the “Securities Act”), this Registration Statement shall also cover an indeterminate number of additional shares of common stock, \$0.0001 par value per share (the “Common Stock”) of MAIA Biotechnology, Inc. (the “Registrant”), which become issuable under the 2021 Plan (as defined below) by reason of any stock splits, stock dividends, reorganizations, mergers, consolidations, recapitalizations or other similar transactions.
- (2) Represents 2,250,000 shares of Common Stock that were automatically added to the shares authorized for issuance under the 2021 Equity Incentive Plan, as amended (the “2021 Plan”) on January 1, 2025 pursuant to an “evergreen” provision contained in the 2021 Plan. On May 25, 2023, the stockholders of the Registrant approved an amendment to the 2021 Plan to include an automatic increase in the aggregate number of shares reserved for awards under the 2021 Plan, commencing on the date of stockholder approval of the amendment, and then each January 1 following thereafter, and ending on (and including) January 1, 2032 (each an “Increase Date”), in an amount equal to ten (10%) of the total number of shares of Common Stock on a fully diluted basis outstanding on December 31 of the preceding calendar year; provided that, the board of directors of the Registrant may act prior to any Increase Date to provide that there will be no increase for such year or that the increase for such year will be a lesser number of shares than provided in the 2021 Plan. In addition, the Company is registering an additional 250,000 share in respect of shares issued under the 2021 Plan that are forfeit or expire are available for future grants of awards under the 2021 Plan.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) under the Securities Act, based on the average of the high and low sales prices of the Common Stock as reported on NYSE American on March 26, 2025, which was \$1.61505 per share.