As filed with the Securities and Exchange Commission on August 5, 2026

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

IMAGENEBIO, INC.
(Exact name of registrant as specified in its charter)

Delaware	**81-1697316**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**

12526 High Bluff Drive, Suite 345
San Diego, CA 92130
(858) 345-6265
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

ImageneBio, Inc. Amended and Restated 2025 Equity Incentive Plan
(Full title of the plans)

Kristin Yarema, Ph.D.
Chief Executive Officer
12526 High Bluff Drive, Suite 345
San Diego, CA 92130
(858) 345-6265
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Thomas A. Coll, Esq.
Asa M. Henin, Esq.
Brittany K. Wightman, Esq.
Cooley LLP
10265 Science Center Drive
San Diego, CA 92121
(858) 550-6000

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	☐	Accelerated filer	☐
Non-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. ☐

EXPLANATORY NOTE

This Registration Statement on Form S-8 (this "Registration Statement") is being filed by ImageneBio, Inc. (the "Registrant") for the purpose of increasing the number of securities of the same class as other securities for which Registration Statements on Form S-8 relating to the same employee benefit plan are effective. The Registrant previously registered its shares of common stock, par value $0.001 per share (the "Common Stock"), for issuance under the Registrant's 2025 Equity Incentive Plan (the "2025 Plan") under the Registrant's Registration Statements on Form S-8 filed with the Securities and Exchange Commission (the "Commission") on November 12, 2025 (File No. 333-291449) and March 10, 2026 (File No. 333-294174) (the "Prior Registration Statements"). In accordance with General Instruction E to Form S-8, the contents of the Prior Registration Statements are hereby incorporated by reference.

PART II

Item 3. Incorporation of Certain Documents by Reference.

The following documents filed by the Registrant with the Commission are incorporated by reference into this Registration Statement:

(a) the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2025, filed with the Commission on March 10, 2026 (the "2025 Annual Report");

(b) the information specifically incorporated by reference into the 2025 Annual Report from the Registrant's definitive proxy statement on Schedule 14A, filed with the Commission on April 30, 2026;

(c) the Registrant's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2026 and June 30, 2026, filed with the Commission on May 7, 2026 and August 5, 2026, respectively;

(d) the Registrant's Current Reports on Form 8-K filed with the Commission on February 17, 2026, March 17, 2026, April 13, 2026, June 17, 2026, June 26, 2026 and July 23, 2026; and

(e) the description of the Registrant's Common Stock contained in Exhibit 4.4 to the 2025 Annual Report, including all amendments or reports filed for the purpose of updating such description.

In addition, all documents subsequently filed by the Registrant with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (other than Current Reports furnished under Item 2.02 or Item 7.01 of exhibits furnished on such form that relate to such items and other portions of documents that are furnished but not filed or are otherwise not incorporated into registration statements pursuant to the applicable rules promulgated by the Commission), 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 remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents.

Any statement, including financial statements, 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 contained herein or therein or in any other 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 be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 8. Exhibits.

Exhibit No.	Exhibit Description
4.1	Fifth Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the Commission on March 30, 2021).
4.2	Certificate of Amendment to the Fifth Amended and Restated Certificate of Incorporation of the Registrant, dated July 25, 2025 (Stock Split Amendment) (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the Commission on July 29, 2025).
4.3	Certificate of Amendment to the Fifth Amended and Restated Certificate of Incorporation of the Registrant, dated July 25, 2025 (Name Change Amendment) (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K,filed with the Commission on July 29, 2025).
4.4	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K, filed with the Commission on March 30, 2021).
5.1	Opinion of Cooley LLP.
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.
23.2	Consent of Cooley LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included on the signature page to this Registration Statement).
99.1	The Registrant's Amended and Restated 2025 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K, filed with the Commission on June 17, 2026).
99.2	Forms of Option Award Notice, Option Agreement and Notice of Exercise under the Registrant's 2025 Equity Incentive Plan (incorporated by reference to Exhibit 10.21 to the Registrant's Current Report on Form 8-K, filed with the Commission on July 29, 2025).
99.3	Forms of Restricted Stock Unit Grant Notice and Unit Award Agreement under the Registrant's 2025 Equity Incentive Plan (incorporated by reference to Exhibit 10.22 to the Registrant's Current Report on Form 8-K, filed with the Commission on July 29, 2025).
107.1	Filing Fee Table.

SIGNATURES

Pursuant to the requirements of the Securities Act, 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 San Diego, State of California, on the 5th day of August 2026.

IMAGENEBIO, INC.

By: /s/ Kristin Yarema
Name: Kristin Yarema, Ph.D.
Title: Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kristin Yarema, Ph.D. as the individual's true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Registration Statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or their substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Kristin Yarema Kristin Yarema, Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)	August 5, 2026
/s/ Yanina Grant Yanina Grant	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	August 5, 2026
/s/ Jonathan Jian Wang Jonathan Jian Wang, Ph.D., MBA	Chair of the Board	August 5, 2026
/s/ David P. Bonita David P. Bonita, M.D.	Lead Independent Director	August 5, 2026
/s/ Joseph P. Slattery Joseph P. Slattery	Director	August 5, 2026
/s/ Otello Stampacchia Otello Stampacchia, Ph.D.	Director	August 5, 2026
/s/ Weiguo Su Weiguo Su, Ph.D.	Director	August 5, 2026

Cooley

Asa M. Henin
+1 858 550 6104
ahenin@cooley.com

August 5, 2026

ImageneBio, Inc.
12526 High Bluff Drive, Suite 345
San Diego, California 92130

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to ImageneBio, Inc., a Delaware corporation (the "***Company***"), in connection with the filing of a Registration Statement on Form S-8 (the "***Registration Statement***") with the Securities and Exchange Commission (the "***Commission***") covering the offering of up to 850,000 shares (the "***Shares***") of the Company's Common Stock, par value $0.001 per share ("***Common Stock***") issuable pursuant to the Company's 2025 Equity Incentive Plan (the "***Plan***").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and related prospectuses, (b) the Plan, (c) the Company's certificate of incorporation and bylaws, each as currently in effect and (d) such other records, documents, opinions, certificates, memoranda and instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials and the due authorization, execution and delivery of all documents by all persons other than the Company. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the Plan, the Registration Statement and the related prospectuses, will be validly issued, fully paid, and nonassessable (except as to shares issued pursuant to deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

[Remainder of Page Intentionally Blank]

This opinion is limited to the matters expressly set forth in this letter, and no opinion has been or should be implied, or may be inferred, beyond the matters expressly stated. This opinion speaks only as to law and facts in effect or existing as of the date hereof, and we have no obligation or responsibility to update or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

We consent to the filing of this letter as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Commission thereunder.

Sincerely,

Cooley LLP

By: /s/ Asa M. Henin
Asa M. Henin

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of ImageneBio, Inc. of our report dated March 10, 2026 relating to the financial statements, which appears in ImageneBio, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2025.

/s/ PricewaterhouseCoopers LLP
San Diego, California
August 5, 2026

Calculation of Filing Fee Tables

S-8

ImageneBio, Inc.

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
1	Equity	Amended and Restated 2025 Equity Incentive Plan, Common Stock, par value $0.001 per share	Other	850,000	$ 5.57	$ 4,734,500.00	0.0001381	$ 653.83
			Total Offering Amounts:			$ 4,734,500.00		$ 653.83
			Total Fee Offsets:					$ 0.00
			Net Fee Due:					$ 653.83

Offering Note

1 The amount registered represents additional shares of ImageneBio, Inc.'s (the "Registrant's") common stock, par value $0.001 per share (the "Common Stock"), authorized for issuance under the Registrant's Amended and Restated 2025 Equity Incentive Plan (the "2025 Plan"), which additional shares were approved by the Registrant's stockholders at the Registrant's annual meeting of stockholders held on June 16, 2026. Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), the Registration Statement on Form S-8 to which this exhibit is a part (the "Registration Statement") shall also cover any additional shares of Common Stock that become issuable under the 2025 Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction. The proposed maximum aggregate offering price per unit and proposed maximum aggregate offering price is estimated in accordance with Rule 457(h)(1) and Rule 457(c) of the Securities Act solely for purposes of calculating the registration fee, and are based upon the average of the high and low prices of the Common Stock on July 31, 2026, as reported on the Nasdaq Capital Market.

Table 2: Fee Offset Claims and Sources ☑**Not Applicable**

	Registrant or Filer Name	Form or Filing Type	File Number	Initial Filing Date	Filing Date	Fee Offset Claimed	Security Type Associated with Fee Offset Claimed	Security Title Associated with Fee Offset Claimed	Unsold Securities Associated with Fee Offset Claimed	Unsold Aggregate Offering Amount Associated with Fee Offset Claimed	Fee Paid with Fee Offset Source
Rule 457(p)											
Fee Offset Claims											
Fee Offset Sources											