

---

---

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

---

**FORM S-8**

**REGISTRATION STATEMENT UNDER THE  
SECURITIES ACT OF 1933**

---

**Humacyte, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of incorporation or organization)

**85-1763759**

(I.R.S. Employer Identification No.)

**2525 East North Carolina Highway 54  
Durham, NC**

(Address of Principal Executive Offices)

**27713**

(Zip Code)

**Humacyte, Inc. 2021 Long-Term Incentive Plan**  
(Full title of the plan)

**Dale A. Sander  
Chief Financial Officer  
Humacyte, Inc.**

**2525 East North Carolina Highway 54  
Durham, NC 27713**

(Name and address of agent for service)

**(919) 313-9633**

(Telephone number, including area code, of agent for service)

**Copy to:**

**Kerry S. Burke  
Covington & Burling LLP  
One CityCenter  
850 Tenth Street, NW  
Washington, DC 20001  
(202) 662-6000**

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

Non-accelerated filer

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 (the “Registration Statement”) is filed by Humacyte, Inc. (the “Company”) for the purpose of registering additional shares of its common stock, par value \$0.0001 per share (the “Common Stock”), under the Company’s 2021 Long-Term Incentive Plan (the “Plan”).

The number of shares of Common Stock reserved and available for issuance under the Plan will automatically increase on January 1 of each year, but not after August 26, 2031, in an amount equal to 5% of the total number of shares of the Company’s capital stock outstanding on December 31 of the preceding year, unless the board of directors of the Company acts prior to January 1 of a given year to provide that the increase for such year will be a lesser number of shares of Common Stock (the “Plan Provision”). Pursuant to an action by the board of directors of the Company, the number of shares of Common Stock available for issuance under the Plan was increased by 4,000,000 shares, effective January 1, 2026. This Registration Statement registers the offer and sale of the 4,000,000 additional shares of Common Stock that are available for issuance under the Plan as a result of the Plan Provision.

Of the 23,410,314 shares of Common Stock currently authorized by the Plan, the Company has previously registered the offer and sale of 7,725,253 shares of Common Stock pursuant to the Company’s [Registration Statement on Form S-8 filed on October 28, 2021](#) (Commission File No. 333-260561), 5,183,686 shares of Common Stock pursuant to the Company’s [Registration Statement on Form S-8 filed on March 28, 2024](#) (Commission File No. 333-278296) and 6,501,375 shares of Common Stock pursuant to the Company’s [Registration Statement on Form S-8 filed on March 31, 2025](#) (Commission File No. 333-286271) (collectively, the “Existing Plan Registration Statements”).

Pursuant to General Instruction E to Form S-8 under the Securities Act of 1933, as amended, the contents of the Existing Plan Registration Statements, including any amendments thereto or filings incorporated therein by reference are incorporated herein by reference and made part of this Registration Statement. Any items in the Existing Plan Registration Statements not expressly changed hereby shall be as set forth in the applicable Existing Plan Registration Statement.

---

## PART II

### Information Required in the Registration Statement

#### Item 3. Incorporation of Documents by Reference.

The following documents (File No. 001-818382) previously filed with the Securities and Exchange Commission (the "SEC") are hereby incorporated by reference:

- the Company's [Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on March 27, 2026](#) (including the portions of the Company's [Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 28, 2026](#), incorporated by reference therein);
- the Company's [Quarterly Report on Form 10-Q for the quarter ended March 31, 2026, filed with the SEC on May 13, 2026](#);
- the Company's Current Reports on Form 8-K (File No. 001-39532) (other than portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits accompanying such reports that are related to such items) filed on [March 19, 2026](#), [March 19, 2026](#), [April 24, 2026](#) and [May 8, 2026](#); and
- the description of the Company's Common Stock contained in [Exhibit 4.6](#) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on March 28, 2024, including any amendments or reports filed for the purposes of updating this description.

All reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended, prior to the filing of a post-effective amendment which indicates that all securities registered have been sold or which 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 of such documents, except as to specific sections of such statements as set forth therein.

Unless expressly incorporated into this Registration Statement, a report furnished on Form 8-K (or any portion thereof so furnished) prior or subsequent to the date hereof shall not be incorporated by reference into this Registration Statement. 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 contained in any subsequently filed document which also is deemed to be incorporated by reference herein modifies or supersedes such statement.

---

**Item 8. Exhibits.**

<b>Exhibit Number.</b>	<b>Description</b>
<a href="#"><u>4.1</u></a>	<a href="#"><u>Second Amended and Restated Certificate of Incorporation of Humacyte, Inc., as amended (incorporated by reference to Exhibit 3.1 to Humacyte, Inc.'s Current Report on Form 10-K, filed with the SEC on March 27, 2026).</u></a>
<a href="#"><u>4.2</u></a>	<a href="#"><u>Amended and Restated By Laws of Humacyte, Inc. (incorporated by reference to Exhibit 3.2 to Humacyte, Inc.'s Current Report on Form 8-K, filed with the SEC on December 12, 2022).</u></a>
<a href="#"><u>5.1*</u></a>	<a href="#"><u>Opinion of Covington &amp; Burling LLP.</u></a>
<a href="#"><u>23.1*</u></a>	<a href="#"><u>Consent of Covington &amp; Burling LLP (included in Exhibit 5.1).</u></a>
<a href="#"><u>23.2*</u></a>	<a href="#"><u>Consent of PricewaterhouseCoopers LLP.</u></a>
<a href="#"><u>24.1*</u></a>	<a href="#"><u>Power of attorney (included on signature page).</u></a>
<a href="#"><u>99.1</u></a>	<a href="#"><u>Humacyte, Inc. 2021 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4 to Humacyte, Inc.'s Current Report on Form 8-K, filed with the SEC on August 27, 2021).</u></a>
<a href="#"><u>107*</u></a>	<a href="#"><u>Filing Fee Table.</u></a>

\* Filed herewith.

---



**COVINGTON**

BEIJING BOSTON BRUSSELS DUBAI FRANKFURT  
JOHANNESBURG LONDON LOS ANGELES NEW YORK  
PALO ALTO SAN FRANCISCO SEOUL SHANGHAI WASHINGTON

Covington & Burling LLP  
One CityCenter  
850 Tenth Street, NW  
Washington, DC 20001-4956  
T +1 202 662 6000

May 14, 2026

Humacyte, Inc.  
2525 East North Carolina Highway 54  
Durham, NC 27713

Ladies and Gentlemen:

We have acted as counsel to Humacyte, Inc., a Delaware corporation (the “*Company*”), and are rendering this opinion in connection with the registration by the Company under the Securities Act of 1933 (the “*Securities Act*”), of the offer and sale of 4,000,000 shares of the Company’s common stock, par value \$0.0001 per share (the “*Shares*”), issuable under the Company’s 2021 Long-Term Incentive Plan (the “*Plan*”), pursuant to the registration statement on Form S-8 filed with the United States Securities and Exchange Commission on the date hereof (the “*Registration Statement*”).

We have reviewed the Registration Statement, the Plan, and such corporate records, certificates and other documents, and such questions of law, as we deemed necessary or appropriate for the purposes of this opinion. We have assumed that all signatures are genuine, that all documents submitted to us as originals are authentic and that all copies of documents submitted to us conform to the originals. We have assumed further that, except as to legal conclusions expressly set forth in this opinion, the information contained in the agreements, records, certificates and other documents we reviewed were true, accurate and complete as of their stated date and are true, accurate and complete as of the date of this letter.

We have relied as to certain matters on information obtained from public officials, officers of the Company and other sources believed by us to be responsible.

Based upon the foregoing, we are of the opinion that the Shares have been duly authorized and, when issued in accordance with the terms of the Plan, and any individual agreements relating to such Shares, the Shares will be validly issued, fully paid and nonassessable.

We are members of the bar of the District of Columbia. We do not express any opinion herein on any laws other than the Delaware General Corporation Law.

We hereby 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 in the category of persons whose consent is required under Section 7 of the Securities Act.

Very truly yours,

/s/ Covington & Burling LLP

---

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of Humacyte, Inc. of our report dated March 27, 2026 relating to the financial statements, which appears in Humacyte, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2025.

/s/ PricewaterhouseCoopers LLP  
Raleigh, North Carolina  
May 14, 2026

