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

#### **SCHEDULE 13D**

Under the Securities Exchange Act of 1934 (Amendment No. 5)

# HUMACYTE, INC.

(Name of Issuer)

### Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

**44486Q 103** (CUSIP Number)

Laura E. Niklason Brady W. Dougan Ayabudge LLC c/o Humacyte, Inc. 2525 E NC Highway 54 Durham, North Carolina 27713 (919) 313-9633

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

### September 14, 2023

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of  $\S$  240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box .

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7(b) for other parties to whom copies are to be sent.

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

#### **SCHEDULE 13D**

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_	T.					
	NAME OF REPOR	RTING PEF	RSONS			
1	Laura E. Mikhaan					
Laura E. Niklason  CHECK THE ADDRODDIATE BOY IF A MEMBER OF A CROUD (See Instructions)						
		CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)				
2 (a) 0						
	(b) X					
3	SEC USE ONLY					
4	SOURCE OF FUNDS (See Instructions) PF and OO					
5	CHECK BOX IF D	DISCLOSU	RE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)	0		
	CITIZENSHIP OR	PLACE O	F ORGANIZATION			
6						
	United States of A	merica				
			SOLE VOTING POWER			
		7				
NI	MBER OF		0			
5	SHARES		SHARED VOTING POWER			
	EFICIALLY	8	10,050,822 (1)			
	VNED BY EACH		SOLE DISPOSITIVE POWER			
RE	PORTING		SOLE DISPOSITIVE POWER			
F	PERSON WITH		0			
	WIII	I'H	SHARED DISPOSITIVE POWER			
		10				
			10,050,822 (1)			
	AGGREGATE AM	IOUNT BE	NEFICIALLY OWNED BY EACH REPORTING PERSON			
11 10,050,822 (1)						
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES			0		
	(See Instructions)					
12	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)					
13	9.5% (2)					
	` '	TING DED	SON (See Instructions)			
14	TITE OF KEFOR	TIMO FER	SOLI (See Instructions)			
]	IN					

<sup>(1)</sup> Consists of (i) 1,270,240 shares of the Issuer's common stock held by Dr. Niklason, (ii) 2,041,647 shares of the Issuer's common stock subject to options exercisable within 60 days of September 14, 2023 held by Dr. Niklason, (iii) 510,161 shares of the Issuer's common stock held by Mr. Dougan, (iv) 37,634 shares of the Issuer's common stock subject to options exercisable within 60 days of September 14, 2023 held by Mr. Dougan, and (v) 6,191,140 shares of the Issuer's common stock held by Ayabudge LLC. Dr. Niklason is married to Mr. Dougan and Mr. Dougan has sole voting and dispositive power over the shares held by Ayabudge LLC. By virtue of these relationships, Dr. Niklason may be deemed to share beneficial ownership of the securities held of record by Mr. Dougan and Ayabudge LLC.

<sup>(2)</sup> Based upon 103,434,507 shares of the Issuer's Common Stock outstanding as of August 3, 2023, as reported in the Issuer's Quarterly Report on Form 10-Q for the quarter ended June 30, 2023 (the "Form 10-Q") filed with the Securities and Exchange Commission (the "SEC") on August 14, 2023.

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				1	
1	NAME OF REPORTING PERSONS				
1	Brady W. Dougan				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) 0				
2	` ′				
	(b)				
3		USE ONLY			
4	PF an	d OO	JNDS (See Instructions)		
5	CHEC	CK BOX IF	DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)	0	
	CITIZ	ZENSHIP C	OR PLACE OF ORGANIZATION		
6	Unite	d States of .	America		
	Ome	a otates or i	SOLE VOTING POWER		
		7	JOEE VOINGTOWER		
			0		
NUMBER ( SHARES			SHARED VOTING POWER		
BENEFICIAL		8			
OWNED B	Y		10,050,822 (1)		
EACH REPORTIN			SOLE DISPOSITIVE POWER		
PERSON		9			
WITH			SHARED DISPOSITIVE POWER		
		10	SHARED DISPOSITIVE POWER		
		10	10,050,822 (1)		
	AGG	REGATE A	MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
11					
	10,050,822 (1)				
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions)		0		
	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)				
13					
	9.5% (2)				
l	TYPE OF REPORTING PERSON (See Instructions)				
14	IN				
	IN				

<sup>(1)</sup> Consists of (i) 510,161 shares of the Issuer's common stock held by Mr. Dougan, (ii) 37,634 shares of the Issuer's common stock subject to options exercisable within 60 days of September 14, 2023 held by Mr. Dougan, (iii) 1,270,240 shares of the Issuer's common stock held by Dr. Niklason, (iv) 2,041,647 shares of the Issuer's common stock subject to options exercisable within 60 days of September 14, 2023 held by Dr. Niklason and (v) 6,191,140 shares of the Issuer's common stock held by Ayabudge LLC. Mr. Dougan is married to Dr. Niklason and Mr. Dougan has sole voting and dispositive power over the shares held by Ayabudge LLC. By virtue of these relationships, Mr. Dougan may be deemed to share beneficial ownership of the securities held of record by Dr. Niklason and Ayabudge

<sup>(2)</sup> Based upon 103,434,507 shares of the Issuer's Common Stock outstanding as of August 3, 2023, as reported in the Form 10-Q filed with the SEC on August 14, 2023

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1	NAME OF REPORTING PERSONS				
1	Ayabudge LLC				
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)				
2	(a) O				
	(b)				
3		USE ONLY			
4	SOUI	RCE OF FU	JNDS (See Instructions)		
4	AF ar	nd BK			
5	CHEC	CK BOX IF	DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)	0	
	CITIZ	ZENSHIP C	OR PLACE OF ORGANIZATION		
6	Delav	vare, United	d States of America		
		-, -	SOLE VOTING POWER		
		7			
NII IM ADED	O.F.		0		
NUMBER ( SHARES		8	SHARED VOTING POWER		
BENEFICIAL OWNED B		U	6,191,140 (1)		
EACH			SOLE DISPOSITIVE POWER		
REPORTIN PERSON		9			
WITH			0		
	10	10	SHARED DISPOSITIVE POWER		
		10	6,191,140 (1)		
AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON					
11					
	6,191,140 (1)				
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES  (See Instructions)		0		
	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)				
13					
	6.0% (2)				
14	TYPE OF REPORTING PERSON (See Instructions)				
14	00				

<sup>(1)</sup> Consists of 6,191,140 shares of the Issuer's common stock held by Ayabudge LLC. Mr. Dougan is the sole member of Ayabudge LLC and has sole voting and dispositive power over the shares held by Ayabudge LLC. Ayabudge LLC has pledged 6,191,140 shares to certain lenders in connection with a financing arrangement.

<sup>(2)</sup> Based upon 103,434,507 shares of the Issuer's Common Stock outstanding as of August 3, 2023, as reported in the Form 10-Q filed with the SEC on August 14, 2023.

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This Amendment No. 5 to the statement on Schedule 13D (this "<u>Statement</u>") with respect to the shares of common stock, par value \$0.0001 per share (the "<u>Common Stock</u>"), of Humacyte, Inc. (the "<u>Issuer</u>"), filed by Laura E. Niklason ("<u>Dr. Niklason</u>"), Brady W. Dougan ("<u>Mr. Dougan</u>") and Ayabudge LLC ("<u>Ayabudge</u>" and, together with Dr. Niklason and Mr. Dougan, the "<u>Reporting Persons</u>") on September 15, 2023 (such statement, as amended herein the "<u>Schedule 13D</u>"), amends the Schedule 13D as set forth below.

All capitalized terms contained herein but not otherwise defined shall have the meanings ascribed to such terms in the Schedule 13D. Except as specifically amended by this Amendment No. 5, items in the Schedule 13D remain unchanged.

#### Item 3. Source and Amount of Funds or Other Consideration

Item 3 of the Schedule 13D is hereby amended to be supplemented by the following:

On September 14, 2023, Ayabudge sold 2,000,000 shares of Common Stock to institutional healthcare investors at a price of \$2.78 per share for an aggregate sale price of approximately \$5.6 million (excluding commissions).

Mr. Dougan used the proceeds of these transactions to pay down leverage while providing a mechanism for the purchasers to acquire shares at a time that the Issuer was not conducting a financing transaction. Dr. Niklason is treated as indirectly beneficially owning the shares of Common Stock sold. However, no shares of Common Stock directly owned by Dr. Niklason were sold in these transactions.

#### Item 5. Interest in Securities of the Issuer

Item 5 of the Schedule 13D is hereby amended and restated in full as follows:

(a)-(b)

Number of shares of Common Stock beneficially owned:

Laura E. Niklason, M.D., Ph.D.	10,050,822 shares
Brady W. Dougan	10,050,822 shares
Ayabudge LLC	6,191,140 shares

### Percent of class:

Laura E. Niklason, M.D., Ph.D.	9.5%
Brady W. Dougan	9.5%
Ayabudge LLC	6.0%

The percentage ownership was calculated based upon 103,434,507 shares of the Issuer's Common Stock outstanding as of August 3, 2023, as reported in the Form 10-Q filed with the SEC on August 14, 2023.

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Number of shares as to which such person has:

(i) Sole power to vote or to direct the vote:

Laura E. Niklason, M.D., Ph.D.	0 shares
Brady W. Dougan	0 shares
Ayabudge LLC	0 shares

(ii) Shared power to vote or to direct the vote:

Laura E. Niklason, M.D., Ph.D.	10,050,822 shares
Brady W. Dougan	10,050,822 shares
Ayabudge LLC	6,191,140 shares

(iii) Sole power to dispose or to direct the disposition of:

Laura E. Niklason, M.D., Ph.D.	0 shares
Brady W. Dougan	0 shares
Avabudge LLC	0 shares

(iv) Shared power to dispose or to direct the disposition of:

Laura E. Niklason, M.D., Ph.D.	10,050,822 shares
Brady W. Dougan	10,050,822 shares
Ayabudge LLC	6,191,140 shares

- (c) Except as reported in this Schedule 13D, none of the Reporting Persons has effected any transactions in the Common Stock during the past sixty (60) days.
  - (d) Not applicable.
  - (e) Not applicable.

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## **SIGNATURE**

After reasonable inquiry and to the best of each of the undersigned's knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Date: September 15, 2023 Laura E. Niklason

By: /s/ Laura E. Niklason by Dale A. Sander as Attorney-in-Fact

Date: September 15, 2023 Brady W. Dougan

By: /s/ Brady W. Dougan by Dale A. Sander as Attorney-in-Fact

Date: September 15, 2023 Ayabudge LLC

By: /s/ Brady W. Dougan by Dale A. Sander as Attorney-in-Fact

Name: Brady W. Dougan Title: Sole Member