Table of Contents

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2021

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____.

Commission File Number: 001-39532

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 Number)
2525 East North Carolina Highway 54 **Durham, NC** (Address of principal executive offices)	**27713** (Zip code)

(919) 313-9633
(Registrant's telephone number, including area code)

Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	**HUMA**	**The Nasdaq Stock Market LLC**
Redeemable Warrants, each whole warrant exercisable for one share of Common Stock at an exercise price of $11.50	**HUMAW**	**The Nasdaq Stock Market LLC**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of November 4, 2021, 103,003,384 shares of common stock, par value $0.0001, were issued and outstanding.

Humacyte, Inc.
Quarterly Report on Form 10-Q
Table of Contents

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

Humacyte, Inc.
Condensed Consolidated Balance Sheets
(unaudited)
(in thousands except for share and per share amounts)

	September 30, 2021	December 31, 2020
ASSETS		
Current assets		
Cash and cash equivalents	$ 240,449	$ 39,929
Accounts receivable	240	113
Prepaid expenses	3,490	1,407
Total current assets	244,179	41,449
Finance lease right-of-use assets, net	21,947	23,492
Operating lease right-of-use assets, net	738	769
Property and equipment, net	36,499	40,978
Total assets	**$ 303,363**	**$ 106,688**

	September 30, 2021	December 31, 2020
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities		
Accounts payable	$ 5,830	$ 2,274
Accrued expenses	9,422	4,592
SVB loan payable, current portion	3,889	—
Finance lease obligation, current portion	1,915	1,729
Deferred payroll tax, current portion	145	145
Operating lease obligation, current portion	44	42
PPP loan payable, current portion	—	2,451
Total current liabilities	21,245	11,233
Contingent earnout liability	169,200	—
Finance lease obligation, net of current portion	21,627	23,090
SVB loan payable, net of current portion	14,038	—
Operating lease obligation, net of current portion	693	727
Common stock warrant liabilities	555	—
Deferred payroll tax, net of current portion	144	144
PPP loan payable, net of current portion	—	822
Total liabilities	**227,502**	**36,016**
Commitments and contingencies (Note 11)		
Redeemable convertible preferred stock (Series A, B, C and D) $0.001 par value, 0 and 69,613,565 shares authorized as of September 30, 2021 and December 31, 2020, respectively; 0 and 69,613,562 shares outstanding as of September 30, 2021 and December 31, 2020, respectively; liquidation preference of $0 and $435,579 as of September 30, 2021 and December 31, 2020, respectively.	—	420,989
Stockholders' equity (deficit)		
Preferred stock, $0.0001 par value; 20,000,000 and 0 shares designated as of September 30, 2021 and December 31, 2020; 0 shares issued and outstanding as of September 30, 2021 and December 31, 2020	—	—
Common stock, $0.0001 and $0.0001 par value as of September 30, 2021 and December 31, 2020, respectively; 250,000,000 and 340,216,780 shares authorized as of September 30, 2021 and December 31, 2020, respectively; 103,003,384 and 5,822,396 shares issued and outstanding as of September 30, 2021 and December 31, 2020, respectively.	10	1
Additional paid-in capital	533,009	37,778
Accumulated deficit	(457,158)	(388,096)
Total stockholders' equity (deficit)	75,861	(350,317)
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	**$ 303,363**	**$ 106,688**

The accompanying notes are an integral part of these financial statements.

Humacyte, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(unaudited)
(in thousands except for share and per share amounts)

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2021	2020	2021	2020
Grant revenue	$ 241	$ 914	$ 1,086	$ 1,367
Operating expenses:				
Research and development (includes related party expenses of $2 and $149 for the three months ended September 30, 2021 and 2020 and $168 and $462 for the nine months ended September 30, 2021 and 2020)	15,386	14,692	45,091	40,879
General and administrative	5,398	3,435	15,576	9,416
Total operating expenses	20,784	18,127	60,667	50,295
Loss from operations	**(20,543)**	**(17,213)**	**(59,581)**	**(48,928)**
Other expenses, net:				
Interest income	3	2	6	277
Change in fair value of contingent earnout liability	(9,768)	-	(9,768)	—
Interest expense	(1,204)	(549)	(2,952)	(1,661)
Transaction costs expensed	(49)	—	(49)	—
Change in fair value of common stock warrant liabilities	(2)	—	(2)	—
Gain on PPP loan forgiveness	—	—	3,284	—
Total other expenses, net	(11,020)	(547)	(9,481)	(1,384)
Net loss and comprehensive loss	**$ (31,563)**	**$ (17,760)**	**$ (69,062)**	**$ (50,312)**
Net loss per share attributable to common stockholders, basic and diluted	$ (0.72)	$ (3.07)	$ (3.69)	$ (8.74)
Weighted-average shares outstanding used in computing net loss per share attributable to common stockholders, basic and diluted	43,950,856	5,788,130	18,728,471	5,755,418

The accompanying notes are an integral part of these financial statements.

Humacyte, Inc.
Condensed Consolidated Statements of Changes in Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)
(unaudited)
(in thousands except for share amounts)

	Redeemable Convertible Preferred Stock		Common Stock		Additional	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Paid-in Capital	Deficit	(Deficit) Equity
Balance as of December 31, 2020	**69,613,562**	**$ 420,989**	**5,822,396**	**$ 1**	**$ 37,778**	**$ (388,096)**	**$ (350,317)**
Proceeds from the exercise of stock options	—	—	116,149	—	206	—	206
Stock-based compensation	—	—	—	—	2,528	—	2,528
Issuance of warrants in conjunction with debt	—	—	—	—	2,360	—	2,360
Net loss	—	—	—	—	—	(20,301)	(20,301)
Balance as of March 31, 2021	**69,613,562**	**$ 420,989**	**5,938,545**	**$ 1**	**$ 42,872**	**$ (408,397)**	**$ (365,524)**
Proceeds from the exercise of stock options	—	—	5,204	—	30	—	30
Stock-based compensation	—	—	—	—	2,930	—	2,930
Net loss	—	—	—	—	—	(17,198)	(17,198)
Balance as of June 30, 2021	**69,613,562**	**$ 420,989**	**5,943,749**	**$ 1**	**$ 45,832**	**$ (425,595)**	**$ (379,762)**
Conversion of redeemable convertible preferred stock into common stock in connection with the Merger and related PIPE financing	(69,613,562)	(420,989)	69,613,562	7	420,982	—	420,989
The merger and related PIPE financing, net of transaction costs and acquired liabilities	—	—	27,346,449	2	209,478	—	209,480
Public warrants assumed upon the merger, net of transaction costs	—	—	—	—	13,912	—	13,912
Contingent earnout liability recognized upon closing of the reverse recapitalization	—	—	—	—	(159,432)	—	(159,432)
Proceeds from the exercise of stock options	—	—	99,624	—	360	—	360
Stock-based compensation	—	—	—	—	1,877	—	1,877
Net loss	—	—	—	—	—	(31,563)	(31,563)
Balance as of September 30, 2021	**—**	**$ —**	**103,003,384**	**$ 10**	**$ 533,009**	**$ (457,158)**	**$ 75,861**

	Redeemable Convertible Preferred Stock		Common Stock		Additional	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Paid-in Capital	Deficit	Deficit
Balance as of December 31, 2019	**69,613,562**	**$ 420,989**	**5,627,157**	**1**	**$ 32,783**	**$ (321,572)**	**$ (288,788)**
Proceeds from the exercise of stock options	—	—	148,159	—	175	—	175
Stock-based compensation	—	—	—	—	1,182	—	1,182
Net loss	—	—	—	—	—	(17,674)	(17,674)
Balance as of March 31, 2020	**69,613,562**	**$ 420,989**	**5,775,316**	**$ 1**	**$ 34,140**	**$ (339,246)**	**$ (305,105)**
Proceeds from the exercise of stock options	—	—	11,761	—	48	—	48
Stock-based compensation	—	—	—	—	1,114	—	1,114
Net loss	—	—	—	—	—	(14,878)	(14,878)
Balance as of June 30, 2020	**69,613,562**	**$ 420,989**	**5,787,077**	**$ 1**	**$ 35,302**	**$ (354,124)**	**$ (318,821)**
Proceeds from the exercise of stock options	—	—	1,800	—	12	—	12
Stock-based compensation	—	—	—	—	1,170	—	1,170
Net loss	—	—	—	—	—	$ (17,760)	(17,760)
Balance as of September 30, 2020	**69,613,562**	**$ 420,989**	**5,788,877**	**$ 1**	**$ 36,484**	**$ (371,884)**	**$ (335,399)**

The accompanying notes are an integral part of these financial statements.

Humacyte, Inc.
Condensed Consolidated Statements of Cash Flows
(unaudited)
(in thousands)

	For the Nine Months Ended September 30,	
	2021	**2020**
Cash flows from operating activities		
Net loss	$ (69,062)	$ (50,312)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation expense	4,650	4,729
Stock-based compensation expense	7,335	3,466
Change in fair value of contingent earnout liability	9,768	—
Change in fair value of common stock warrant liabilities	2	—
Loss on disposal of property and equipment	—	155
Amortization expense	1,545	1,545
Non-cash operating lease costs	31	71
Amortization of SVB debt discount	628	—
Accrued interest on PPP loan obligation	11	14
Gain on PPP loan forgiveness	(3,284)	—
Payment of liabilities assumed in Merger	(12,363)	—
Changes in operating assets and liabilities:		
Accounts receivable	(127)	(18)
Prepaid expenses	(2,002)	(654)
Accounts payable	757	539
Accrued expenses	2,401	30
Operating lease obligation	(32)	(71)
Deferred payroll taxes	—	133
Net cash used in operating activities	(59,742)	(40,373)
Cash flows from investing activities		
Purchase of property and equipment	(175)	(305)
Proceeds from sale of property and equipment	—	50
Net cash used in investing activities	(175)	(255)
Cash flows from financing activities		
Proceeds from Merger and PIPE financing, net of offering costs paid	242,400	—
Payment of transaction costs related to Merger	(941)	—
Proceeds from the exercise of stock options	596	235
Proceeds from SVB loan	19,659	—
Proceeds from PPP loan	—	3,251
Payment of finance lease principal	(1,277)	(1,107)
Net cash provided by financing activities	260,437	2,379
Net increase (decrease) in cash and cash equivalents	200,520	(38,249)
Cash and cash equivalents at the beginning of the period	39,929	93,713
Cash and cash equivalents at the end of the period	**240,449**	**55,464**
Supplemental disclosure		
Cash paid for interest on SVB loan	$ 642	$ —
Supplemental disclosure of noncash activities:		
Operating lease right-of-use assets obtained in exchange for lease obligations	$ —	$ 36
Issuance of warrants in conjunction with debt	$ 2,360	$ —
Unpaid liabilities assumed in connection with Merger	$ 2,228	$ —
Unpaid transaction costs in connection with Merger	$ 3,004	$ —
Conversion of redeemable convertible preferred stock into common stock in connection with the reverse capitalization	$ 420,989	$ —
Contingent Consideration Liability recognized upon the closing of the reverse recapitalization	$ 159,432	$ —

The accompanying notes are an integral part of these financial statements.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

1. Organization and Description of Business

Organization

Humacyte, Inc.and subsidiary, or the Company, is pioneering the development and manufacture of off-the-shelf, universally implantable, bioengineered human tissues designed to improve the lives of patients and transform the practice of medicine. The Company is leveraging its technology platform to develop proprietary, bioengineered, acellular human tissues for use in the treatment of diseases and conditions across a range of anatomic locations in multiple therapeutic areas.

On August 26, 2021 (the "Closing Date"), Alpha Healthcare Acquisition Corp. ("AHAC") consummated a merger pursuant to which Hunter Merger Sub, Inc. ("Merger Sub"), a Delaware corporation and wholly owned subsidiary of AHAC, merged with Humacyte, Inc., a Delaware Corporation ("Legacy Humacyte"), with Legacy Humacyte surviving the Merger as a wholly-owned subsidiary of AHAC (such transactions, the "Merger," and, collectively with the other transactions described in the Merger Agreement (as defined below), the "Reverse Recapitalization"). As a result of the Merger, AHAC was renamed Humacyte, Inc. ("New Humacyte") and Legacy Humacyte was renamed Humacyte Global, Inc.

Refer to Note 3 - Reverse Recapitalization for further details of the Merger.

Liquidity and Going Concern

Since its inception in 2004, the Company has generated no product revenue and has incurred net losses and negative cash flows from operations in each year. To date, the Company has financed its operations primarily through the sale of equity securities and convertible debt and, to a lesser extent, through governmental and other grants. At September 30, 2021 and December 31, 2020, the Company had an accumulated deficit of $457.2 million and $388.1 million, respectively. The Company's net losses were $69.1 million and $50.3 million for the nine months ended September 30, 2021 and 2020, respectively. Substantially all of the Company's net losses resulted from costs incurred in connection with the Company's research and development programs and from general and administrative costs associated with the Company's operations. The Company expects to incur substantial operating losses and negative cash flows from operations for the foreseeable future as the Company advances its product candidates.

As of September 30, 2021, the Company had cash and cash equivalents of $240.4 million. Based on the cash and cash equivalents on hand, the Company believes its combined cash and cash equivalents will be sufficient to fund operations, including clinical trial expenses and capital expenditure requirements, for at least 12 months from the issuance date of these interim financial statements.

Impact of COVID-19

The COVID-19 pandemic, which began in December 2019 and has spread worldwide, has caused many governments to implement measures to slow the spread of the outbreak, including shelter-in-place orders and the mandatory shutdown of certain businesses. The outbreak and government measures taken in response have had a significant impact, both direct and indirect, on the Company's business, as supply chains have been disrupted, and facilities and production have been suspended. The future progression of the pandemic and its effects on the Company's business and operations are uncertain. The COVID-19 pandemic may affect the Company's ability to initiate and complete preclinical studies, delay its clinical trials or future clinical trials, disrupt regulatory activities, or have other adverse effects on its business and operations. The pandemic has already caused significant disruptions in the financial markets, and may continue to cause such disruptions, which could impact the Company's ability to raise additional funds to support its operations. Moreover, the pandemic has significantly impacted economies worldwide and could result in adverse effects on the Company's business and operations.

To date, the COVID-19 pandemic has not resulted in material financial impacts or impairment losses in the carrying values of the Company's assets as a result of the pandemic and the Company is not aware of any specific related event or circumstance that would

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

require it to revise the estimates reflected in these financial statements. The extent to which the COVID-19 pandemic will directly or indirectly impact the Company's business, results of operations and financial condition, including current and future clinical trials and research and development costs, will depend on future developments that are highly uncertain, including as a result of new information that may emerge concerning COVID-19, the actions taken to contain or treat it, and the duration and intensity of the related economic impact of the pandemic.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company has prepared the accompanying financial statements in conformity with accounting principles generally accepted in the United States of America, or U.S. GAAP. The Company's condensed consolidated financial statements reflect the operations of the Company and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Unless otherwise noted, the Company has retroactively adjusted all common and preferred share and related price information to give effect to the Exchange Ratio established in the Merger Agreement.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates in the financial statements include stock-based compensation costs, right-of-use, or ROU, assets, accruals for research and development activities, contingent earnout liability, fair value of common stock warrants, redeemable convertible preferred stock and income taxes. The Company evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors and adjusts those estimates and assumptions when facts and circumstances dictate. Actual results could differ from those estimates.

Unaudited Interim Condensed Consolidated Financial Statements

The accompanying interim condensed consolidated financial statements and the related footnote disclosures are unaudited. These unaudited interim financial statements have been prepared on the same basis as the audited financial statements, and in management's opinion, include all adjustments, consisting of only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of September 30, 2021 and its results of operations for the three and nine months ended September 30, 2021 and 2020, and cash flows for the nine months ended September 30, 2021 and 2020. The results of operations for the three and nine months ended September 30, 2021 are not necessarily indicative of the results to be expected for the year ended December 31, 2021 or any other period. The December 31, 2020 year-end condensed consolidated balance sheet was derived from audited annual financial statements but does not include all disclosures from the annual financial statements.

Certain information and footnote disclosures normally included in consolidated financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to such rules and regulations. Accordingly, these condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2020 and the related notes included in the Company's Registration Statement on Form S-1, filed with the SEC on September 17, 2021 and amended on October 22, 2021, or S-1, which provides a more complete discussion of the Company's accounting policies and certain other information.

Other than the policies noted below, there have been no significant changes to the significant accounting policies disclosed in Note 2 of the audited consolidated financial statements as of and for the years ended December 31, 2020 and 2019 included in the Company's S-1.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

Common Stock Warrants

The Company assumed 5,000,000 publicly-traded warrants ("Public Warrants") and 177,500 private placement warrants issued to AHAC Sponsor LLC (the "Sponsor"), Oppenheimer & Co. Inc. and Northland Securities, Inc, in connection with AHAC's initial public offering ("Private Placement Warrants" and, together with the Public Warrants, the "Common Stock Warrants"). The Common Stock Warrants entitle the holder to purchase one share of the Company's Common stock, par value $0.0001 ("Common Stock"), at an exercise price of $11.50 per share. The Public Warrants are publicly traded and are exercisable for cash unless certain conditions occur, such as the failure to have an effective registration statement related to the shares issuable upon exercise or redemption by the Company under certain conditions, at which time the warrants may be eligible for a cashless exercise. The Private Placement Warrants are non-redeemable for cash so long as they are held by the initial purchasers or their permitted transferees. If the Private Placement Warrants are held by someone other than the initial purchasers or their permitted transferees, the Private Placement Warrants are redeemable by the Company and exercisable by such holders on the same basis as the Public Warrants.

The Company evaluated the Common Stock Warrants to determine the appropriate financial statement classification upon the consummation of the Merger. The Common Stock Warrants are not mandatorily redeemable and are considered to be freestanding instruments as they are separately exercisable into common shares. As such, the Common Stock Warrants were not classified as liabilities under FASB ASC Topic 480, *Distinguishing Liabilities from Equity* ("ASC 480"). The Company then evaluated the Common Stock Warrants under FASB ASC Topic 815, *Derivatives and Hedging*.

The agreement governing the Common Stock Warrants includes a provision ("Replacement of Securities Upon Reorganization"), the application of which could result in a different settlement value for the Private Placement Warrants depending on their holder. Because the holder of an instrument is not an input into the pricing of a fixed-for-fixed option on the Company's ordinary shares, the Private Placement Warrants are not considered to be "indexed to the Company's own stock" and therefore are not classified in stockholders' equity. As the Private Placement Warrants meet the definition of a derivative, the Company recorded these warrants as liabilities on the condensed consolidated balance sheet at fair value, with subsequent changes in their respective fair values recognized in the condensed consolidated statements of operations and comprehensive loss at each reporting date.

The Public Warrants are considered to be "indexed to the Company's own stock". The agreement provides that in the event of a tender or exchange offer made to and accepted by holders of more than 50% of the outstanding shares of the Company's common shares, all holders of the Common Stock Warrants (both the Public Warrants and the Private Placement Warrants) would be entitled to receive cash for all of their Common Stock Warrants. As the Company has a single class of common stock, a qualifying cash tender offer of more than 50% of the Company's common stock will always result in a change-in-control and would not preclude permanent equity classification of the Public Warrants. Based on this evaluation, the Company concluded that the Public Warrants meet the criteria to be classified within stockholders' equity.

Contingent Earnout Liability

In connection with the Reverse Recapitalization and pursuant to the Business Combination Agreement dated as of February 17, 2021 by and among Legacy Humacyte, Merger Sub, and AHAC (the "Merger Agreement"), Legacy Humacyte equity holders are entitled to receive as additional merger consideration of up to 15,000,000 shares of the Company's Common Stock (the "Contingent Earnout Shares"), comprised of two separate tranches of 7,500,000 shares per tranche, for no consideration upon the occurrence of certain triggering events, including a change of control event that is not solely indexed to the common stock. In accordance with ASC 815-40, as the earnout shares were not indexed to the common stock, they were accounted for as a liability at the Reverse Recapitalization date and subsequently remeasured at each reporting date with changes in fair value recorded as a component of other (expense) income, net in the condensed consolidated statements of operations and comprehensive loss.

The estimated fair value of the Contingent Earnout Shares was determined using a Monte Carlo simulation using a distribution of potential outcomes on a monthly basis over a ten-year period prioritizing the most reliable information available. The assumptions

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

utilized in the calculation were based on the achievement of certain stock price milestones, including the current Company common stock price, expected volatility, risk-free rate, expected term and expected dividend yield.

The Contingent Earnout Shares are categorized as a Level 3 fair value measurement (see Fair Value Measurements accounting policy described below in Note 4) because the Company estimated projections over a ten-year period utilizing unobservable inputs. Contingent earnout payments involve certain assumptions requiring significant judgment and actual results can differ from assumed and estimated amounts.

Segments

The Company operates and manages its business as one reportable and operating segment. The Company is developing proprietary, bioengineered, acellular human tissues that are designed to be used in the treatment of diseases and conditions across a range of anatomic locations in multiple therapeutic areas. The Company's chief executive officer, who is the chief operating decision maker, reviews financial information on an aggregate basis for purposes of evaluating financial performance and allocating resources.

Revenue Recognition

The Company's revenues generally consist of grant revenues, including revenues generated under government and other awarded grants.

Under ASC 606, revenue is recognized when a customer obtains control of promised goods or services and is recognized in an amount that reflects the consideration that an entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. ASC 606 also impacts certain other areas, such as the accounting for costs to obtain or fulfill a contract.

In addition, ASC 606 requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers.

For contracts where the period between when the Company transfers a promised good or service to the customer and when the customer pays is one year or less, the Company has elected the practical expedient to not adjust the promised amount of consideration for the effects of a significant financing component.

Grant Revenue

The Company generates revenue primarily from government and other awarded grants that reimburse the Company for certain allowable costs related to research and development efforts. These grants include the following terms:

The Department of Defense grants are for an award of $4.0 million, all of which was recognized as revenue before the program ended, for work on bioengineered blood vessels for vascular trauma, which was awarded to the Company in September 2017 and ended in February 2020, and an award of $7.1 million for work to support human tissue engineered blood vessels for vascular reconstruction in the injured warfighter, which was awarded to the Company in August 2017 and is ongoing. The Company has recognized revenue of $0.2 million and $1.1 million during the three and nine months ended September 30, 2021,respectively, and $0.6 million and $1.0 million during the three and nine months ended September 30, 2020, respectively, for reimbursement of certain allowable costs related to these grants.

The National Institutes of Health grant is for $1.6 million for work to support bioengineered grafts for peripheral vascular disease, which was awarded to the Company in November 2013. The Company recognized $1.6 million for the reimbursement of certain

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

allowable costs related to the grant before this program ended in 2020. The Company recognized $0.3 million during the three and nine months ended September 30, 2020, and no revenue during the three and nine months ended September 30, 2021, for reimbursement of certain allowable costs related to these grants.

The Company has determined that the grants are not within the scope of ASC 606 as they do not meet the definition of a contract with a customer. The Company has concluded that the grants meet the definition of a contribution and are nonexchange transactions and has applied the contribution accounting model in Subtopic 958-605, Not-for-Profit-Entities-Revenue Recognition by analogy.

The Company recognizes funding received from grants as revenue, rather than as a reduction of research and development expenses, because the Company is the principal in conducting the research and development activities and these grants are central to the Company's ongoing operations. The Company recognizes revenue only after the qualifying expenses related to the grants have been incurred and it is reasonably assured that the expenses will be reimbursed and the revenue will be collectible. The related costs incurred are included in research and development expense in the Company's condensed consolidated statements of operations and comprehensive loss.

Revenue from grants not within the scope of ASC 606 was $0.2 million and $1.1 million for the three and nine months ended September 30, 2021, respectively, and $0.9 million and $1.4 million for the three and nine months ended September 30, 2020, respectively.

Concentration of Credit Risk

Financial instruments which potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents. Total cash balances exceeded insured balances by the Federal Deposit Insurance Corporation as of September 30, 2021 and December 31, 2020. Cash equivalents are invested in highly rated money market funds invested only in obligations of the U.S. government and its agencies.

The majority of the Company's revenue has been derived from government grants. The Company's grants, which represented 10% or more of the Company's total revenue during the three and nine months ended September 30, 2021 and 2020, or accounts receivable balance as of September 30, 2021 and December 31, 2020, are as follows:

	Revenue				Accounts Receivable	
	Three Months Ended September 30,		Nine Months Ended September 30,		September 30,	December 31,
	2021	2020	2021	2020	2021	2020
Grant A	—	—	—	—	—	—
Grant B	—	0 %	—	11 %	—	—
Grant C	100 %	68 %	100 %	65 %	100 %	100 %
Grant D	—	30 %	—	20 %	—	—
Total	100 %	98 %	100 %	96 %	100 %	100 %

All of the Company's revenues were generated from grants from government and other entities located in the United States, for the three and nine months ended September 30, 2021 and 2020.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

Other Risks and Uncertainties

The Company is subject to risks and uncertainties common to early-stage companies in the biotechnology industry, including, but not limited to, successful discovery and development of its product candidates, the success of clinical trials and other studies for its product candidates, including for its ongoing V005 Phase II/III clinical trial and V007 Phase III clinical trial, the regulatory approval and commercialization of its HAVs and other product candidates, the expected size of the target populations for the Company's product candidates, the degree of market acceptance of the HAVs, if approved, the availability of third-party coverage and reimbursement, development by competitors of new technological innovations, the ability to manufacture HAVs and other product candidates in sufficient quantities, expectations regarding the Company's strategic partnerships, dependence on third parties, key personnel and the ability to attract and retain qualified employees, protection of proprietary technology and confidentiality of trade secrets, compliance with governmental regulations, the impact of the COVID-19 pandemic, the Company's implementation and maintenance of effective internal controls, and the ability to secure additional capital to fund operations and commercial success of its product candidates.

Product candidates currently under development will require extensive preclinical and clinical testing and regulatory approval prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel, and infrastructure and extensive compliance-reporting capabilities. Even if the Company's commercialization efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales, and the Company may depend on certain strategic relationships to distribute its products, including the Company's strategic partnership with Fresenius Medical Care Holdings, Inc., or Fresenius Medical Care, to sell, market and distribute its 6 millimeter HAV for certain specified indications.

Net Loss per Share Attributable to Common Stockholders

The Company follows the two-class method to compute basic and diluted net loss per share attributable to common stockholders when shares met the definition of participating securities. The two-class method determines net loss per common share for each class of common and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income available to common stockholders for the period to be allocated between common and participating securities based upon their respective rights to share in the earnings as if all income for the period had been distributed. During periods of loss, there is no allocation required under the two-class method since the redeemable convertible preferred stock did not have a contractual obligation to share in the Company's losses.

Basic net loss per share attributable to common stockholders is computed by dividing net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period without consideration of potentially dilutive common stock. Diluted net loss per share attributable to common stockholders reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock that then shared in the earnings of the Company unless inclusion of such shares would be anti-dilutive. As the Company has only incurred losses, basic and diluted net loss per share is the same.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

The potential shares of common stock that were excluded from the computation of diluted net loss per share for each period because including them would have had an antidilutive effect were as follows:

	September 30,	
	2021	2020
Shares issuable upon conversion of Series A redeemable convertible preferred stock	—	18,421,897
Shares issuable upon conversion of Series B redeemable convertible preferred stock	—	24,137,647
Shares issuable upon conversion of Series C redeemable convertible preferred stock	—	11,241,283
Shares issuable upon conversion of Series D redeemable convertible preferred stock	—	15,812,735
Exercise of options under stock plan	6,399,888	4,516,907
Warrants to purchase common stock	5,465,204	32,961

The 15,000,000 Contingent Earnout shares are excluded from the anti-dilutive table for all the periods presented as such shares are contingently issuable until the share price of the Company exceeds specified thresholds that have not yet been achieved, or upon the occurrence of a change in control.

Impairment of Long-Lived Assets

The Company reviews the carrying value of property and equipment for indicators of possible impairment whenever events and circumstances indicate that the carrying value of an asset or asset group may not be recoverable from the estimated future net undiscounted cash flows expected to result from its use and eventual disposition. In cases where estimated future net undiscounted cash flows are less than the carrying value, an impairment loss is recognized equal to an amount by which the carrying value exceeds the fair value of the asset or asset group. The factors considered by management in performing this assessment include current operating results, trends and prospects, the manner in which the property is used, and the effects of obsolescence, demand, competition, and other economic factors. Based on this assessment, during the nine months ended September 30, 2021 and 2020, respectively, the Company concluded there were no such events or changes in circumstances requiring review of the carrying amount of the Company's long-lived assets and there was no impairment at September 30, 2021 or December 31, 2020.

Recently Adopted Accounting Pronouncements

In August 2020, the FASB issued ASU No. 2020-06, "Debt-Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging-Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity" ("ASU 2020-06"), which simplifies accounting for convertible instruments by removing major separation models required under current U.S. GAAP. The ASU removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exception and it also simplifies the diluted earnings per share calculation in certain areas. Either a modified retrospective method of transition or a fully retrospective method of transition is permissible for the adoption of this standard. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2021, with early adoption permitted. The Company adopted ASU 2020-06 as of January 1, 2021. The adoption of this ASU had no impact on the Company's financial statements and related disclosures.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

Recently Issued Accounting Pronouncements

In May 2021, the FASB issued ASU No. 2021-04, "Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options" ("ASU 2021-04"). The FASB issued this update to clarify and reduce diversity in an issuer's accounting for modifications or exchanges of freestanding equity classified written call options (for example, warrants) that remain equity classified after modification or exchange. ASU 2021-04 is effective for all entities for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. An entity should apply the amendments prospectively to modifications or exchanges occurring after the effective date of the amendments. The Company is currently evaluating the effect of this update on its financial statements.

3. Reverse Recapitalization

On August 26, 2021, Merger Sub, a wholly-owned subsidiary of AHAC, merged with Legacy Humacyte, with Legacy Humacyte surviving as a wholly-owned subsidiary of AHAC. At the effective time of the Merger:

- each outstanding share of Legacy Humacyte common stock was converted into approximately 0.26260 shares of the Company's common stock;

- each outstanding share of preferred stock of Legacy Humacyte was cancelled and converted into the aggregate number of shares of New Humacyte's common stock that would be issued upon conversion of the shares of Legacy Humacyte preferred stock based on the applicable conversion ratio immediately prior to the effective time, multiplied by approximately 0.26260; and

- each outstanding option or warrant to purchase Legacy Humacyte common stock was converted into an option or warrant, as applicable, to purchase a number of shares of the Company's common stock equal to the number of shares of Legacy Humacyte common stock subject to such option or warrant multiplied by approximately 0.26260, at an exercise price per share equal to the current exercise price per share for such option or warrant divided by approximately 0.26260;

in each case, rounded down to the nearest whole share.

In addition, upon the closing of the merger (the "Closing"), 2,500,000 Class B shares of AHAC (Founder Shares) automatically converted into shares of the Company's common stock, on a one-for-one basis.

Former holders of the Legacy Humacyte common stock and Legacy Humacyte preferred stock are eligible to receive up to an aggregate of 15 million additional shares of the Company's common stock (the "Contingent Earnout Shares") in the aggregate in two equal tranches of 7.5 million shares if the volume-weighted average closing sale price of the common stock is greater than or equal to $15.00 and $20.00, respectively, for any 20 trading days within any 30 consecutive trading day period. At the Closing on August 26, 2021, the Company recorded a liability ("Contingent Earnout Liability") of $159.4 million, based on the estimated fair value of the 15 million Contingent Earnout Shares with a corresponding reduction of additional paid-in capital in the equity section of the Company's condensed consolidated balance sheet.

Concurrently with the execution of the Business Combination Agreement, AHAC entered into subscription agreements (the "Subscription Agreements") with certain investors (the "PIPE Investors"). Pursuant to the Subscription Agreements, the PIPE Investors purchased an aggregate of 17,500,000 shares of the Company's common stock (the "PIPE Shares") in a private placement at a price of $10.00 per share for an aggregate purchase price of $175 million (the "PIPE Financing"). The PIPE Financing was consummated in connection with the Closing.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

The number of shares of the Company's common stock outstanding immediately following the consummation of the Merger was:

	Shares
Common stock of AHAC, outstanding prior to Merger	10,355,000
Less redemption of AHAC shares	(3,008,551)
Common stock of AHAC	7,346,449
AHAC Founder Shares	2,500,000
New Humacyte shares issued to PIPE Investors	17,500,000
Issuance of common stock upon reverse recapitalization and PIPE Financing	27,346,449
New Humacyte shares issued in Merger to Legacy Humacyte stockholders	75,656,935 (1)
Total shares of common stock immediately after Merger	103,003,384

(1) Includes 69,613,562 shares of common stock issued upon conversion of Legacy Humacyte's redeemable convertible preferred stock.

The Merger is accounted for as a reverse recapitalization in accordance with U.S. GAAP. Under this method of accounting, AHAC is treated as the acquired company for financial reporting purposes and Legacy Humacyte is treated as the acquiror. This determination is primarily based on the fact that subsequent to the Merger, the Legacy Humacyte stockholders hold a majority of the voting rights of the combined company, Legacy Humacyte comprises all of the ongoing operations of the combined company, Legacy Humacyte comprises a majority of the carryover governing body of the combined company, and Legacy Humacyte's senior management comprises all of the senior management of the combined company. Accordingly, for accounting purposes, the Merger was treated as the equivalent of Legacy Humacyte issuing shares for the net assets of AHAC, accompanied by a recapitalization. The net assets of AHAC were stated at historical costs. No goodwill or other intangible assets were recorded. Operations prior to the Merger are those of Legacy Humacyte.

In connection with the Merger, the Company received $242.4 million in proceeds from the Merger and related PIPE Financing. The Company incurred $3.9 million of transaction costs, consisting of banking, legal, and other professional fees, of which $3.9 million was recorded as a reduction of proceeds to additional paid-in capital, and less than $0.1 million related to the Private Placement Warrants, which are classified as liabilities in the condensed consolidated balance sheets, was expensed in the condensed consolidated statements of operations and comprehensive loss. Legacy Humacyte assumed $15.2 million of liabilities, including PIPE Financing fees and legal fees, and $0.1 million of assets from AHAC. Of the $15.2 million of liabilities assumed from AHAC, as of September 30, 2021, $2.2 million was included in accounts payable and accrued expenses. In addition, there were $3.0 million of unpaid transaction costs included in accounts payable and accrued expenses as of September 30, 2021.

4. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market in an orderly transaction between market participants at the measurement date. ASC 820, *Fair Value Measurement and Disclosures*, establishes a hierarchy whereby inputs to valuation techniques used in measuring fair value are prioritized, or the fair value hierarchy. There are three levels to the fair value hierarchy based on reliability of inputs, as follows:

- Level 1 — Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets.
- Level 2 — Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 — Unobservable inputs in which little or no market data exists, therefore requiring the Company to develop its own assumptions.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

The Company evaluates assets and liabilities subject to fair value measurements on a recurring basis to determine the appropriate level at which to classify them for each reporting period, utilizing valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The determination requires significant judgments to be made by the Company.

The Company's assets and liabilities that were measured at fair value on a recurring basis were as follows:

	Fair Value Measured as of September 30, 2021			
($in thousands)	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	$ 238,375	$ —	$ —	$ 238,375
Total financial assets	$ 238,375	$ —	$ —	$ 238,375
Liabilities:				
Contingent earnout liability	$ —	$ —	$ 169,200	$ 169,200
Common stock warrant liabilities (Private Placement Warrants)	—	—	555	555
Total financial liabilities	$ —	$ —	$ 169,755	$ 169,755

	Fair Value Measured as of December 31, 2020			
($in thousands)	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	$ 35,623	$ —	$ —	$ 35,623
Total financial assets	$ 35,623	$ —	$ —	$ 35,623

The following table presents a summary of the changes in the fair value of the Company's Level 3 financial instruments:

($in thousands)	Contingent Earnout Liability	Private Placement Warrants
Fair value as of December 31, 2020	$ —	$ —
Private placement warrant liability acquired as part of the merger	—	(553)
Contingent earount liability recognized upon the closing of the reverse recapitalization	(159,432)	—
Change in fair value included in other (expense) income	(9,768)	(2)
Fair value as of September 30, 2021	$ (169,200)	$ (555)

The fair value of the Contingent Earnout Liability and Private Placement Warrants liability are based on significant unobservable inputs, which represent Level 3 measurements within the fair value hierarchy.

In determining the fair value of the Contingent Earnout Liability, the Company used the Monte Carlo simulation value model using a distribution of potential outcomes on a monthly basis over a ten-year period prioritizing the most reliable information available. The assumptions utilized in the calculation were based on the achievement of certain stock price milestones, including the current Company common stock price, expected volatility, risk-free rate, expected term and expected dividend yield (see Note 8).

In determining the fair value of the Private Placement Warrants liability, the Company used the Monte Carlo simulation valuation model to estimate the fair value utilizing assumption including the current Company stock price, expected volatility, risk-free rate, expected term and expected dividend yield (see Note 8).

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

The Company's cash equivalents are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices. The carrying values of other receivables, accounts payable and accrued expenses as of September 30, 2021 and December 31, 2020 approximated their fair values due to the short-term nature of these items.

5. Property and Equipment, Net

Property and equipment, net consist of the following:

($ in thousands)	September 30, 2021	December 31, 2020
Scientific equipment	$ 27,578	$ 27,412
Computer equipment	154	149
Software	335	335
Furniture and fixtures	988	988
Leasehold improvements	26,355	26,355
	55,410	55,239
Accumulated depreciation	(18,911)	(14,261)
Property and equipment, net	$ 36,499	$ 40,978

Depreciation expense totaled $1.5 million and $4.7 million for the three and nine months ended September 30, 2021, respectively, and $1.6 million and $4.7 million for the three and nine months ended September 30, 2020, respectively. All long-lived assets are maintained in the United States.

6. Accrued Expenses

Accrued expenses consisted of the following:

($ in thousands)	September 30, 2021	December 31, 2020
Accrued external research, development and manufacturing costs	$ 2,685	$ 2,615
Accrued employee compensation and benefits	4,025	1,009
Accrued professional fees	2,712	968
Total	$ 9,422	$ 4,592

7. Debt

On April 30, 2020, the Company received loan proceeds in the amount of approximately $3.3 million under the Paycheck Protection Program ("PPP"). All or portion of this loan and any accrued interest was eligible to be forgiven after a twenty-four week period as long as the borrower used the loan proceeds for eligible purposes, including payroll, benefits, rent and utilities, and maintains its payroll levels. The amount of the loan forgiven was to be reduced if the borrower terminated employees or reduced salaries during the twenty-four week period. The unforgiven portion of the PPP loan was to be payable over two years at an interest rate of 1%, with a deferral of payments for the first ten months. On May 25, 2021, the PPP loan was forgiven and the Company recognized a gain from loan extinguishment in the amount of $3,284 during the nine months ended September 30, 2021.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

In March 2021, the Company entered into a term loan agreement with Silicon Valley Bank and SVB Innovation Credit Fund VIII, L.P., which provides a term loan facility of up to $50.0 million with a maturity date of March 1, 2025, or the Loan Agreement. The Company's obligations under the Loan Agreement are secured by substantially all of its assets except for its intellectual property. The Loan Agreement contains certain customary covenants, including, but not limited to, those relating to additional indebtedness, liens, asset divestitures, and affiliate transactions. If a minimum liquidity amount is not maintained, 50% of the outstanding principal and interest will become cash collateralized. As of September 30, 2021, the Company was in compliance with all covenants. The Company may use the proceeds of borrowings under the Loan Agreement as working capital and to fund its general business requirements.

The Loan Agreement provides that the term loans will be distributed in tranches. The initial term loan tranche of $20.0 million was drawn in March 2021 and is accounted for net of issuance costs which are being accreted to interest expense over the term of the loan using the effective interest method. As of September 30, 2021, three subsequent $10.0 million term loan tranches were eligible to be disbursed at the request of the Company during specified draw periods between now and 2023 if certain business development milestones and other specified requirements are met by the dates specified in the Loan Agreement. Borrowings bear interest at the greater of 7.5% or the Wall Street Journal Prime Rate plus 4.25% (7.5% as of September 30, 2021). Interest only payments on the principal amount outstanding are due monthly beginning in the first month after the loan is dispersed. Repayment of principal may begin as soon as April 1, 2022 under the level of borrowing outstanding at September 30, 2021, and no later than April 1, 2024. The term loans may only be prepaid in full, and such prepayment requires 30 days' advance notice and is subject to a prepayment fee of 3.00% (with a step down to 2.00% after March 30, 2022, and a further step down to 1.00% after March 30, 2023). The Company is not obligated to pay a prepayment fee if the Company makes a prepayment after March 30, 2024.

On October 13, 2021, the Company borrowed an additional $10.0 million under the Loan Agreement. As a result of the additional borrowing, the commencement of repayment of principal was deferred to no earlier than July 2023.

In connection with the Loan Agreement, the Company granted warrants to the lenders to purchase shares of common stock at an exercise price of $10.28 per share, of which 287,704 warrants were immediately exercisable. The warrants are classified within stockholders' equity as the settlement of the warrants is indexed to the Company's own stock. The Company recognized the fair value of the warrants immediately exercisable within stockholders' equity using a Black-Scholes valuation model at issuance. As of September 30, 2021, the fair value of warrants ($2.4 million), a 5% final payment fee ($1.0 million) and debt issuance costs ($0.3 million) are being accreted to interest expense over the term of the loan using the effective interest method.

At issuance, the Company initially determined that the funding of an additional tranche was not probable, and therefore no value was ascribed to the remaining 123,302 warrants that were only exercisable upon the funding of the additional tranche. As a result of the Company's additional $10.0 million borrowings under the Loan Agreement on October 13, 2021, the warrants to purchase the additional 123,302 shares of the Company's common stock became exercisable at an exercise price of $10.28 per share.

SVB loan payable and net discount or premium balances are as follows:

($ in thousands)	**September 30, 2021**
Principal amount of SVB loan payable	$ 20,000
Final payment amount of SVB loan payable	1,000
Net premium associated with accretion of final payment and other debt issuance costs	(3,073)
SVB loan payable, current and noncurrent	17,927
Less SVB loan payable, current portion	(3,889)
SVB loan payable, noncurrent portion	$ 14,038

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

Future minimum payments of principal on the Company's outstanding variable rate borrowings as of September 30, 2021 are as follows:

Year ending December 31:	*($ in thousands)*
2021 (remainder)	$ —
2022	5,555
2023	6,667
2024	6,667
2025	1,111
Total future payments	20,000

8. Stockholders' Equity (Deficit)

Redeemable Convertible Preferred Stock

As of December 31, 2020 and immediately prior to the Merger, Legacy Humacyte had outstanding series A redeemable convertible preferred stock, series B redeemable convertible preferred stock, series C redeemable convertible preferred stock and series D redeemable convertible preferred stock, which are collectively referred to as "redeemable convertible preferred stock."

In connection with the Merger, all previously issued and outstanding redeemable convertible preferred stock was converted into an equivalent number of shares of common stock of the Company on a one-to-one basis, then multiplied by the Exchange Ratio pursuant to the Merger Agreement.

Common Stock

On August 26, 2021, the Merger and related PIPE Financing was consummated and the Company issued 27,346,449 shares of common stock for proceeds of $242.4 million. The Company incurred $3.9 million of transaction costs, consisting of banking, legal, and other professional fees. Legacy Humacyte assumed $15.2 million of liabilities, including PIPE Financing fees and legal fees, and $0.1 million of assets from AHAC. Immediately following the Merger, there were 103,003,384 shares of common stock outstanding with a par value of $0.0001.

As of September 30, 2021, the Company's Second Amended and Restated Certificate of Incorporation authorized the Company to issue 250,000,000 shares of common stock at a par value of $0.0001 per share. The number of authorized shares of common stock may be increased or decreased (but not below the number of shares thereof then outstanding or reserved for issuance) by the affirmative vote of the holders of a majority of the capital stock of the Company entitled to vote and without a separate class vote of the common stock.

The holders of common stock are entitled to receive dividends from time to time as may be declared by the Company's board of directors. Through September 30, 2021, no dividends have been declared.

The holders of common stock are entitled to one vote for each share held with respect to all matters voted on by the common stockholders of the Company.

In the event of a reorganization of the Company, after payment to the preferred stockholders of their liquidation preferences, holders of common stock are entitled to share ratably in all remaining assets of the Company.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

As of September 30, 2021, the Company had reserved common stock for future issuances as follows:

	September 30, 2021
Common stock reserved for Contingent Consideration Shares	15,000,000
Exercise of options under stock plans	6,399,888
Issuance of options under stock plans	7,730,503
Shares available for grant under ESPP	1,030,033
Warrants to purchase common stock	5,465,204
	35,625,628

On August 26, 2021, upon the Closing, all of the outstanding redeemable convertible preferred stock was converted to Common Stock pursuant to the conversion rate effective immediately prior to the Merger and the Exchange Ratio and the remaining amount was reclassified to additional paid-in capital.

Preferred Stock

The Company's Second Amended and Restated Certificate of Incorporation provides the Company's board of directors with the authority to issue $0.0001 par value preferred stock in one more series and to establish from time to time the number of shares to be included in each such series, by adopting a resolution and filing a certification of designations. Voting powers, designations, powers, preferences and relative, participating, optional, special and other rights shall be stated and expressed in such resolutions. There were 20,000,000 shares designated as preferred stock and none were outstanding as of September 30, 2021.

Warrants

Activity of warrants for the nine months ended September 30, 2021 is set forth below:

	Legacy Humacyte Common Stock Warrants	Private Placement Warrants	Public Warrants	Total Common Stock Warrants
Outstanding as of December 31, 2020	32,961	—	—	32,961
Common Stock Warrants issued to SVB	287,704	—	—	287,704
Common Stock Warrants as Part of the Merger	—	177,500	5,000,000	5,177,500
Warrants Exercised	(32,961)	—	—	(32,961)
Oustanding as of September 30, 2021	287,704	177,500	5,000,000	5,465,204

In conjunction with a long-term debt agreement entered into on March 15, 2006 and paid in full during 2011, the Company issued a warrant that gave the holder the right to purchase 32,961 shares of the Company's common stock at an exercise price of $1.14 per share, which was outstanding as of December 31, 2020. The warrant was fully exercised on March 4, 2021. There was no activity for the warrant during the year ended December 31, 2020.

See Note 7 – Debt for a discussion of warrants issued in conjunction with the Company's Loan Agreement.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

Private Placement Warrants

The Private Placement Warrants were initially recognized as a liability on the Closing Date, at a fair value of $0.6 million, and the Private Placement Warrant liability was remeasured to fair value as of September 30, 2021, resulting in a loss of less than $0.1 million for the three and nine months ended September 30, 2021, classified within change in fair value of common stock warrant liabilities in the condensed consolidated statements of operations and comprehensive loss.

The Private Placement Warrants were valued using the following assumptions under the Monte Carlo simulation value model:

	September 30, 2021	August 26, 2021
Market price of public stock	$ 11.61	$ 10.96
Exercise price	$ 11.50	$ 11.50
Expected term (years)	4.91	5.00
Expected share price volatility	28.5 %	32.5 %
Risk-free interest rate	0.96 %	0.68 %
Estimated dividend yield	0 %	0 %

Public Warrants

The Public Warrants may only be exercised for a whole number of shares and will expire five years after the completion of the Merger. The Public Warrants became exercisable 30 days after the completion of the Merger.

The Public Warrants were initially recognized as equity on the Closing Date at a fair value of $2.80 per share. There were no exercises of the Public Warrants during the three months ended September 30, 2021.

Contingent Earnout Liability

Following the Closing, former holders of Legacy Humacyte common and preferred shares may receive up to 15,000,000 additional shares of the Company's common stock in the aggregate, in two equal tranches of 7,500,000 shares of common stock per tranche. The first and second tranches are issuable if the closing volume weighted average price ("VWAP") per share of common stock quoted on the Nasdaq (or the exchange on which the shares of common stock are then listed) is greater or equal to $15.00 and $20.00, respectively, over any twenty trading days within any thirty-day trading period.

Upon the Closing, the contingent obligation to issue Contingent Earnout Shares was accounted for as a liability because the triggering events that determine the number of Contingent Earnout Shares required to be issued include events that are not solely indexed to the common stock of Humacyte. The estimated fair value of the total Contingent Earnout Shares at the Closing on August 26, 2021, was $159.4 million based on a Monte Carlo simulation valuation model using a distribution of potential outcomes on a monthly basis over a ten-year period using the most reliable information available. The Contingent Earnout Liability was remeasured to fair value as of September 30, 2021, resulting in the recording of a non-cash loss of $9.8 million for the three and nine months ended September 30, 2021, classified within change in fair value of contingent earnout liability in the condensed consolidated statements of operations and comprehensive loss.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

Assumptions used in the valuations are described below:

	September 30, 2021	August 26, 2021
Current stock price	$ 11.61	$ 10.96
Expected share price volatility	78.9 %	79.6 %
Risk-free interest rate	1.55 %	1.34 %
Estimated dividend yield	0.0 %	0 %
Expected term (years)	10.00	10.00

9. Stock-based Compensation

At Closing, the 2021 Long-Term Incentive Plan, or the 2021 Plan, and the 2021 Employee Stock Purchase Plan, or the ESPP, became effective. As of September 30, 2021, 7,730,503 and 1,030,033 shares of common stock were available under the 2021 Plan and ESPP, respectively. On January 1 of each year commencing January 1, 2022, the 2021 Plan and the ESPP reserve will automatically increase in an amount equal to the lesser of (a) 5% and 1%, respectively, of the number of shares of the Company's common stock outstanding on December 31 of the preceding year and (b) a number of shares of common stock determined by the Company's board of directors.

Under the 2021 Plan, the Company can grant non-statutory stock options, or NSOs, incentive stock options, or ISOs, stock appreciation rights, restricted stock, restricted stock units, unrestricted stock, performance awards and other forms of awards. Under the ESPP, eligible employees are permitted to purchase shares of the Company's common stock at the lower of 85% of the closing trading price per share of the Company's common stock on the first day of the offering or 85% of the closing trading price per share on the exercise date, which will occur on the last day of each offering.

Prior to the Closing, Legacy Humacyte had two equity incentive plans, the 2015 Omnibus Incentive Plan, as amended, or the 2015 Plan, and the 2005 Stock Option Plan, or the 2005 Plan. As a result of the Merger, no further awards may be granted under either the 2015 plan or the 2005 Plan. All awards previously granted and outstanding as of the effective date of the Merger, which total 5,886,706 and 518,432 shares of common stock reserved for options issued under the 2015 Plan and 2005 Plan, respectively, were adjusted to reflect the impact of the Merger as set forth in the Merger Agreement, but otherwise remain in effect pursuant to their original terms. The shares underlying any award granted under the 2015 Plan that are forfeited, cancelled or reacquired by the Company prior to vesting, that expire or that are paid out in cash rather than shares will become available for grant and issuance under the 2021 Plan.

The Company's stock option plans allow for the grant of awards that the Company believes aid in aligning the interests of these persons with those of its stockholders. The Company's board of directors determines the specific terms of equity incentive grants, including the exercise price per share and vesting period for option awards. Option awards are granted with an exercise price equal to the fair market value of the Company's common stock at the date of grant.

The Company has granted options that include either a service-based or performance-based vesting conditions, or both, and a 10-year contractual term. The service-based vesting condition for the plans is generally satisfied over 36 to 48 months from the date of grant. The performance-based vesting conditions are satisfied upon the attainment of certain product development milestones. The Company recognizes stock-based compensation expense based on the grant date fair value of the awards measured using the Black-Scholes option pricing model. Compensation expense related to awards with service-based vesting conditions is recognized on a straight-line basis over the requisite service period. Option valuation models, including the Black-Scholes option-pricing model, require the input of highly subjective assumptions, and changes in the assumptions used can materially affect the grant-date fair value of an award. These assumptions include the risk-free rate of interest, expected dividend yield, expected volatility, the expected term of the award, and the fair value of the underlying common stock on the date of grant. Forfeitures are accounted for as they occur.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

Compensation expense related to awards with performance-based vesting conditions is recognized over the requisite service period using the accelerated attribution method to the extent achievement of the performance-based condition is probable. The Company does not recognize compensation expense related to awards with performance-based vesting conditions until it is probable that the performance-based vesting condition will be achieved. Forfeitures are accounted for as they occur.

Option awards under the Company's option plans generally provide for accelerated vesting of the unvested portions of any option award in the event of an involuntary termination, as such term is defined in the relevant stock option agreement, of a grantee's employment during the period that commences 30 days prior to the effective date of a corporate transaction and that ends 12 months following the effective date of such transaction. Additionally, the Company's board of directors may, in its sole discretion, accelerate the vesting of any unvested stock options in the event of a corporate transaction.

Under the terms of her employment agreement, the Company awarded the Company's President and Chief Executive Officer, Laura Niklason M.D., PhD., a stock option award in January 2021 entitling her to purchase 1,312,984 shares of the Company's common stock at an exercise price of $10.28 per share, none of which have vested as of September 30, 2021. This stock option vests in equal annual installments on each of the first three anniversaries of November 9, 2020, subject to acceleration upon a corporate transaction (as defined in the 2015 Plan). The vesting of this award did not accelerate upon finalization of the Merger.

The Company estimated the fair value of the stock options on the date of grant using the following assumptions in the Black-Scholes option-pricing model:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021 (1)	2020	2021	2020
Estimated dividend yield	—	0 %	0 %	0 %
Expected share price volatility (weighted average and range, if applicable)	—	91.6 %	91.4% (91.0% to 92.1%)	91.4% (89.4% to 91.6%)
Risk-free interest rate (weighted average and range, if applicable)	—	0.34 %	0.68% (0.62% to 1.02%)	0.40% (0.34% to 0.75%)
Expected term of options (in years)	—	6.0	6.0	6.0

(1) The Company did not grant any stock options during the three months ended September 30, 2021.

- *Fair Value of Common Stock.* As the Company's common stock was not publicly traded prior to the Merger, the fair value of the shares of its common stock underlying the options has historically been determined by the Company's board of directors with input from management, after considering independent third-party valuation reports.

- *Expected Term.* The expected term represents the period that stock options are expected to be outstanding. The Company calculated the expected term using the simplified method for options, which is available where there is insufficient historical data about exercise patterns and post-vesting employment termination behavior. The simplified method is based on the vesting period and the contractual term for each grant, or for each vesting-tranche for awards with graded vesting. The mid-point between the vesting date and the maximum contractual expiration date is used as the expected term under this method. For awards with multiple vesting-tranches, the times from grant until the mid-points for each of the tranches may be averaged to provide an overall expected term.

- *Expected Volatility.* The expected volatility was based on the historical share volatility of several publicly traded peer companies over a period of time equal to the expected term of the options, as the Company does not have any trading history to use the volatility of its common stock. For purposes of identifying these peer companies, the Company considered the industry, stage of development, size and financial leverage of potential comparable companies.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

- *Risk-Free Interest Rate.* The risk-free interest rate was based on the yields of U.S. Treasury zero-coupon securities with maturities similar in duration to the expected term of the options.

- *Expected Dividend Yield.* The Company has not paid dividends on its common stock nor does it expect to pay dividends in the foreseeable future. Accordingly, the Company has estimated the dividend yield to be zero.

At September 30, 2021, there were 7,730,503 options remaining available for grant under the 2021 Plan. The Company has sufficient authorized and unissued shares to make all issuances currently available under the 2021 Plan.

The following tables show a summary of stock-based compensation expense included in the condensed consolidated statements of operations and comprehensive loss for the three and nine months ended September 30, 2021, and the three and nine months ended September 30, 2020, and remaining unrecognized cost as of September 30, 2021 and 2020:

($ in thousands)	Three Months Ended September 30, 2021	Three Months Ended September 30, 2020	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
Research and development	$ 486	$ 308	$ 1,837	$ 781
General and administrative	1,391	862	5,498	2,685
Total	$ 1,877	$ 1,170	$ 7,335	$ 3,466

($ in thousands)	September 30, 2021	December 31, 2020
Unrecognized share-based compensation cost	$ 12,480	$ 5,789
Expected weighted average period compensation costs to be recognized (years)	2.1	1.7

A summary of option activity under the Company's stock option plans during the nine months ended September 30, 2021 is presented below:

	Number of Shares	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
Options outstanding at December 31, 2020	4,813,262	$ 6.04	6.6	$ 20,422
Granted	1,838,029	$ 10.28		
Exercised	(188,006)	$ 2.97		
Forfeited	(63,397)	$ 7.87		
Options outstanding at September 30, 2021	6,399,888	$ 7.33	6.6	$ 26,705
Vested and exercisable, September 30, 2021	4,092,342	$ 5.74	5.1	$ 23,345
Vested and expected to vest, September 30, 2021	6,399,888	$ 7.33	6.6	$ 26,705

The Company did not grant any stock options during the three months ended September 30, 2021.

10. Income Taxes

The Company's tax provision for interim periods is determined using an estimate of its annual effective tax rate, adjusted for discrete items, if any, that arise during the period. Each quarter, the Company updates its estimate of the annual effective tax rate and, if the estimated annual effective tax rate changes, the Company makes a cumulative adjustment in such period. No adjustment was made as of September 30, 2021. The Company's effective federal tax rate for the three and nine months ended September 30, 2021 and 2020

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

was 0%, primarily as a result of estimated tax losses for the fiscal year to date offset by the increase in the valuation allowance in the net operating loss carryforwards.

The Company did not record any income tax expense or benefit during the three and nine months ended September 30, 2021 and 2020. The Company has a net operating loss and has provided a valuation allowance against net deferred tax assets due to uncertainties regarding the Company's ability to realize these assets. All losses before income taxes arose in the United States.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security ("CARES") Act was passed by the U.S. Congress and signed into United States law. The CARES Act, among other things, includes certain provisions for individuals and corporations; however, these benefits did not materially impact the Company's income tax provision in the periods presented.

11. Commitments and Contingencies

Patent License Agreements

Duke University

In March 2006, the Company entered into a license agreement with Duke University, or Duke, which was subsequently amended in 2011, 2014, 2015, 2018 and 2019. Under this license agreement, Duke granted the Company a worldwide, exclusive, sublicensable license to certain patents related to decellularized tissue engineering, referred to as the patent rights, as well as a non-exclusive license to use and practice certain know-how related to the patent rights. The relevant licensed patent on decellularization of tissue will expire in 2021. The Company has agreed to use commercially reasonable efforts to develop, register, market and sell products utilizing the patent rights, referred to as the licensed products. Any services provided to a third party utilizing licensed products are referred to as licensed services. The Company has also agreed to meet certain benchmarks in its development efforts, including as to development events, clinical trials, regulatory submissions and marketing approval, within specified timeframes. Under the license agreement, Duke retains the right to use the patent rights for its own educational and research purposes, and to provide the patent rights to other non-profit, governmental or higher-learning institutions for non-commercial purposes without paying royalties or other fees.

In connection with the Company's entry into the license agreement, the Company granted equity consideration to Duke in the form of 52,693 shares of the Company's common stock. Under the license agreement, the Company also agreed to pay Duke:

- a low single-digit percentage royalty on eligible sales of licensed products and licensed services, plus a low double-digit percentage of any sublicensing revenue;
- an annual minimum royalty beginning in 2012, which increases in the calendar year immediately following the first commercial sale of licensed products or licensed services (whichever occurs first); and
- an additional amount in license fees, as certain milestones are met.

The license agreement remains effective until the last of the patent rights expires or four years after the Company's first commercial sale, unless earlier terminated. Either party may terminate the agreement for fraud, willful misconduct or illegal conduct, or uncured material breach. Duke may terminate the agreement if the Company becomes insolvent. Duke may also terminate the license, convert the license into a non-exclusive license or seek assignment of any sublicense if the Company fails to reach diligence milestones within the applicable time period. If the Company abandons any claim, patent or patent application, its rights under the license with respect to such patent rights will be terminated in the territory in which the Company abandons such rights. The Company may terminate the license agreement unilaterally upon three months' prior notice to Duke. The Company agrees to indemnify Duke against certain third-party claims. Payments to Duke under the license agreement were immaterial during the periods presented.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

Yale University

In February 2014, the Company entered into a license agreement with Yale University, or Yale, that granted the Company a worldwide license to the patents related to coatings for small-diameter vessels to inhibit clotting. The license granted under the agreement is exclusive in the field of engineered vascular tissues and tissues and extracellular matrix-based implants used for vascular repair, reconstruction and replacement (provided that all uses are vascular tissues within the range of 1-12mm in diameter), except that it is subject to Yale's non-exclusive right, on behalf of itself and all other non-profit academic institutions, to use the licensed products for research, teaching, and other non-commercial purposes. The Company has agreed to pay to Yale an annual maintenance fee, increasing between the first and fourth anniversaries of the agreement up to a maximum of less than $0.1 million per year for this license.

In August 2019, the Company entered into a license agreement with Yale, that granted the Company a worldwide license to the patents related to Bioartificial Vascular Pancreas (BVP). The license granted under the agreement is exclusive in the field of engineered vascular tissues that deliver pancreatic islet cells to patients, except that it is subject to Yale's non-exclusive right, on behalf of itself and all other non-profit academic institutions, to use the licensed products for research, teaching, and other non-commercial purposes. The Company has agreed to pay to Yale an annual maintenance fee, increasing between the first and fourth anniversaries of the agreement up to a maximum of less than $0.1 million per year for this license.

In August 2019, the Company entered into a license agreement with Yale that granted the Company a worldwide license to the patents related to tubular prostheses. The license granted under the agreement is exclusive in the field of engineered urinary conduits, engineered tracheas/airways, and engineered esophagi, except that it is subject to Yale's non-exclusive right, on behalf of itself and all other non-profit academic institutions, to use the licensed products for research, teaching, and other non-commercial purposes. The Company has agreed to pay to Yale an annual maintenance fee, increasing between the first and fourth anniversaries of the agreement up to a maximum of less than $0.1 million per year for this license.

The Company has agreed to use reasonable commercial efforts to develop and commercialize the licensed patents and any licensed products and methods, and to use reasonable efforts to make the licensed products available to patients in low and low-middle income countries. The Company is also obligated to provide Yale periodically an updated and revised copy of its plan for each license, which must indicate progress of its development and commercialization. The Company may also sublicense the Company's rights without Yale's prior written consent, but such sublicense is subject to certain conditions.

In connection with its entry into the license agreement, the Company paid Yale upfront cash fees. The Company has also agreed to pay Yale:

- annual maintenance fees, increasing between the first anniversary of the agreement until the fifth anniversary for the coating and BVP licenses and until the fourth anniversary for the tubular prostheses license up to a maximum of less than $0.1 million per year;
- milestone payments upon achievement of certain regulatory and commercial milestones of $0.2 million and $0.6 million;
- a low single-digit percentage royalty on worldwide net sales, subject to reductions for third-party license fees; and
- a low double-digit percentage of sublicensing income.

If the Company or any of its future sublicensees bring a patent challenge against Yale or assists another party in bringing a patent challenge against Yale, the license fees described above will be subject to certain increases and penalties.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

The agreements expire on a country-by-country basis on the date on which the last of the patents in such country expires, lapses or is declared invalid. Yale may terminate the agreements if the Company fails to (i) provide written diligence reports, (ii) provide commercially reasonable diligence plans, (iii) implement the plans in accordance with the obligations under the agreements, or (iv) reach certain research and development milestones within the scheduled timeframe set forth in the agreements; however, any such termination right would be limited in scope to the country to which such failure relates. Yale may also terminate for the Company's non-payment, uncured material breach, failure to obtain adequate insurance, bringing or assisting in bringing of a patent challenge against Yale, abandonment of the research and development of the Company's products or insolvency. The Company may terminate the license agreements (i) on 90 days' prior written notice to Yale, provided the Company is not in breach of the license agreements and has made all required payments to Yale thereunder and (ii) on written notice to Yale following an uncured material breach. With respect to the license agreements related to small-diameter vessels and BVP, the Company's rights under the license agreements will also terminate automatically with respect to a patent application or patent within the licensed patents in a specified country if, upon receipt of written notice from Yale, the Company does not agree to pay the patent filing, prosecution and maintenance fees incurred by Yale for such patent applications or patents in the specified country. Under certain circumstances, Yale may, at its option, convert the exclusive licenses to non-exclusive licenses if the Company declines to initiate certain infringement or interference proceedings with respect to the licensed patents. The Company has agreed to indemnify Yale against certain third-party claims. Payments to Yale under the license agreement were immaterial during the periods presented.

Legal Matters

The Company currently is not aware of any legal proceedings or claims that management believes will have, individually or in the aggregate, a material adverse effect on the Company's business, financial condition, results of operations, or cash flows.

Indemnification

To the extent permitted under Delaware law, the Company has agreed to indemnify its directors and officers for certain events or occurrences while the director or officer is, or was serving, at the Company's request in such capacity. The indemnification period covers all pertinent events and occurrences during the director's or officer's service. The maximum potential amount of future payments the Company could be required to make under these indemnification arrangements is not specified in such arrangements; however, the Company has director and officer insurance coverage that is intended to reduce its exposure and enable the Company to recover a portion of any potential future amounts the Company could be required to make. To date, the Company has not incurred any costs as a result of such obligations and has not accrued any liabilities related to such obligations in the condensed consolidated financial statements.

12. Related Party Transactions

Fresenius Medical Care investments and distribution agreement

In June 2018, the Company completed a $150 million financing transaction pursuant to which Fresenius Medical Care purchased shares of series D redeemable convertible preferred stock that at the Closing of the Merger converted into 15,812,735 shares of the Company's common stock. In August 2021, Fresenius Medical Care invested $25 million as part of the PIPE Financing and received 2.5 million shares of the Company's common stock.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

In addition, the Company entered into a distribution agreement with Fresenius Medical Care in June 2018 which, as amended as of February 16, 2021, granted Fresenius Medical Care and its affiliates exclusive rights to develop outside the United States and EU and commercialize outside of the United States the Company's 6 millimeter x 42cm HAV and all improvements thereto, and modifications and derivatives thereof (including any changes to the length, diameter or configuration of the foregoing), for use in vascular creation, repair, replacement or construction, including renal replacement therapy for dialysis access, the treatment of peripheral arterial disease, and the treatment of vascular trauma, but excluding coronary artery bypass graft, pediatric heart surgery, or adhering pancreatic islet cells onto the outer surface of the distribution product for use in diabetic patients. Within the United States, Fresenius Medical Care will collaborate with the Company in its commercialization of the product in the field, including adoption of the distribution product as a standard of care in patients for which such use is supported by clinical results and health economic analyses.

The Company is responsible for developing and seeking regulatory approval for the distribution product in the field in the United States. For countries outside the United States, the parties agreed to use commercially reasonable efforts to satisfy certain agreed minimum market entry criteria for the distribution product in the field in such country. For the EU, once such criteria have been satisfied for the applicable country, or if the parties otherwise mutually agree to obtain regulatory approval for the distribution product in the field in the applicable country, the Company agreed to use commercially reasonable efforts to obtain such regulatory approval (other than pricing approval), and Fresenius Medical Care agreed to use commercially reasonable efforts to obtain the corresponding pricing approval. For the rest of the world (i.e., outside the United States and the EU), once such criteria have been satisfied for the applicable country, or if the parties otherwise mutually agree to obtain regulatory and pricing approval for the distribution product in the field in the applicable country, Fresenius Medical Care agreed to use commercially reasonable efforts to obtain such approvals, and the Company agreed to use commercially reasonable efforts to support Fresenius Medical Care in its efforts.

Under the distribution agreement, the Company grants an exclusive, sublicensable license to Fresenius Medical Care under the patents, know-how and regulatory materials controlled by the Company during the term to commercialize the distribution product in the field outside the United States, subject to the Company's retained rights to carry out its obligations under the distribution agreement. The Company also grants a non-exclusive, sublicensable license to Fresenius Medical Care under the patents, know-how and regulatory materials controlled by the Company during the term to develop the distribution product in accordance with the terms of the distribution agreement. In addition, the Company grants to Fresenius Medical Care, among other things, a perpetual, irrevocable, non-exclusive sublicensable license under the patents and know-how that primarily relate to the distribution product or its manufacture and that were created, conceived or developed solely or jointly by or on behalf of Fresenius Medical Care in the performance of its activities under the distribution agreement.

The distribution agreement provides that the Company will own all know-how and patents that primarily relate to the distribution product or its manufacture that are created, conceived or developed by or on behalf of either party in the performance of activities under the distribution agreement. Ownership of all other know-how, patents, materials and other intellectual property created, conceived or developed during the performance of activities under the distribution agreement will be determined in accordance with U.S. patent laws for determining inventorship.

The Company is obligated to make payments to Fresenius Medical Care based on a share of aggregate net sales by or on behalf of the Company of the distribution product in the United States in the field. Such revenue-share payments will be a percentage of net sales in the low double digits, without regard to the calendar year in which such net sales are attributable, until such time that the Company has paid to Fresenius Medical Care a certain total amount, at which time the revenue-share will decrease to a percentage of net sales in the mid-single digits. The amounts that Fresenius Medical Care will be obligated to pay the Company under the distribution agreement for sales of the distribution product in the field outside of the United States will vary. Fresenius Medical Care agreed to pay the Company initially, on a country-by-country basis for sales outside of the United States, the amount equal to the average cost of manufacturing the Company's distribution product plus a fixed dollar amount per unit. Following a specified period, on a country-by-country basis outside of the United States, Fresenius Medical Care will pay the Company a fixed percentage of net sales for each unit sold in such country, such that the Company will receive more than half of such net sales.

Humacyte,Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

The distribution agreement will generally continue on a country-by-country basis until the later of (a) the tenth anniversary of the launch date of the distribution product in the relevant country or (b) the expiration of the last-to-expire valid claim of specified patents in such country. Each party is permitted to terminate the distribution agreement for insolvency of, or, under certain circumstances, including various cure periods, material breach by the other party. Subject to a cure period, Fresenius Medical Care may also terminate the distribution agreement in its entirety or on a country-by-country basis (i) for certain withdrawals of regulatory approval or (ii) for termination or expiration of any of our in-licenses that is necessary for the exercise of Fresenius Medical Care's rights, or the satisfaction of its obligations, under the distribution agreement. In addition, Fresenius Medical Care may terminate the distribution agreement for convenience on a country-by-country basis upon not less than 12 months' written notice to the Company, although Fresenius Medical Care is not permitted to give such notice prior to the end of the second year following launch of the distribution product in such country. Each party is required to indemnify one another for certain third-party claims.

Arrangements with Dr. Niklason and Yale University

In September 2016, the Company entered into a Memorandum of Understanding Regarding Scientific and Operational Leadership, or MOU, with Dr. Niklason in connection with her performance of various consulting activities for the Company.

The MOU provided for the Company to make a payment each year through 2023 to the academic institution with which Dr. Niklason was then affiliated, up to an aggregate amount of $2.5 million for 2018 through 2023, and to pay Dr. Niklason reasonable consulting fees in consideration of the services she performed for the Company. For the three and nine months ended September 30, 2020, the company made payments under the MOU of $0.1 million and $0.4 million, respectively, to, or on behalf of, Yale University, where Dr. Niklason, currently the Company's President, CEO and a member of the Company's board of directors, serves as a Professor Adjunct, Division Chief and Vice Chair, Research in Anesthesia. The MOU was terminated effective November 9, 2020.

The following table shows a summary of related party expenses included in the statements of operations and comprehensive loss for the three and nine months ended September 30, 2021 and 2020:

($ in thousands)	Three Months Ended September 30, 2021	2020	Nine Months Ended September 30, 2021	2020
Expenses under MOU	—	125	—	375
License expenses	—	20	85	70
Other	2	4	83	17
Total	2	149	168	462

As of September 30, 2021 and December 31, 2020, the Company was a party to license agreements with Yale University, as described in Note 11 — Commitments and Contingencies, above.

13. Subsequent Events

In preparing the condensed consolidated financial statements as of September 30, 2021 and for the three and nine months ended September 30, 2021, the Company evaluated the effect subsequent events would have on the financial statements through the date the financial statements were issued.

On October 13, 2021, the Company borrowed an additional $10.0 million under the Loan Agreement, and the warrants to purchase an additional 123,302 shares of the Company's common stock at an exercise price of $10.28 per share became exercisable. See Note 7 – Debt and Note 8 – Stockholders' Equity (Deficit) for additional information.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes included under Part I, Item 1 of this Quarterly Report on Form 10-Q (this "Quarterly Report"). In addition, you should refer to our audited consolidated financial statements and the related notes for the year ended December 31, 2020 and the section entitled "Management's Discussion and Analysis of Financial Conditions and Results of Operations" included in the Company's Registration Statement on Form S-1, filed with the SEC on September 17, 2021 and amended on October 22, 2021.

Unless the context indicates otherwise, references in this Quarterly Report to the "Company," "Humacyte," "we," "us," "our" and similar terms refer to Humacyte, Inc. (formerly known as Alpha Healthcare Acquisition Corp.) and its consolidated subsidiaries (including Humacyte Global, Inc.) following the Company's business combination with Alpha Healthcare Acquisition Corp (the "Business Combination"); references to "Legacy Humacyte" refer to Humacyte, Inc. prior to the Business Combination; and references to "AHAC" refer to Alpha Healthcare Acquisition Corp. prior to the Business Combination.

Cautionary Statement Regarding Forward-Looking Statements

In addition to historical information, some of the information contained in this discussion and analysis or set forth elsewhere in this Quarterly Report, including information with respect to our plans and strategy for our business, future financial performance, expense levels and liquidity sources, includes forward-looking statements that involve risks and uncertainties. You should read the sections of this Quarterly Report entitled "Forward-Looking Statements" and "Risk Factors" for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are pioneering the development and manufacture of off-the-shelf, universally implantable, bioengineered human tissues designed to improve the lives of patients and transform the practice of medicine. We believe our technology has the potential to overcome limitations in existing standards of care and address the lack of significant innovation in products that support tissue repair, reconstruction and replacement. We are leveraging our novel, scalable technology platform to develop proprietary, bioengineered, acellular human tissues. Our goal is to develop and manufacture these tissues for the treatment of diseases and conditions across a range of anatomic locations in multiple therapeutic areas.

We are initially using our proprietary scientific technology platform to engineer and manufacture our bioengineered human, acellular tissue-based vessels ("HAVs"). Our HAVs are designed to be easily implanted into any patient without inducing a foreign body response or leading to immune rejection. We are developing our "cabinet" of HAVs of varying diameters and lengths. The HAV cabinet would initially target the vascular repair, reconstruction and replacement market, including use in AVs access for hemodialysis, trauma, peripheral arterial disease and coronary artery bypass graft. In addition, we are developing our HAVs as conduits for pediatric heart surgery and the delivery of cellular therapies, including pancreatic islet cell transplantation for the treatment of Type 1 diabetes (our biovascular pancreas). We intend to continue to explore the application of our technology across a broad range of markets and indications, including the development of urinary conduit, trachea, esophagus and other novel cell delivery systems.

We believe there is substantial clinical demand for safe and effective vascular conduits to replace and repair blood vessels throughout the body. Vascular injuries resulting from trauma are common in civilian and military populations, frequently resulting in the loss of either life or limb. Existing treatment options in the vascular repair, reconstruction and replacement market use autologous vessels and synthetic grafts and suffer from significant limitations. For example, the use of autologous veins to repair traumatic vascular injuries can lead to significant morbidity associated with the surgical wounds created for vein harvest and prolonged times to restore blood flow to injured limbs leading to an increased risk of amputation and infection. Synthetic grafts are often contraindicated in the setting of vascular trauma due to higher infection risk that can lead to prolonged hospitalization and limb loss. Given the competitive advantages HAVs may have over existing vascular substitutes, we believe that HAVs have the potential to become the standard of care and lead to improved patient outcomes and lower healthcare costs.

We have generated no product revenue and incurred losses and negative cash flows from operations in each year since our inception in 2004. As of September 30, 2021 and December 31, 2020, we had an accumulated deficit of $457.2 and $388.1 million, respectively, and working capital of $222.9 million and $30.2 million, respectively. Our net losses were approximately $31.6 million and $69.1 million for the three and nine months ended September 30, 2021, respectively, and $17.8 million and $50.3 million for the three and nine months ended September 30, 2020, respectively. Substantially all of our net losses resulted from costs incurred in connection with our research and development programs and from general and administrative costs associated with our operations. We expect to incur substantial operating losses and negative cash flows from operations for the foreseeable future as the Company advances its product candidates.

As of September 30, 2021 and December 31, 2020, we had cash and cash equivalents of $240.4 million and $39.9 million, respectively. We believe our cash and cash equivalents will be sufficient to fund operations, including clinical trial expenses and capital expenditure requirements, for at least 12 months from the date of this Quarterly Report. See Note 1, “Organization and Description of Business,” in the notes to our condensed consolidated financial statements included elsewhere in this Quarterly Report for additional information regarding this assessment.

Recent Developments

Closing of Merger

On August 26, 2021 (the “Closing Date”), Legacy Humacyte and AHAC consummated the Business Combination pursuant to the Business Combination Agreement (the “Merger Agreement”), by and among Legacy Humacyte, AHAC and Hunter Merger Sub, Inc. (“Merger Sub”). As contemplated by the Business Combination Agreement, Merger Sub merged with and into Legacy Humacyte, with Legacy Humacyte surviving the Merger as a wholly owned subsidiary of AHAC (such transactions, the “Merger”). As a result of the Merger, AHAC was renamed Humacyte, Inc. and Legacy Humacyte was renamed Humacyte Global, Inc.

Pursuant to the terms of the Merger Agreement, at the effective time of the Merger (the “Effective Time”), (1) each outstanding share of common stock of Legacy Humacyte (“Legacy Humacyte common stock”) was cancelled and converted into the right to receive approximately 0.26260 shares of the Company’s common stock, par value $0.0001 per share (“Common Stock”), and (2) each outstanding share of preferred stock of Legacy Humacyte (“Legacy Humacyte preferred stock”) was cancelled and converted into the aggregate number of shares of Common Stock that would be issued upon conversion of the shares of Legacy Humacyte preferred stock based on the applicable conversion ratio immediately prior to the Effective Time, multiplied by approximately 0.26260, resulting in the issuance of a total of 75,656,935 shares of Common Stock. Prior holders of shares of Legacy Humacyte common stock and Legacy Humacyte preferred stock also received the contingent right to receive certain Earnout Shares (as defined below), for each share owned by each such Legacy Humacyte stockholder that was outstanding immediately prior to the closing of the Merger (the “Closing”). In addition, certain investors purchased an aggregate of 17,500,000 shares of Common Stock (such investors, the “PIPE Investors”) in a private placement that closed concurrently with the Closing for an aggregate purchase price of $175 million (the “PIPE Financing”). Additionally, at the Closing, 2,500,000 shares of AHAC’s Class B common stock (“Founder Shares”) automatically converted into shares of Common Stock on a one-for-one basis.

Pursuant to the terms of the Merger Agreement, at the Effective Time of the Merger, (1) warrants to purchase shares of Legacy Humacyte common stock were converted into warrants to purchase an aggregate of 287,704 shares of Common Stock, and (2) options to purchase shares of Legacy Humacyte common stock were converted into options to purchase an aggregate of 6,405,138 shares of Common Stock.

Following the Closing Date, former holders of Legacy Humacyte common stock and Legacy Humacyte preferred stock may receive up to 15,000,000 additional shares of Common Stock (“Earnout Shares”) in the aggregate in two equal tranches if the volume-weighted average closing sale price of our Common Stock is greater than or equal to $15.00 and $20.00, respectively, for any 20 trading days within any 30 consecutive trading day period.

Impact of COVID-19

The COVID-19 pandemic, which began in December 2019 and has spread worldwide, has caused many governments to implement measures to slow the spread of the outbreak, including shelter-in-place orders and the mandatory shutdown of certain businesses. The outbreak and government measures taken in response have had a significant impact, both direct and indirect, on our business, as supply chains have been disrupted, and facilities and production have been suspended. The future progression of the pandemic and its effects on our business and operations are uncertain. The COVID-19 pandemic may affect our ability to initiate and complete preclinical studies, delay our clinical trials or future clinical trials, disrupt regulatory activities, or have other adverse effects on our business and operations. The pandemic has already caused significant disruptions in the financial markets, and may continue to cause such disruptions, which could impact our ability to raise additional funds to support our operations. Moreover, the pandemic has significantly impacted economies worldwide and could result in adverse effects on our business and operations.

To date, the COVID-19 pandemic has not resulted in material financial impacts or impairment losses in the carrying values of our assets as a result of the pandemic and we are not aware of any specific related event or circumstance that would require us to revise the estimates reflected in our financial statements. The extent to which the COVID-19 pandemic will directly or indirectly impact our business, results of operations and financial condition, including current and future clinical trials and research and development costs, will depend on future developments that are highly uncertain, including as a result of new information that may emerge concerning COVID-19, the actions taken to contain or treat it, and the duration and intensity of the related economic impact of the pandemic.

Components of Results of Operations

Revenue

To date, we have not generated revenue from the sale of any products. All of our revenue has been derived from government and other grants. Since inception we have been awarded grants from the California Institute of Regenerative Medicine (“CIRM”), the National Institutes of Health (“NIH”), and the Department of Defense (“DoD”), to support our development, production scaling and clinical trials of our product candidates. We recognized $30.8 million in revenue from inception to September 30, 2021 from these sources, including $11.2 million from CIRM under a program that ended in 2020. We may generate revenue in the future from government and other grants, payments from future license or collaboration agreements and, if any of our product candidates receive marketing approval, from product sales. We expect that any revenue we generate will fluctuate from quarter to quarter. If we fail to complete the development of, or obtain marketing approval for, our product candidates in a timely manner, our ability to generate future revenue, and our results of operations and financial position, would be materially adversely affected.

Research and Development Expenses

Since our inception, we have focused our resources on our research and development activities, including conducting preclinical studies and clinical trials, developing our manufacturing process and activities related to regulatory filings for our product candidates. We recognize research and development expenses as they are incurred. Our research and development expenses consist primarily of:

- salaries and related overhead expenses for personnel in research and development functions, including stock-based compensation and benefits;
- fees paid to consultants and clinical research organizations (“CROs”), including in connection with our clinical trials, and other related clinical trial fees, such as for investigator grants, patient screening, laboratory work and statistical compilation and analysis;
- allocation of facility lease and maintenance costs;
- depreciation of leasehold improvements, laboratory equipment and computers;
- costs related to purchasing raw materials for and producing our product candidates for clinical trials;
- costs related to compliance with regulatory requirements;

- costs related to our manufacturing development and expanded-capabilities initiatives; and
- license fees related to in-licensed technologies.

The majority of our research and development resources are currently focused on our Phase III clinical trials for our 6 millimeter HAV and other work needed to obtain marketing approval for our 6 millimeter HAV for use for vascular repair, reconstruction and replacement, including trauma and arteriovenous ("AV") access in hemodialysis in the United States and Europe. We have incurred and expect to continue to incur significant expenses in connection with these and our other clinical development efforts, including expenses related to regulatory filings, trial enrollment and conduct, data analysis, patient follow up and study report generation for our Phase II and Phase III clinical trials. We do not allocate our costs by each research and development program for which we are developing our cabinet of HAVs, as a significant amount of our development activities broadly support multiple programs that use our technology platform. We plan to further increase our research and development expenses for the foreseeable future as we continue the development of our proprietary scientific technology platform and our novel manufacturing paradigm.

The successful development of our preclinical and clinical product candidates is highly uncertain. At this time, we cannot estimate with any reasonable certainty the nature, timing or costs of the efforts that will be necessary to complete the remainder of the development of any of our preclinical or clinical product candidates or the period, if any, in which material net cash inflows from these product candidates may commence. This is due to the numerous risks and uncertainties associated with the development of our product candidates, including:

- the scope, rate of progress, expense and results of our preclinical development activities, our ongoing clinical trials and any additional clinical trials that we may conduct, and other research and development activities;
- successful patient enrollment in and the initiation and completion of clinical trials;
- the timing, receipt and terms of any marketing approvals from applicable regulatory authorities including the U.S. Food and Drug Administration ("FDA") and non-U.S. regulators;
- the extent of any required post-marketing approval commitments to applicable regulatory authorities;
- development of clinical and commercial manufacturing capabilities or making arrangements with third-party manufacturers in order to ensure that it or its third-party manufacturers are able to successfully manufacture our product;
- obtaining, maintaining, defending and enforcing patent claims and other intellectual property rights;
- significant and changing government regulations;
- launching commercial sales of our product candidates, if approved, whether alone or in collaboration with others;
- the degree of market acceptance of any product candidates that obtain marketing approval; and
- maintaining a continued acceptable safety profile following approval, if any, of our product candidates.

A change in the outcome of any of these variables could lead to significant changes in the costs and timing associated with the development of our product candidates. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those that we currently anticipate being required to conduct in order to complete the clinical development of any of our product candidates, or if we experience significant delays in the enrollment or the conduct of any of our clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related costs for employees in executive, finance, human resources, commercialization, and administrative support functions, which also include stock-based compensation expenses and benefits for such employees. Other significant general and administrative expenses include facilities costs, professional fees for accounting and legal services and expenses associated with obtaining and maintaining patents.

We expect our general and administrative expenses will increase for the foreseeable future to support our expanded infrastructure and increased costs of operating as a public company. These increases are expected to include increased employee-related expenses and increased director and officer insurance premiums, audit and legal fees, investor relations fees and expenses for compliance with public company reporting requirements under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and rules implemented by the Securities and Exchange Commission (the "SEC"), as well as the rules of the Nasdaq Global Select Market.

Total Other Expenses, Net

Total other expenses, net consists of (i) the change in fair value of the contingent earnout liability that was accounted for as a liability as of the date of the Merger, and is remeasured to fair value at each reporting period, resulting in a non-cash gain or loss, (ii) a gain on Paycheck Protection Program ("PPP") loan forgiveness, (iii) interest income earned on our cash and cash equivalents, (iv) interest expense incurred on our term loan agreement with Silicon Valley Bank and SVB Innovation Credit Fund VIII, L.P. (the "Loan Agreement"), finance leases, and our PPP loan during the periods each were outstanding, (v) a change in fair value of private placement common stock warrant liabilities related to private placement warrants originally issued in a private placement to AHAC Sponsor LLC ("Private Placement Warrants"), which we assumed in connection with the Merger, and which are subject to remeasurement to fair value at each balance sheet date resulting in a non-cash gain or loss, and (vi) legal, accounting, and underwriting fees and other costs directly related to the consummation of the Merger that were associated with the aforementioned warrant liabilities.

Results of Operations

Comparison of the Three Months Ended September 30, 2021 and 2020

($in thousands)	Three Months Ended September 30, 2021	2020	Change $	Change %
Revenue	$ 241	$ 914	(673)	(74)%
Operating expenses:				
Research and development	15,386	14,692	694	5 %
General and administrative	5,398	3,435	1,963	57 %
Total operating expenses	20,784	18,127	2,657	15 %
Loss from operations	**(20,543)**	**(17,213)**	(3,330)	(19)%
Other expenses, net				
Change in fair value of contingent earnout liability	(9,768)	—	(9,768)	100 %
Interest expense	(1,204)	(549)	(655)	(119)%
Other (expenses) income, net	(48)	2	(50)	—
Total other expense, net	(11,020)	(547)	(10,473)	— %
Net loss	**$ (31,563)**	**$ (17,760)**	**$ (13,803)**	(78)%

Grant Revenue

For the three months ended September 30, 2021 and 2020, revenue totaled $0.2 million and $0.9 million, respectively, a decrease of $0.7 million, or 74%. The decrease relates to $0.3 million of revenue recognized during the three months ended September 30, 2020 related to our grant from NIH before the program ended in 2020, and $0.4 million related to the timing of reimbursement of certain allowable costs related to our grant from DoD in the third quarter of 2020 as compared to the current year period.

Research and Development Expenses

The following table discloses the breakdown of research and development expenses for the periods indicated:

($in thousands)	Three Months Ended September 30, 2021	2020	Change $	%
External services	$ 3,801	$ 3,696	$ 105	3 %
Lab supplies	2,947	3,273	(326)	(10)%
Payroll and personnel expenses	5,775	4,774	1,001	21 %
Other research and development expenses	2,863	2,949	(86)	(3)%
	$ 15,386	**$ 14,692**	694	5 %

Research and development expenses increased from $14.7 million for the three months ended September 30, 2020 to $15.4 million for the three months ended September 30, 2021. The increase of $0.7 million, or 5%, was primarily driven by an increase in payroll and personnel expenses to support our research and development initiatives, including a $0.8 million increase in salaries and benefits and a $0.2 million increase in non-cash stock compensation expense, partially offset by a $0.3 million decrease in the purchase of lab supplies.

General and Administrative Expenses

General and administrative expenses were $5.4 million and $3.4 million for the three months ended September 30, 2021 and 2020, respectively. The increase in general and administrative expenses of $2.0 million, or 57%, was primarily driven by increases in professional fees of $0.6 million, including those related to preparations for commercial launch, non-cash stock compensation expense of $0.5 million, $0.3 million in insurance costs and $0.2 million in salaries and benefits.

Total Other Expenses, Net

Total other expense, net was $11.0 million and $0.5 million for the three months ended September 30, 2021 and 2020, respectively. The increase of $10.5 million resulted from a $9.8 million non-cash expense related to the remeasurement of the contingent earnout liability as of September 30, 2021 and a $0.7 million increase in interest expense related to our loan facility with Silicon Valley Bank, which commenced in March 2021.

Comparison of the Nine Months Ended September 30, 2021 and 2020

($ in thousands)	Nine Months Ended September 30, 2021	2020	Change $	%
Revenue	$ 1,086	$ 1,367	(281)	(21)%
Operating expenses:				
Research and development	45,091	40,879	4,212	10 %
General and administrative	15,576	9,416	6,160	65 %
Total operating expenses	60,667	50,295	10,372	21 %
Loss from operations	**(59,581)**	**(48,928)**	**(10,653)**	(22)%
Other expenses, net:				
Gain on PPP loan forgiveness	3,284	—	3,284	0 %
Change in fair value of contingent earnout liability	(9,768)	—	(9,768)	100 %
Interest expense	(2,952)	(1,661)	(1,291)	(78)%
Other (expenses) income, net	(45)	277	(322)	116 %
Total other expense, net	(9,481)	(1,384)	(8,097)	—
Net loss	**$ (69,062)**	**$ (50,312)**	**$ (18,750)**	(37)%

Grant Revenue

For the nine months ended September 30, 2021 and 2020, revenue totaled $1.1 million and $1.4 million, respectively, a decrease of $0.3 million, or 21%. The decrease relates to $0.3 million of revenue recognized during the nine months ended September 30, 2020 related to our grant from NIH before the program ended in 2020.

Research and Development Expenses

The following table discloses the breakdown of research and development expenses for the periods indicated:

	Nine Months Ended September 30,		Change	
($in thousands)	**2021**	**2020**	**$**	**%**
External services	$ 11,534	$ 10,748	$ 786	7 %
Lab supplies	8,141	6,815	1,326	19 %
Payroll and personnel expenses	17,003	14,497	2,506	17 %
Other research and development expenses	8,413	8,819	(406)	(5)%
	$ 45,091	**$ 40,879**	**$ 4,212**	10 %

Research and development expenses increased from $40.9 million for the nine months ended September 30, 2020 to $45.1 million for the nine months ended September 30, 2021. The increase of $4.2 million, or 10%, was primarily driven by an increase in payroll and personnel expenses, including a $1.4 million increase in salaries and benefits and a $1.1 million increase in non-cash stock compensation expense, and the purchase of lab supplies used to in the development of our commercial manufacturing process and in our research and development initiatives, including the preparation of clinical studies.

General and Administrative Expenses

General and administrative expenses were $15.6 million and $9.4 million for the nine months ended September 30, 2021 and 2020, respectively. The increase in general and administrative expenses of $6.2 million, or 65%, was driven by increases in non-cash stock compensation expense of $2.8 million, external services and professional fees of $1.7 million, including those related to preparations for commercial launch and corporate initiatives, $0.6 million in salaries and benefits, and $0.4 million in insurance costs.

Total Other Expenses, net

Total other expense, net was $9.5 million and $1.4 million for the nine months ended September 30, 2021 and 2020, respectively. The increase of $8.1 million resulted from a $9.8 million non-cash expense related to the remeasurement of the contingent earnout liability as of September 30, 2021, a $1.3 million increase in interest expense related to our loan facility with Silicon Valley Bank, which commenced in March 2021, and a $0.3 million decrease in interest income earned on our cash equivalents due to lower interest rates and lower average cash balances during the year, partially offset by a $3.3 million gain on PPP loan forgiveness.

Liquidity and Capital Resources

Sources of Liquidity

To date, we have financed our operations primarily through the sale of equity securities and convertible debt and, to a lesser extent, through grants from governmental and other agencies. Since our inception, we have incurred significant operating losses and negative cash flows. As of September 30, 2021 and December 31, 2020, we had an accumulated deficit of $457.2 and $388.1 million, respectively.

As of September 30, 2021, we had cash and cash equivalents of $240.4 million. We believe our cash and cash equivalents will be sufficient to fund operations, including clinical trial expenses and capital expenditure requirements, for at least the next 12 months from the date of this Quarterly Report. See Note 1, “Organization and Description of Business,” in the notes to our condensed consolidated financial statements included elsewhere in this Quarterly Report for additional information regarding this assessment.

In April 2020, we received loan proceeds in the amount of approximately $3.3 million under the PPP. The loan and accrued interest were forgivable after a 24-week period as long as we used the loan proceeds for eligible purposes, including payroll, benefits, rent and utilities, and maintained its payroll levels. On May 25, 2021, the Small Business Administration approved the forgiveness of the outstanding amount of the PPP loan and we recognized a gain from loan extinguishment in the amount of $3.3 million during the nine months ended September 30, 2021.

In March 2021, we entered into the Loan Agreement with Silicon Valley Bank and SVB Innovation Credit Fund VIII, L.P., which provides a term loan facility of up to $50.0 million, with a maturity date of March 1, 2025, of which $20.0 million was funded upon the closing of the Loan Agreement, and the additional $30.0 million is accessible in three tranches of $10.0 million each contingent on the achievement of certain business and clinical development milestones. Our obligations under the Loan Agreement are secured by substantially all of our assets, except for our intellectual property. The Loan Agreement contains certain customary covenants, including, but not limited to, those relating to additional indebtedness, liens, asset divestitures, and affiliate transactions. We may use the proceeds of borrowings under the Loan Agreement as working capital and to fund our general business requirements.

Borrowings under the Loan Agreement bear interest at a rate of 7.5% or the sum of the Wall Street Journal Prime Rate plus 4.25%, whichever is greater. In addition, the lenders were granted warrants to purchase Common Stock.

As of September 30, 2021, principal of $20.0 million was outstanding under the Loan Agreement and we were in compliance with all covenants in all material respects. On October 13, 2021, the Company borrowed an additional $10.0 million under the Loan Agreement, and principal of $30.0 million is outstanding as of the date of this Quarterly Report. As a result of the additional borrowing, the commencement of repayment of principal was deferred to no earlier than July 2023.

Including the additional $10.0 million borrowed, our contractual obligations under the Loan Agreement as of September 30, 2021, include cash payments related to principal and interest of $2.2 million within one year, $25.0 million within one to three years, and $10.3 million within three to five years.

Future Funding Requirements

Until such time, if ever, as we are able to successfully develop and commercialize one or more of our product candidates, we expect to continue financing our operations through the sale of equity, debt, borrowings under credit facilities or through potential collaborations with other companies, other strategic transactions or government or other grants. Adequate capital may not be available to us when needed or on acceptable terms. We do not currently have any committed external source of funds beyond the Loan Agreement. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making acquisitions or capital expenditures. Debt financing would also result in fixed payment obligations. If we are unable to raise additional funds through equity or debt financings or other strategic arrangements when needed, we may be required to delay, reduce, suspend or cease our research and development programs or any future commercialization efforts, which would have a negative impact on our business, prospects, operating results and financial condition.

Humacyte’s principal use of cash in recent periods has been funding its operations. Humacyte’s future capital requirements, both short-term and long-term, will depend on many factors, including the progress and results of our clinical trials and preclinical development, timing and extent of spending to support development efforts, cost and timing of future commercialization activities, and the amount and timing of revenues, if any, that we receive from commercial sales.

See the section of this Quarterly Report entitled “Risk Factors” for additional risks associated with our substantial capital requirements.

Cash Flows

The following table shows a summary of our cash flows for each of the periods shown below:

	Nine Months Ended September 30,	
($in thousands)	**2021**	**2020**
Statement of cash flows data:		
Total cash (used in)/provided by:		
Operating activities	$ (59,742)	$ (40,373)
Investing activities	(175)	(255)
Financing activities	260,437	2,379
	$ 200,520	**$ (38,249)**

Cash Flow from Operating Activities

Net cash used in operating activities of $59.7 million during the nine months ended September 30, 2021 was primarily the result of our net loss of $69.1 million to support our research and development, including clinical trial, manufacturing and regulatory costs, and general and administrative costs, $12.4 million related to payments of liabilities acquired in the Merger, and adjustments for non-cash expenses related primarily to a $9.8 million loss related to the change in the fair value of our contingent earnout liability, $7.4 million of stock-based compensation, $4.7 million of depreciation expense, $1.5 million for amortization of finance lease right-of-use assets, and $0.6 million amortization of Silicon Valley Bank debt discount, partially offset by a $3.3 million non-cash gain on PPP loan forgiveness. We also experienced a $1.0 million net favorable change in cash related to operating assets and liabilities primarily related to an increase in accrued expenses of $2.4 million, an increase in accounts payable of $0.8 million, partially offset by an increase in prepaid expenses of $2.0 million.

Net cash used in operating activities of $40.4 million during the nine months ended September 30, 2020 was primarily the result of our net loss of $50.3 million to support our research and development, including clinical trial, manufacturing and regulatory costs, and general and administrative costs, with adjustments for non-cash expenses related primarily to $4.7 million of depreciation expense, $3.5 million of stock-based compensation and $1.5 million for amortization of finance lease right-of-use assets.

Cash Flow from Investing Activities

Net cash used in investing activities during the nine months ended September 30, 2021 was $0.2 million, primarily consisting of the purchases of laboratory equipment.

Net cash used in investing activities during the nine months ended September 30, 2020 was $0.3 million, primarily consisting of the purchases of laboratory and manufacturing equipment.

Cash Flow from Financing Activities

Net cash provided by financing activities during the nine months ended September 30, 2021 was $260.4 million, consisting of $242.4 million of proceeds from the Merger and the PIPE Financing, $19.7 million of net proceeds from our loan facility with Silicon Valley Bank and $0.6 million from the exercise of stock options, partially offset by $0.9 million of transaction costs paid and principal payments of $1.3 million in connection with a finance lease obligations.

Net cash provided by financing activities during the nine months ended September 30, 2020 was $2.4 million, consisting of $3.3 million of the proceeds from our PPP loan and proceeds of $0.2 million from the exercise of stock options, partially offset by principal payments of $1.1 million in connection with a finance lease obligation.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations as of September 30, 2021:

($in thousands)	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Contractual obligations:					
Finance leases	$ 33,952	$ 950	$ 7,833	$ 8,232	$ 16,937
Operating leases	1,126	26	210	210	680
SVB loan payable	23,980	5,336	14,813	3,831	—
Noncancelable purchase commitments (1)	12,411	12,411	—	—	—
Total contractual obligations	$ 71,469	$ 18,723	$ 22,856	$ 12,273	$ 17,617

(1) As of September 30, 2021, we had non-cancellable purchase commitments of $12.4 million for supplies and services that are primarily for research and development. We have also entered into contracts with CROs primarily for clinical trials. These contracts generally provide for termination upon limited notice, and therefore we believe that our non-cancellable obligations under these agreements are not material.

The table above does not include potential milestone payments, license fee payments, royalties and other payments that we may be required to make under our license agreements with Duke University and Yale University and our distribution agreement with Fresenius Medical Care Holdings, Inc. These payments are not included in the preceding table as the amount and timing of such payments are unknown or uncertain at September 30, 2021. For additional information regarding these agreements and the nature of payments that could become due thereunder, see "— *Business — Distribution*," and "— *Business — Intellectual Property*" included in the Company's Registration Statement on Form S-1, filed with the SEC on September 17, 2021 and amended on October 22, 2021. Our contractual obligations increased materially from December 31, 2020 as a result of entering into the Loan Agreement with Silicon Valley Bank and SVB Innovation Credit Fund VIII, L.P., which provides a term loan facility of up to $50.0 million with a maturity date of March 1, 2025, of which $20.0 million was outstanding as of September 30, 2021.

On October 13, 2021, we borrowed an additional $10.0 million under the term loan facility. Including the additional $10.0 million borrowed, our contractual obligations under the Loan Agreement as of September 30, 2021 include cash payments related to principal and interest of $2.2 million within one year, $25.0 million within one to three years, and $10.3 million within three to five years.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in SEC rules and regulations.

Critical Accounting Policies and Significant Judgments and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our condensed consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of our financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, costs and expenses. We base our estimates and assumptions on historical experience and other factors that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates.

Other than the policies noted in Part I, Item 1, Note 2, "Summary of Significant Accounting Policies," in our notes to the condensed consolidated financial statements in this Quarterly Report on Form 10-Q, there have been no material changes to our critical accounting policies and estimates as compared to those disclosed in our audited consolidated financial statements as of and for the years ended December 31, 2020 and 2019, included in the Company's Registration Statement on Form S-1, filed with the SEC on September 17, 2021 and amended on October 22, 2021.

Recent Accounting Pronouncements

See Note 2, "Summary of Significant Accounting Policies," in our notes to our condensed consolidated financial statements included elsewhere in this Quarterly Report for a description of recent accounting pronouncements applicable to our financial statements.

Emerging Growth Company and Smaller Reporting Company Status

The Company is an "emerging growth company" as defined in the Jumpstart our Business Startups Act of 2012 (the "JOBS Act"), and may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies until it is no longer an emerging growth company. Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards. We expect the Company to avail itself of the extended transition period and, therefore, while the Company is an emerging growth company it will not be subject to new or revised accounting standards at the same time that they become applicable to other public companies that are not emerging growth companies, unless it chooses to early adopt a new or revised accounting standard. This may make it difficult or impossible to compare the Company's financial results with the financial results of another public company that is either not an emerging growth company or is an emerging growth company that has chosen not to take advantage of the extended transition period exemptions because of the potential differences in accounting standards used.

Additionally, the Company is a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. The Company will remain a smaller reporting company if (1) the market value of Common Stock held by non-affiliates is less than $250 million as of the last business day of the second fiscal quarter, or (2) the Company's annual revenues in its most recent fiscal year completed before the last business day of its second fiscal quarter are less than $100 million and the market value of Common Stock held by non-affiliates is less than $700 million as of the last business day of the second fiscal quarter.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk in the ordinary course of business. As of September 30, 2021 and December 31, 2020, we were not subject to any material market, currency, or interest rate risk.

Our primary exposure to market risk is associated with changes in interest rates related to the interest income from our cash and cash equivalents of $240.4 million and $39.9 million as of September 30, 2021 and December 31, 2020, respectively, which we invest in money market funds invested only in obligations of the U.S. government and its agencies. Due to the short-term maturities and low risk profile of our cash and cash equivalents, an immediate 10.0% change in interest rates would not have a material effect on our financial position or results of operations.

Item 4. Controls and Procedures

Changes in Internal Control Over Financial Reporting

Prior to the Merger, AHAC made the determination that it was required to restate certain previously issued financial statements and related disclosures for the periods disclosed in its Annual Report on Form 10-K for the year ended December 31, 2020 in order to correct the accounting treatment for the Company's warrants. The determination by AHAC was made following the publication by the SEC on April 12, 2021 of a statement regarding the accounting and reporting considerations for warrants issued by special purpose acquisition companies entitled "*Staff Statement on Accounting and Reporting Considerations for Warrants Issued by Special Purpose Acquisition Companies* ("SPACs")." In addition, AHAC's management concluded that its disclosure controls and procedures and internal control over financial reporting were not effective as of December 31, 2020, solely as a result of a material weakness in controls related to the accounting for the warrants.

Effective as of the closing of the Merger, the management of Legacy Humacyte is responsible for internal control over financial reporting and the former management of AHAC no longer participates in financial reporting. Our assessment is that, post merger, we have a sufficiently staffed and technically experienced finance and accounting team to address the financial reporting requirements of a public company. At that point, because the conditions causing the material weakness no longer existed, and are not expected to exist, we determined the material weakness did not exist in internal control over financial reporting as of September 30, 2021.

There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act) during the three months ended September 30, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Evaluation of Disclosure Controls and Procedures

Our management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of September 30, 2021. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of September 30, 2021.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

The Company currently is not aware of any legal proceedings or claims that management believes will have, individually or in the aggregate, a material adverse effect on the Company's business, financial condition, results of operations, or cash flows.

Item 1A. Risk Factors

Our business is subject to substantial risks and uncertainties. As a result of the closing of the Merger, the risk factors previously disclosed in Part I, Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2020 no longer apply. Following the Merger, factors that could cause our actual results to differ materially from those in this Quarterly Report include the risks described in the section entitled "Risk Factors" of our Registration Statement on Form S-1, filed with the SEC on September 17, 2021 and amended on October 22, 2021. There have been no material changes to our previously disclosed risk factors.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The following list sets forth information regarding all unregistered securities sold by us during the quarter ended September 30, 2021:

(1) On August 26, 2021, concurrently with the closing of the Business Combination, we issued 17,500,000 shares of Common Stock for an aggregate purchase price of $175.0 million to certain qualified institutional buyers and accredited investors, at a price of $10.00 per share.

(2) Upon the closing of the Business Combination, unvested options to purchase an aggregate of 8,949,680 shares of Legacy Humacyte common stock at exercise prices of $2.226 to $2.699 per share under Humacyte's 2015 Omnibus Incentive Plan, as amended, and Humacyte's 2005 Stock Option Plan, as amended, were automatically and without any required action on the part of any holder or beneficiary thereof, assumed by us and converted into options to purchase an aggregate of 2,350,003 shares of Common Stock at exercise prices of $8.48 to $10.28.

(3) On October 13, 2021, we issued warrants to purchase an aggregate of up to 123,302 shares of Common Stock to Silicon Valley Bank and SVB Innovation Credit Fund VIII, L.P. at an exercise price of $10.28 per share.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. We believe each of these transactions was exempt from registration under the Securities Act of 1933, as amended (the "Securities Act") in reliance on Section 4(a)(2) of the Securities Act (and Regulation D promulgated thereunder) as transactions by an issuer not involving any public offering or Rule 701 promulgated under Section 3(b) of the Securities Act as transactions by an issuer under benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed on the share certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

None.

Item 6. Exhibits

The following exhibits are filed as part of, or incorporated by reference into, this Quarterly Report on Form 10-Q.

Exhibit Number	Description
3.1	Second Amended and Restated Certificate of Incorporation of Humacyte, Inc. (incorporated by reference to Exhibit 3.1 to Humacyte, Inc.'s Current Report on Form 8-K, filed with the SEC on August 27, 2021).
3.2	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 August 27, 2021).
4.1	Form of Subscription Agreement (incorporated by reference to Exhibit 10.3 to Humacyte, Inc.'s Registration Statement on S-4/A, filed with the SEC on August 2, 2021).
4.2	Form of Investor Rights and Lock-up Agreement (incorporated by reference to Exhibit 4.3 to Humacyte, Inc.'s Current Report on Form 8-K, filed with the SEC on August 27, 2021).
4.3	Form of Lock-up Agreement (incorporated by reference to Exhibit 10.1 to Humacyte, Inc.'s Registration Statement on S-4/A, filed with the SEC on August 2, 2021).
10.1	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).
10.1.1	Form of Stock Option Agreement under Humacyte, Inc. 2021 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4.1 to Humacyte, Inc.'s Current Report on Form 8-K, filed with the SEC on August 27, 2021).
10.2	Humacyte, Inc. 2021 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.5 to Humacyte, Inc.'s Current Report on Form 8-K, filed with the SEC on August 27, 2021).
10.3	Humacyte, Inc. Annual Bonus Plan (incorporated by reference to Exhibit 10.8 to Humacyte, Inc.'s Current Report on Form 8-K, filed with the SEC on August 27, 2021).
10.4	Form of Indemnity Agreement by and between Humacyte, Inc. and each of its directors and executive officers (incorporated by reference to Exhibit 10.23 to Humacyte, Inc.'s Registration Statement on S-4/A, filed with the SEC on July 1, 2021).
31.1*	Certification of Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

101*	The following materials from Humacyte, Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2021, formatted in Inline XBRL (Inline eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets (unaudited), (ii) Condensed Consolidated Statements of Operations and Comprehensive Loss, (iii) Condensed Consolidated Statements of Changes in Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit) (unaudited), (iv) Condensed Consolidated Statements of Cash Flows (unaudited), (v) Notes to Condensed Consolidated Financial Statements, and (vi) Cover Page.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Filed herewith.
** This exhibit is being furnished rather than filed, and shall not be deemed incorporated by reference into any filing, in accordance with Item 601 of Regulation S-K.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized on this 12th day of November, 2021.

Date: November 12, 2021

HUMACYTE, INC.

By: /s/ Laura E. Niklason, M.D., Ph.D.
Name: Laura E. Niklason, M.D., Ph.D.
Title: President and Chief Executive Officer

By: /s/ Dale A. Sander
Name: Dale A. Sander
Title: Chief Financial Officer, Chief Corporate Development Officer and Treasurer

EXHIBIT 31.1

CERTIFICATION

I, Laura E. Niklason, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Humacyte, Inc. for the quarter ended September 30, 2021;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 12, 2021

By: /s/ Laura E. Niklason
Name: Laura E. Niklason, M.D., Ph.D.
Title: President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Dale A. Sander, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Humacyte, Inc. for the quarter ended September 30, 2021;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 12, 2021

By: /s/ Dale A. Sander
Name: Dale A. Sander
Title: Chief Financial Officer, Chief Corporate Development Officer and Treasurer

Exhibit 32.1

CERTIFICATION

In connection with the Quarterly Report on Form 10-Q of Humacyte, Inc. (the "Company") for the quarter ended September 30, 2021 (the "Report"), as filed with the Securities and Exchange Commission on the date hereof, I, Laura E. Niklason, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 12, 2021

By: /s/ Laura E. Niklason
Name: Laura E. Niklason, M.D., Ph.D.
Title: President and Chief Executive Officer

Exhibit 32.2

CERTIFICATION

In connection with the Quarterly Report on Form 10-Q of Humacyte, Inc. (the "Company") for the quarter ended September 30, 2021 (the "Report"), as filed with the Securities and Exchange Commission on the date hereof, I, Dale A. Sander, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 12, 2021

By: /s/ Dale A. Sander
Name: Dale A. Sander
Title: Chief Financial Officer, Chief Corporate Development Officer and Treasurer