### **UNITED STATES** SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K
CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): August 8, 2024

# Assembly Biosciences, Inc. (Exact name of Registrant as Specified in Its Charter)

Delaware	001-35005	20-8729264
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)
Two Tower Place, 7th Floor,		

South San Francisco, California (Address of Principal Executive Offices)

94080 (Zip Code)

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	Registrant's Tele	ephone Number, Including Ar	rea Code: (833) 509-4583					
	(Former	Not Applicable Name or Former Address, if Changed	Since Last Report)					
	ck the appropriate box below if the Form 8-K filing is owing provisions:	intended to simultaneously sati	sfy the filing obligation of the registrant under any of the					
	Written communications pursuant to Rule 425 unde	r the Securities Act (17 CFR 23	30.425)					
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)							
	Pre-commencement communications pursuant to Ru	ale 14d-2(b) under the Exchang	e Act (17 CFR 240.14d-2(b))					
	Pre-commencement communications pursuant to Ru	ule 13e-4(c) under the Exchange	e Act (17 CFR 240.13e-4(c))					
Sec	urities registered pursuant to Section 12(b) of the Act:							
	Title of each class	Trading Symbol(s)	Name of each exchange on which registered					
	Common Stock, par value \$0.001	ASMB	The Nasdaq Global Select Market					
chaj	cate by check mark whether the registrant is an emerginater) or Rule 12b-2 of the Securities Exchange Act of 1 berging growth company $\Box$		in Rule 405 of the Securities Act of 1933 (§ 230.405 of this er).					
	n emerging growth company, indicate by check mark if evised financial accounting standards provided pursuar	$\mathcal{E}$	o use the extended transition period for complying with any new inge Act. $\Box$					

#### Item 2.02 Results of Operations and Financial Condition.

On August 8, 2024, Assembly Biosciences, Inc. (the "Company") issued a press release announcing its financial results for the quarter ended June 30, 2024. A copy of the press release is attached hereto as Exhibit 99.1.

The information furnished with this Item 2.02, including Exhibit 99.1, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any other filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

#### Item 9.01 Financial Statements and Exhibits.

#### (d) Exhibits.

Exhibit Number	Description
99.1	Press Release dated August 8, 2024.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

#### **SIGNATURES**

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 thereunto duly authorized.

Date: August 8, 2024

Assembly Biosciences, Inc.

By: /s/ John O. Gunderson

John O. Gunderson

VP, General Counsel and Corporate Secretary

#### Assembly Biosciences Reports Second Quarter 2024 Financial Results and Recent Updates

- Dosing initiated in healthy participants in Phase 1a/b trial for ABI-5366 targeting recurrent genital herpes, with interim
  Phase 1a first-in-human data expected in Q3 2024 and interim Phase 1b data in participants with recurrent genital herpes
  expected in first half of 2025
- Dosing initiated in Phase 1b trial for ABI-4334 in participants with chronic HBV infection, with interim Phase 1b data expected by end of year
- Two additional pipeline candidates, ABI-1179 and ABI-6250, anticipated to enter clinic by end of year

SOUTH SAN FRANCISCO, Calif., August 8, 2024 (GLOBE NEWSWIRE) -- Assembly Biosciences, Inc. (Nasdaq: ASMB), a biotechnology company developing innovative therapeutics targeting serious viral diseases, today reported financial results and recent updates for the second quarter ended June 30, 2024.

"Entering the second half of the year, I'm incredibly proud of our team's accomplishments on our path to delivering novel therapeutics for individuals living with serious viral diseases," said Jason Okazaki, chief executive officer and president of Assembly Bio. "We are rapidly progressing toward key inflection points for our clinical development programs and remain on track with the data sets we plan to deliver in 2024. Specifically, in the third quarter, we look forward to sharing interim Phase 1a data for ABI-5366 in healthy participants. The pharmacokinetic data in this study will enable us to assess ABI-5366's ability to reach the target concentrations we have established for antiviral efficacy and to support our once-weekly oral dosing profile, while also informing dose selection in the Phase 1b part of the study in participants with recurrent genital herpes."

#### **Second Quarter 2024 and Recent Highlights**

- First participants were dosed in two clinical trials:
  - o The Phase 1a portion of a Phase 1a/b clinical study of ABI-5366, a long-acting herpes simplex virus (HSV) helicase-primase inhibitor candidate; the Phase 1a portion in healthy participants and the Phase 1b portion to be conducted in participants with recurrent genital herpes
  - o A Phase 1b study of ABI-4334, a next-generation, highly potent capsid assembly modulator candidate, in participants with chronic hepatitis B virus (HBV) infection
- Scientific conference presentations highlighted:
  - o Preclinical data for ABI-5366 (poster presentation) and ABI-1179 (poster and oral presentation) featured at the International Herpesvirus Workshop held July 13-17, 2024. ABI-1179 is the long-acting HSV helicase-primase inhibitor candidate contributed by Gilead Sciences, Inc. (Gilead) under the collaboration between Assembly Bio and Gilead

- o Preclinical data for ABI-6250, an oral, small molecule HBV/hepatitis delta virus (HDV) entry inhibitor candidate, featured in a poster presentation at the European Association for the Study of the Liver (EASL) Congress<sup>™</sup> 2024 held June 5-8, 2024
- o Preclinical data for ABI-6250 featured in an oral presentation at the Science of HBV Cure Meeting 2024 held July 26-27, 2024
- Strengthened balance sheet with equity investments that resulted in aggregate gross proceeds to Assembly Bio of approximately \$12.6 million, supporting advancement of antiviral portfolio and extending cash runway into Q1 2026

#### **Upcoming Anticipated Milestones**

- ABI-5366 Phase 1a interim clinical data in healthy participants expected in Q3 2024 and interim Phase 1b data in participants with recurrent genital herpes expected in the first half of 2025
- ABI-4334 Phase 1b interim clinical data expected by the end of 2024
- Two additional candidates, ABI-1179 and ABI-6250, are anticipated to enter the clinic by the end of 2024

#### **Upcoming Conferences**

 Abstract highlighting preclinical data for ABI-6250 accepted for poster presentation at the International HBV Meeting taking place September 11-15, 2024, in Chicago

#### **Second Quarter 2024 Financial Results**

- Cash, cash equivalents and marketable securities were \$109.2 million as of June 30, 2024, compared to \$113.0 million as of March 31, 2024. Assembly Bio's cash position is projected to fund operations into Q1 2026.
- Revenue from collaborative research was \$8.5 million for the three months ended June 30, 2024. There was no revenue recognized for the same period in 2023. Revenue for the three months ended June 30, 2024, consists of amounts recognized under the collaboration with Gilead.
- Research and development expenses were \$16.3 million for the three months ended June 30, 2024, compared to \$12.5 million for the same period in 2023. The increase is attributable to having more candidates in development in 2024.
- **General and administrative expenses** were \$4.5 million for the three months ended June 30, 2024, compared to \$5.0 million for the same period in 2023. The decrease is primarily due to a decrease in non-cash stock-based compensation expense.
- **Net loss attributable to common stockholders** was \$11.2 million, or \$1.98 per basic and diluted share, for the three months ended June 30, 2024, compared to \$16.9 million, or \$3.88 per basic and diluted share, for the same period in 2023.

The investigational products and investigational product candidates referenced here have not been approved anywhere globally, and their safety and efficacy have not been established.

#### **About Assembly Biosciences**

Assembly Biosciences is a biotechnology company dedicated to the development of innovative small-molecule therapeutics designed to change the path of serious viral diseases and improve the lives of patients worldwide. Led by an accomplished team of leaders in virologic drug development, Assembly Bio is committed to improving outcomes for patients struggling with the serious, chronic impacts of herpesvirus, hepatitis B virus (HBV) and hepatitis delta virus (HDV) infections. For more information, visit assemblybio.com.

#### **Forward-Looking Statements**

The information in this press release contains forward-looking statements that are subject to certain risks and uncertainties that could cause actual results to materially differ. These risks and uncertainties include: Assembly Bio's ability to realize the potential benefits of its collaboration with Gilead Sciences, Inc., including all financial aspects of the collaboration and equity investments; Assembly Bio's ability to initiate and complete clinical studies involving its therapeutic product candidates, including studies contemplated by Assembly Bio's collaboration with Gilead, in the currently anticipated timeframes or at all; safety and efficacy data from clinical or nonclinical studies may not warrant further development of Assembly Bio's product candidates; clinical and nonclinical data presented at conferences may not differentiate Assembly Bio's product candidates from other companies' candidates; results of nonclinical studies may not be representative of disease behavior in a clinical setting and may not be predictive of the outcomes of clinical studies; and other risks identified from time to time in Assembly Bio's reports filed with the U.S. Securities and Exchange Commission (the SEC). You are urged to consider statements that include the words may, will, would, could, should, might, believes, hopes, estimates, projects, potential, expects, plans, anticipates, intends, continues, forecast, designed, goal or the negative of those words or other comparable words to be uncertain and forwardlooking. Assembly Bio intends such forward-looking statements to be covered by the safe harbor provisions contained in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. More information about Assembly Bio's risks and uncertainties are more fully detailed under the heading "Risk Factors" in Assembly Bio's filings with the SEC, including its most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. Except as required by law, Assembly Bio assumes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

#### **Contacts**

#### **Investor and Corporate:**

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## ASSEMBLY BIOSCIENCES, INC. CONDENSED CONSOLIDATED BALANCE SHEETS

(In thousands except for share amounts and par value)

	June 30, 2024		December 31, 2023	
	(L	Jnaudited)		
ASSETS				
Current assets				
Cash and cash equivalents	\$	19,208	\$	19,841
Marketable securities		90,011		110,406
Accounts receivable from collaboration		_		43
Prepaid expenses and other current assets		3,712		3,497
Total current assets		112,931		133,787
Property and equipment, net		349		385
Operating lease right-of-use assets		1,731		2,339
Other assets		312		312
Total assets	\$	115,323	\$	136,823
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
	\$	801	\$	461
Accounts payable	Ş		Ş	885
Accrued research and development expenses		2,531		
Other accrued expenses		3,587		5,744
Deferred revenue from a related party - short-term		33,060		30,915
Operating lease liabilities - short-term		1,295		1,220
Total current liabilities		41,274		39,225
Deferred revenue from a related party - long-term		38,916		55,379
Operating lease liabilities - long-term		451		1,122
Total liabilities		80,641		95,726
Commitments and contingencies				
Stockholders' equity				
Preferred stock, \$0.001 par value; 5,000,000 shares authorized; no shares issued or outstanding		_		_
Common stock, \$0.001 par value; 150,000,000 shares authorized as of June 30, 2024 and December				
31, 2023; 6,345,561 and 5,482,752 shares issued and outstanding as of June 30, 2024 and December				
31, 2023, respectively		6		5
Additional paid-in capital		840,946		826,921
Accumulated other comprehensive loss		(293)		(81)
Accumulated deficit		(805,977)		(785,748)
Total stockholders' equity		34,682		41,097
Total liabilities and stockholders' equity	\$	115,323	\$	136,823

## ASSEMBLY BIOSCIENCES, INC. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(In thousands except for share and per share amounts) (Unaudited)

	Three Months Ended June 30,			Six Months Ended June 30,				
		2024		2023		2024		2023
Collaboration revenue from a related party	\$	8,533	\$	_	\$	14,318	\$	_
Operating expenses								
Research and development		16,259		12,523		28,138		27,070
General and administrative		4,477		4,965		9,112		9,977
Total operating expenses	<u> </u>	20,736		17,488		37,250		37,047
Loss from operations		(12,203)		(17,488)		(22,932)		(37,047)
Other income								
Interest and other income, net		1,457		592		3,109		1,201
Total other income		1,457		592		3,109		1,201
Loss before income taxes		(10,746)		(16,896)		(19,823)		(35,846)
Income tax expense		406		_		406		_
Net loss	\$	(11,152)	\$	(16,896)	\$	(20,229)	\$	(35,846)
Other comprehensive loss								
Unrealized (loss) gain on marketable securities		(54)		188		(212)		478
Comprehensive loss	\$	(11,206)	\$	(16,708)	\$	(20,441)	\$	(35,368)
Net loss per share, basic and diluted	\$	(1.98)	\$	(3.88)	\$	(3.64)	\$	(8.33)
Weighted average common shares outstanding, basic and diluted		5,642,752		4,355,007		5,563,033		4,303,244