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): May 12, 2022

Assembly Biosciences, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation) 001-35005

(Commission File Number)

331 Oyster Point Blvd., Fourth Floor, South San Francisco, California (Address of Principal Executive Offices) 20-8729264 (IRS Employer Identification No.)

> 94080 (Zip Code)

Registrant's Telephone Number, Including Area Code: (833) 509-4583

Not Applicable

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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

	Trading	
Title of each class	Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.001	ASMB	The Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company \Box

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.

Item 2.02 Results of Operations and Financial Condition.

On May 12, 2022, Assembly Biosciences, Inc. (the "Company") issued a press release announcing its financial results for the quarter ended March 31, 2022. 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 May 12, 2022.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

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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: May 12, 2022

Assembly Biosciences, Inc.

By: /s/ Jason A. Okazaki

Jason A. Okazaki Chief Operating Officer

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Assembly Biosciences Reports First Quarter 2022 Financial Results and Recent Highlights

SOUTH SAN FRANCISCO, Calif., May 12, 2022 (GLOBE NEWSWIRE) -- Assembly Biosciences, Inc. (Nasdaq: ASMB), a clinical-stage biotechnology company developing innovative, investigational therapeutics targeting hepatitis B virus (HBV) and other viral diseases, today reported financial results and recent highlights for the first quarter ended March 31, 2022.

John McHutchison, AO, MD, chief executive officer and president of Assembly Bio, said, "We are excited to expand our pipeline with the introduction of our HBV/hepatitis delta virus (HDV) small molecule entry inhibitor, which we believe could increase treatment options for the estimated 12 million people infected with this devastating disease that significantly increases the incidence and severity of liver disease and its complications, including cirrhosis and liver cancer. We are also looking forward to introducing our third HBV target next month. And, of course, we continue to execute on our strategy pursuing finite and curative HBV therapies, with vebicorvir (VBR) triple combination trials and the advancement of our next generation, more potent core inhibitors, on which we will share more in presentations at upcoming scientific and clinical meetings going forward."

Recent Updates

- Introduced a new research program focused on a novel, orally bioavailable small-molecule approach to inhibit the intracellular entry of HBV and HDV, targeting nomination of a product candidate in the first half of 2023.
- Announced the expansion of Assembly Bio's pipeline to include candidates focused on viruses outside of HBV.
- Completed enrollment and continued dosing in two Phase 2 triple combination studies evaluating Assembly Bio's lead investigational core inhibitor, VBR + nucleos(t)ide analogs (Nrtl) therapy, along with Arbutus Biopharma's RNAi therapeutic candidate, AB-729, and separately with peg-IFNα.
- Initiated triple combination study with VBR + Nrtl and ATI-2173, Antios Therapeutics' investigational active site polymerase inhibitor nucleotide (ASPIN).
- Participated in:
- The International Conference on Antiviral Research (ICAR) on March 25, 2022.
- William Delaney, PhD, chief scientific officer, presented on "Discovery and Development of HBV Core Inhibitors for the Treatment of Chronic Hepatitis B Infection."
- The <u>Second Annual Chronic HBV Drug Development Summit</u> on April 25-27, 2022.
- Luisa Stamm, MD, PhD, chief medical officer, presented on "Interrogating Therapeutic Agents with Additive or Synergistic Activity against HBV for Combination Therapy."
- Katie Kitrinos, PhD, vice president, clinical virology, presented on "Novel HBV Biomarkers to Guide Treatment Management and Clinical Outcome Prediction."

Anticipated Milestones and Events

- Announce second new HBV target beyond core inhibition.
- Assembly Bio will provide an overview of its second HBV target beyond core inhibitors during a virtual event with a physician expert during June. Details will be announced closer to the event.
- Initiate Phase 1b study in ABI-H3733 (3733) in 1H 2022.
- Initiate Phase 1a study for ABI-H4334 (4334) in 2H 2022.
- Report initial Phase 1b data for 3733 in 2H 2022.
- Report Phase 1a data for ABI-4334 as early as year-end.
- Announce exploratory research program plans focused on other viruses mid-year 2022.
- Report interim on-treatment data from two triple combination studies: (1) VBR + Nrtl and AB-729 and (2) VBR + Nrtl and Peg-IFNα.

Upcoming Conferences

- William Delaney, PhD, will present at the Singapore Science of HBV Cure Meeting taking place May 30 June 2, 2022, on "Progress in the Development in Core Inhibitors for the Treatment of Chronic Hepatitis B Infection."
- Assembly Bio has five abstracts that have been accepted for presentation at the International Liver Congress[™] (ILC), the Annual Meeting of the European Association for the Study of the Liver (EASL), taking place virtually and in person in London on June 22-26, 2022. Titles of accepted poster presentations as follows:
- ABI-4334, a novel inhibitor of HBV core protein, promotes formation of empty capsids and prevents covalently closed circular DNA formation by disruption of incoming capsids
- Improving the pharmacokinetic profile of 3733 following oral administration: results from new formulation activities
- Deeper virologic suppression with the addition of VBR, a first-generation HBV core inhibitor, to entecavir correlates with reduced inflammation and fibrosis-4 index in treatment naïve patients with HBeAg positive chronic HBV
- Evaluation of the drug-drug interaction profile of VBR: Findings include Phase 1 and Phase 2a studies
- Evaluation of the disposition and mass balance recovery of VBR in rats and humans

First Quarter 2022 Financial Results

- Cash, cash equivalents and marketable securities were \$146.5 million as of March 31, 2022, compared to \$174.6 million as of December 31, 2021. The company's cash position is projected to fund operations into the fourth quarter of 2023.
- **Research and development expenses** were \$17.2 million for the three months ended March 31, 2022, compared to \$18.6 million for the same period in 2021. The decrease is primarily due to the termination of Assembly Bio's 211, 205 and 2158 clinical studies in prior year and restructuring charges incurred in prior year related to the wind-down of

Assembly Bio's microbiome program, partially offset by increases in the 3733, 4334 and research and discovery programs.

- General and administrative expenses were \$6.0 million for the three months ended March 31, 2022, compared to \$8.7 million for the same period in 2021. The decrease is due to cost savings across the board but primarily due to a decrease in stock-based compensation expenses.
- Net loss attributable to common stockholders was \$23.1 million, or \$0.48 per basic and diluted share, for the three months ended March 31, 2022, compared to \$27.2 million, or \$0.69 per basic and diluted share, for the same period in 2021.

About Assembly Biosciences

Assembly Bio is a clinical-stage biotechnology company committed to bringing finite and curative therapies to the 296 million people living with hepatitis B virus (HBV) worldwide. A pioneer in the development of a new class of potent, oral investigational core inhibitor inhibitors, Assembly Bio's approach aims to break the complex viral replication cycle of HBV to free patients from a lifetime of therapy. Assembly Bio's strategy includes a leading portfolio of more potent, next-generation core inhibitor drug candidates, proof-of-concept combination studies for HBV cure and research programs focused on the discovery of additional novel antiviral mechanisms for HBV and other viral diseases. For more information, visit <u>assemblybio.com</u>.

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 initiate and complete clinical studies involving its therapeutic product candidates, including studies contemplated by Assembly Bio's clinical collaboration agreements, in the currently anticipated timeframes; safety and efficacy data from clinical 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; continued development and commercialization of Assembly Bio's HBV product candidates, if successful, in the China territory will be dependent on, and subject to, Assembly Bio's collaboration agreement governing its HBV-related activity in the China territory; Assembly Bio's ability to maintain financial resources necessary to continue its clinical studies and fund business operations; any impact that the COVID-19 pandemic may have on Assembly Bio's business and operations, including initiation, enrollment and continuation of its clinical studies or timing of discussions with regulatory authorities; 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 forward-looking. 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

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Media: Sam Brown Inc. Audra Friis (917) 519-9577 <u>ASMBMedia@sambrown.com</u>

ASSEMBLY BIOSCIENCES, INC. CONDENSED CONSOLIDATED BALANCE SHEETS

(In thousands except for share amounts and par value)

	Π	March 31, 2022		December 31, 2021	
	(L	Jnaudited)			
ASSETS					
Current assets					
Cash and cash equivalents	\$	51,174	\$	45,627	
Marketable securities - short-term		71,826		101,000	
Accounts receivable from collaborations		524		336	
Prepaid expenses and other current assets		7,253		7,241	
Total current assets		130,777		154,204	
Marketable securities - long-term		23,459		27,972	
Property and equipment, net		1,019		1,139	
Operating lease right-of-use (ROU) assets		5,300		6,042	
Other assets		2,175		1,703	
Total assets	\$	162,730	\$	191,060	
LIABILITIES AND STOCKHOLDERS' EQUITY					
Current liabilities					
Accounts payable	\$	1,407	\$	2,659	
Accrued research and development expenses		3,596		3,400	
Other accrued expenses		2,499		6,863	
Operating lease liabilities - short-term		3,207		3,151	
Total current liabilities		10,709		16,073	
Deferred revenue		2,733		2,733	
Operating lease liabilities - long-term		2,497		3,325	
Total liabilities		15,939		22,131	
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; 100,000,000 shares authorized as of March 31, 2022 and December 31, 2021; 48,132,937 and 48,120,437 shares issued and outstanding as of March 31, 2022 and December 31,					
2021, respectively		48		48	
Additional paid-in capital		802,170		800,728	
Accumulated other comprehensive loss		(908)		(419	
Accumulated deficit		(654,519)		(631,428	
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Total stockholders' equity Total liabilities and stockholders' equity 168,929

191,060

146,791

162,730

\$

\$

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

(In thousands except for share and per share amounts)

(Unaudited)

		Three Months Ended March 31,				
	2022			2021		
Operating expenses:						
Research and development	\$	17,205	\$	18,554		
General and administrative		5,957		8,704		
Total operating expenses		23,162		27,258		
Loss from operations		(23,162)		(27,258)		
Other income:						
Interest and other income, net		71		58		
Total other income		71		58		
Net loss	\$	(23,091)	\$	(27,200)		
Other comprehensive loss						
Unrealized loss on marketable securities		(489)		(1)		
Comprehensive loss	\$	(23,580)	\$	(27,201)		
Net loss per share, basic and diluted	\$	(0.48)	\$	(0.69)		
Weighted average common shares outstanding, basic and diluted		48,123,930		39,679,734		