UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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 10, 2022

Sensei Biotherapeutics, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware001-3998083-1863385(State or Other Jurisdiction of Incorporation)(Commission File Number)(IRS Employer Identification No.)

451 D Street, Suite 710
Boston, MA
(Address of Principal Executive Offices)

02210 (Zip Code)

Registrant's telephone number, including area code: (240) 243-8000

	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 to	ritten 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))						
	Pre-commencement communications pursuant to Rule	e 13e-4(c) under the Exchange Act (17	CFR 240.13e-4(c))				
Secu	Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:						
	Title of each class	Trading symbol	Name of each exchange on which registered				
	Title of each class Common Stock						
	The second secon	symbol SNSE ng growth company as defined in Rule	on which registered The Nasdaq Stock Market LLC				
chap	Common Stock cate by check mark whether the registrant is an emergin	symbol SNSE ng growth company as defined in Rule	on which registered The Nasdaq Stock Market LLC				

Item 2.02 Results of Operations and Financial Condition.

On May 10, 2022, Sensei Biotherapeutics, Inc. 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 in this Item and the exhibit attached hereto are being furnished and shall not be deemed "filed" for the 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 they be deemed incorporated by reference into any filing under the Exchange Act or the Securities Act of 1933, as amended, whether filed before or after the date hereof and regardless of any general incorporation language in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Exhibit Description
99.1	Press Release of Sensei Biotherapeutics, Inc., dated May 10, 2022
104	The cover page from Sensei Biotherapeutics, Inc.'s Form 8-K filed on May 10, 2022, formatted in Inline XBRL.

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 hereunto duly authorized.

Sensei Biotherapeutics, Inc.

Date: May 10, 2022

/s/ John Celebi

John Celebi

President and Chief Executive Officer



Sensei Biotherapeutics Reports First Quarter 2022 Financial Results and Recent Business Highlights

- SNS-101 preclinical data provide encouraging validation of pH-sensitive approach to inhibiting VISTA with high selectivity to treat solid tumors -

- Cash runway extended into the first quarter of 2025 with \$136.2 million on hand at end of first quarter 2022 -

BOSTON, MA – May 10, 2022 – Sensei Biotherapeutics, Inc. (NASDAQ: SNSE), an immunotherapy company focused on the discovery and development of next generation therapeutics for cancer, today reported financial results for the first quarter ended March 31, 2022, and provided recent corporate updates.

"We continue to make significant progress in the development of our TMAb™ platform, which is designed to address the challenge of resistance to checkpoint blockade. New preclinical data show that SNS-101, our anti-VISTA antibody, binds selectively in low-pH environments to inhibit tumor growth, offering high potential for therapeutic benefit while avoiding the pharmacokinetic sinks and on-target, off-tumor toxicities that have made multiple immune targets difficult to drug," said John Celebi, president and chief executive officer of Sensei Biotherapeutics. "Importantly, we have extended our cash runway into the first quarter of 2025 by prioritizing near-term milestones for SNS-101 and other TMAb programs, while also continuing to optimize our ImmunoPhage™ platform."

Highlights and Milestones

TMAb™ (Tumor Microenvironment Activated Biologics) Platform

SNS-101

Sensei continues preclinical studies to evaluate SNS-101, a monoclonal antibody targeting the immune checkpoint VISTA (V-domain Ig suppressor of T cell activation), which is implicated in resistance to PD-1/PD-L1 and correlates with poor survival across numerous cancers. Recent updates for SNS-101 include:

- In April 2022 Sensei presented preclinical data demonstrating that SNS-101 had a favorable pharmacokinetic profile in a single-dose
 mouse model. Notably, pH-selective SNS-101 demonstrated a long mean residence time in the blood, indicating a lack of significant
 target-mediated drug disposition and clearance in non-malignant tissues.
- SNS-101 demonstrated synergistic anti-tumor activity *in vivo* in combination with anti-PD-1 in a MC38 syngeneic tumor model in human VISTA knock-in mice.
- SNS-101 has demonstrated great manufacturing productivity to date and Sensei anticipates reviewing pharmacokinetic and toxicology data from its single dose non-human primate studies in mid-2022.
- Sensei has initiated GMP manufacturing for SNS-101 and remains on track to submit an IND in the first half of 2023.



SNS-102

- Sensei intends to select a product candidate and initiate IND-enabling studies in 2023 for SNS-102, a monoclonal antibody targeting VSIG4 (V-Set and Immunoglobulin Domain Containing 4), a B7-family related protein that is frequently overexpressed on tumorassociated macrophages.
- VSIG4 is a potent inhibitor of T-cell activity and potential driver of immunosuppressive macrophage polarization. Given its expression within normal tissues and the resulting potential safety challenges, Sensei believes that VSIG4 is an ideal candidate for development through its TMAb platform.
- Sensei has generated the first set of parental tumor-selective antibodies targeting VSIG4 aimed at developing an inhibitory antibody with high selectivity for VSIG4 in the tumor microenvironment versus normal tissue environments.

SNS-103

 Sensei remains on track to select a product candidate in 2023 for SNS-103, a monoclonal antibody targeting ENTPDase1 (ecto-nucleoside triphosphate diphosphohydrolase-1, also known as CD39), the upstream, rate-limiting enzyme leading to the breakdown of extracellular ATP.

ImmunoPhage[™] Platform and SNS-401-NG

Sensei is optimizing its ImmunoPhageTM platform to offer a potentially transformative approach to generating new T cells to fight cancer, with potential to address multiple tumor types. Current work in this platform area extending into 2023 is focused on SNS-401-NG, a potential first-in-class, multi-antigenic bacteriophage designed to deliver anti-tumor antigens to the immune system. Sensei believes that a measured approach to development will position the company to advance the most potent ImmunoPhageTM product candidate when ready.

Corporate

- In April 2022, Robert Pierce, M.D., Chief R&D Officer, presented an update on SNS-101 at the World Vaccine Congress, held April 18-21, 2022, in Washington DC.
- In March 2022, Sensei announced the appointment of William Ringo as Chair of the Board of Directors.
- In January 2022, Sensei announced the promotions of Erin Colgan to Chief Financial Officer and Robert Pierce, M.D., to Chief R&D
 Officer.

First Quarter 2022 Financial Results

Cash Position: Cash, cash equivalents and marketable securities were \$136.2 million as of March 31, 2022, as compared to \$147.6 as of December 31, 2021. Sensei expects the current cash balance to fund operations into the first quarter of 2025.

Research and Development (R&D) Expenses: R&D expenses were \$7.5 million for the quarter ended March 31, 2022, compared to \$3.4 million for the quarter ended March 31, 2021. The increase in R&D expenses was primarily attributable to increased headcount to support Sensei's research, development, and manufacturing activities.



General and Administrative (G&A) Expenses: G&A expenses were \$5.0 million for the quarter ended March 31, 2022, compared to \$4.6 million for the quarter ended March 31, 2021, with the increase mainly driven by franchise tax increases. The company is focused on carefully managing the growth of G&A expenses in the near term.

Net Loss: Net loss was \$12.4 million, for the quarter ended March 31, 2022, compared to \$8.0 million for the quarter ended March 31, 2021.

Condensed Statements of Operations

(Unaudited, in thousands except share and per share data)

Three Months Ended March 31, 2022 2021 Operating expenses: Research and development 7,455 3,365 General and administrative 5,032 4,604 Total operating expenses 12,487 7,969 (7,969)Loss from operations (12,487)Total other income (expense) 82 (3)(12,405)(7,972)Net loss (12,405)(7,972)Net loss attributable to common stockholders (0.40)Net loss per share, basic and diluted (0.42)Weighted-average common shares outstanding, basic and diluted 30,647,679 18,904,853

Selected Condensed Balance Sheet Data

(Unaudited, in thousands)

	March 31, 2022	December 31, 2021
Cash and cash equivalents	\$ 8,721	\$ 7,159
Marketable Securities	127,503	140,462
Total assets	150,038	153,225
Total liabilities	14,730	6,712
Total stockholders' equity	135,308	146,513

About Sensei Biotherapeutics

Sensei Biotherapeutics is a biopharmaceutical company engaged in discovery, development, and delivery of next generation immunotherapies with an initial focus on treatments for cancer. Sensei has developed two unique approaches – its TMAbTM (Tumor Microenvironment Activated biologics)



platform, comprising unique human monoclonal antibodies and alpaca derived nanobodies that are selectively active in the tumor microenvironment, and its ImmunoPhage[™] platform that leverages bacteriophage to drive the generation of tumor antigen-specific immune responses. Using its TMAb platform, the company is developing SNS-101, an antibody-based therapeutic targeting an immune checkpoint gene that inhibits anti-tumor immune responses called V-domain Ig suppressor of T cell activation (VISTA). Using the ImmunoPhage platform, Sensei is developing a library of ImmunoPhage, called Phortress[™], with multiple tumor-associated antigens to create a personalized, yet off-the-shelf cocktail approach for treating cancer patients. The platform is designed to enable efficient, scalable and cost-effective manufacturing to support all of Sensei's clinical programs. SNS-401-NG is an ImmunoPhage cocktail in preclinical development for the treatment of Merkel cell carcinoma. For more information, please visit www.senseibio.com, and follow the company on Twitter @SenseiBio and LinkedIn.

Cautionary Note Regarding Forward-Looking Statements

Any statements contained in this press release that do not describe historical facts may constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements may be identified by words such as "believe", "expect", "may", "plan", "potential", "will", and similar expressions, and are based on Sensei's current beliefs and expectations. These forward-looking statements include expectations regarding the development of Sensei's product candidates and platforms, the availability of data from Sensei's preclinical studies, the timing of selection of product candidates, the timing of IND submissions to the FDA, and its belief that its existing cash and cash equivalents will be sufficient to fund its operations at least into the first quarter of 2025. These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements. Risks and uncertainties that may cause actual results to differ materially include uncertainties inherent in the development of therapeutic product candidates, such as preclinical discovery and development, conduct of clinical trials and related regulatory requirements, Sensei's reliance on third parties over which it may not always have full control, and other risks and uncertainties that are described in Sensei's Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission (SEC) on March 15, 2022 and Sensei's other Periodic Reports filed with the SEC. Any forward-looking statements speak only as of the date of this press release and are based on information available to Sensei as of the date of this release, and Sensei assumes no obligation to, and does not intend to, update any forward-looking statements, whether as a result of new information, future events or otherwise.

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