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 9, 2023

Sensei Biotherapeutics, Inc.
(Exact Name of Registrant as Specified in its Charter)

Delaware	**001-39980**	**83-1863385**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

1405 Research Blvd, Suite 125 **Rockville, MD**	**20850**
(Address of Principal Executive Offices)	**(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 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 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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**
Common Stock	SNSE	The Nasdaq Stock Market LLC
Series A Preferred Stock Purchase Rights		The Nasdaq Stock Market LLC

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 ☒

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 9, 2023, Sensei Biotherapeutics, Inc. issued a press release announcing its financial results for the quarter ended March 31, 2023. A copy of the press release is attached hereto as Exhibit 99.1.

The information in this Item 2.02 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 March 9, 2023
104	The cover page from this Current Report on Form 8-K, 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 9, 2023

/s/ Christopher W. Gerry
Christopher W. Gerry
General Counsel and Secretary

Exhibit 99.1

Sensei Biotherapeutics Reports First Quarter 2023 Financial Results and Recent Business Highlights

- Investigational New Drug (IND) application for SNS-101 cleared by U.S. Food and Drug Administration (FDA) with first patient dose in Phase 1/2 trial expected in mid-2023 -

- Signing of key collaborations underscore potential of conditional activation and VISTA mechanism -

- AACR presentation highlights progress of SNS-103 program targeting CD39 -

- Strong balance sheet with cash runway into the second half of 2025 -

BOSTON, MA – May 9, 2023 – Sensei Biotherapeutics, Inc. (Nasdaq: SNSE), a clinical stage immuno-oncology company focused on the discovery and development of next-generation therapeutics for cancer patients, today reported financial results for the first quarter ended March 31, 2023, and provided recent business updates.

"We are pleased with the progress across our pipeline, underscored by regulatory clearance to proceed with a Phase 1/2 clinical study of our lead candidate, SNS-101, in patients with advanced solid tumors. We look forward to commencing this trial in mid-2023 and expect to move swiftly to a recommended Phase 2 dose," said John Celebi, President and Chief Executive Officer of Sensei Biotherapeutics. "We are also maintaining superb progress and promising results from our other pipeline programs, each with breakthrough potential within their target classes, as we advance toward key decision points later this year."

Highlights and Milestones

SNS-101

Sensei continues to advance SNS-101, a conditionally active antibody targeting the immune checkpoint VISTA (V-domain Ig suppressor of T cell activation), which is implicated in resistance to cancer immunotherapy and whose expression correlates with poor survival across numerous cancers. Recent updates for SNS-101 include:

- In April 2023, the U.S. Food and Drug Administration (FDA) cleared Sensei's Investigational New Drug (IND) application for the planned Phase 1/2 clinical trial of SNS-101 in patients with advanced solid tumors. The Phase 1/2 clinical trial is designed to evaluate the safety, tolerability, pharmacokinetics, pharmacodynamics, and efficacy of SNS-101 as both a monotherapy and in combination with Regeneron's PD-1 inhibitor Libtayo® (cemiplimab) in advanced solid-tumor cancer patients. Sensei expects to begin clinical trial enrollment and commence patient dosing at a starting dose of 0.3 mg/kg in mid-2023.
- In February 2023, Sensei CSO Edward van der Horst presented key preclinical data supporting the mechanism of SNS-101 at the Keystone Symposia on Next Generation Antibody Therapeutics.
- Under the recently signed CRADA with the National Cancer Institute (NCI), part of the National Institutes of Health, in February 2023, preclinical studies are in progress with the

goal of further elucidating VISTA's role in immune checkpoint resistance and expanding the potential of SNS-101 as a combination therapy beyond anti-PD-1. In addition, preparations are underway for the NCI to participate as a trial site in the clinical investigation of SNS-101.

- In a multi-dose GLP toxicology study, SNS-101 was well tolerated and displayed a favorable multi-dose pharmacokinetic profile, with linear elimination kinetics and an absence of target-mediated drug disposition.

Additional TMAb™ Platform Updates

Through its Tumor Microenvironment Activated biologics (TMAb) platform, Sensei is also advancing several conditionally active antibody programs, including SNS-102 targeting VSIG4 (V-Set and Immunoglobulin Domain Containing 4), SNS-103 targeting ENTPDase1 (ecto-nucleoside triphosphate diphosphohydrolase-1, also known as CD39) and a recently initiated fourth program.

- SNS-102: Eight parental pH-sensitive VSIG4 antibodies have been selected, which have undergone further lead optimization and are currently being characterized.
- SNS-103: In April 2023, Sensei presented new preclinical data on SNS-103 at the American Association for Cancer Research (AACR) Annual Meeting. Eight parental pH-sensitive CD39 antibodies have been selected, which have undergone further lead optimization and are currently being characterized.
- Sensei remains on track to select product candidates for both SNS-102 and SNS-103 in 2023.
- Sensei has initiated early discovery efforts for a fourth TMAB program focused on developing a conditionally active bispecific antibody.
- Upon successful candidate selection, Sensei expects to advance one product candidate to IND-enabling studies.

First Quarter 2023 Financial Results

Cash Position: Cash, cash equivalents and marketable securities were $95.5 million as of March 31, 2023, as compared to $107.1 million as of December 31, 2022. Sensei expects its current cash balance to fund operations into the second half of 2025.

Research and Development (R&D) Expenses: R&D expenses were $5.2 million for the quarter ended March 31, 2023, compared to $7.5 million for the quarter ended March 31, 2022. The decrease in R&D expenses was primarily attributable to lower personnel costs due to the restructuring, lower expense relating to lab supply purchases and lower manufacturing related expense partially offset by higher expense associated with clinical trials.

General and Administrative (G&A) Expenses: G&A expenses were $5.8 million for the quarter ended March 31, 2023, compared to $5.0 million for the quarter ended March 31, 2022. The increase in G&A expense was primarily attributable to external professional services, including $1.5 million of non-recurring expenses associated with stockholder activism related to our upcoming 2023 annual meeting of stockholders.

Net Loss: Net loss was $10.2 million for the quarter ended March 31, 2023, compared to $12.4 million for the quarter ended March 31, 2022.

About Sensei Biotherapeutics

Sensei Biotherapeutics (Nasdaq: SNSE) is a clinical stage immuno-oncology company focused on the discovery and development of next-generation therapeutics for cancer patients. Through its TMAb™ (Tumor Microenvironment Activated biologics) platform, Sensei develops conditionally active therapeutics designed to disable immunosuppressive signals or activate immunostimulatory signals selectively in the tumor microenvironment to unleash T cells against tumors. Sensei's lead investigational candidate is SNS-101, a conditionally active antibody designed to block the V-domain Ig suppressor of T cell activation (VISTA) checkpoint selectively within the low pH tumor microenvironment, where VISTA acts as a suppressor of T cells by binding the receptor PSGL-1. The company is also developing SNS-102, a conditional binding monoclonal antibody targeting V-Set and Immunoglobulin Domain Containing 4 (VSIG-4), as well as SNS-103, also a conditionally active monoclonal antibody targeting ecto-nucleoside triphosphate diphosphohydrolase-1 (ENTPDase1), also known as CD39. For more information, please visit www.senseibio.com, and follow the company on Twitter @SenseiBio and LinkedIn.

Condensed Statements of Operations

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

	Three Months Ended March 31,	
	2023	2022
Operating expenses:		
Research and development	$ 5,204	$ 7,455
General and administrative	5,804	5,032
Total operating expenses	11,008	12,487
Loss from operations	(11,008)	(12,487)
Total other income	831	82
Net loss	(10,177)	(12,405)
Net loss attributable to common stockholders	(10,177)	(12,405)
Net loss per share, basic and diluted	$ (0.33)	$ (0.40)
Weighted-average common shares outstanding, basic and diluted	30,866,087	30,647,679

Selected Condensed Balance Sheet Data

(Unaudited, in thousands)

	March 31, 2023	December 31, 2022
Cash and cash equivalents	$ 8,109	$ 17,795
Marketable securities	87,396	89,321
Total assets	107,933	118,375
Total liabilities	13,083	14,968
Total stockholders' equity	94,850	103,407

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 and phrases such as “believe”, “designed to,” “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 and potential therapeutic benefits of Sensei’s product candidates, the expected safety profile of Sensei’s product candidates, the availability of data from Sensei’s preclinical studies, the timing of Sensei’s planned Phase 1/2 clinical trial of SNS-101, the timing of selection of product candidates, and its belief that its existing cash and cash equivalents will be sufficient to fund its operations at least into the second half 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 the risk that any one or more of Sensei’s product candidates will not be successfully developed or commercialized; the risk of delay or cessation of any planned clinical trials of Sensei’s product candidates; the risk that prior results, such as signals of safety, activity or durability of effect, observed from preclinical trials, will not be replicated or will not continue in ongoing or future studies or clinical trials involving Sensei’s product candidates; the risk that Sensei’s product candidates or procedures in connection with the administration thereof will not have the safety or efficacy profile that we anticipate; risks associated with Sensei’s dependence on third-party suppliers and manufacturers, including sole source suppliers, over which we may not always have full control; risks regarding the accuracy of our estimates of expenses, capital requirements and needs for additional financing; 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 29, 2023 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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