UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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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 4, 2021

Sensei Biotherapeutics, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware (State or Other Jurisdiction of Incorporation)	001-39980 (Commission File Number)	83-1863385 (IRS Employer Identification No.)
1405 Research Blvd,	Suite 125	
Rockville, M	D	20850
(Address of Principal Exec	utive Offices)	(Zip Code)
Registrant's tele	ephone number, including area code: (240)	243-8000

	ck the appropriate box below if the Form 8-K filing is in owing provisions:	ntended to simultaneously satisfy the	ming obligation of the registrant under any of the				
	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				
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).							
Eme	erging growth company 🗵						

new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. $\ \Box$

Item 2.02 Results of Operations and Financial Condition.

On August 4, 2021, Sensei Biotherapeutics, Inc. issued a press release announcing its financial results for the quarter ended June 30, 2021. 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 Description

99.1 <u>Press Release of Sensei Biotherapeutics, Inc., dated August 4, 2021.</u>

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: August 4, 2021

/s/ John Celebi

John Celebi

President and Chief Executive Officer



Sensei Biotherapeutics Reports Second Quarter 2021 Results and Highlights Recent *In Vivo* Data from SNS-VISTA Program

- Company announced first set of pH-sensitive anti-VISTA antibodies showing significant in vivo anti- tumor activity in combination with PD-1 blockade in a human VISTA knock-in mouse model
 - Company plans to select a lead SNS-VISTA candidate and initiate IND-enabling studies by year-end 2021
 - SNS-401-NG on track to start IND-enabling studies in second half of 2022 –
 - -Strong cash position of \$162.5 million to support platform innovation and next generation program development -

BOSTON, MA – August 4, 2021 – 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 second quarter ended June 30, 2021 and provided recent corporate updates, including new *in vivo* data from the company's SNS-VISTA program.

"The second quarter of 2021 was an important one for Sensei as we advanced our next-generation ImmunoPhage platform technology based on critical learnings from our first generation ImmunoPhage and expanded our R&D footprint and capabilities. We also continue to make important strides toward the clinic with our SNS-VISTA program," said John Celebi, president and chief executive officer of Sensei Biotherapeutics. "As we enter the third quarter of 2021, we are in a strong cash position to progress our development programs. By leveraging the synergies of these programs, our goal is to generate tumor-specific T-cells through our ImmunoPhage platform and to unleash the full potential of tumor-specific T-cells through our TMAb platform. We are looking forward to sharing additional data and to announcing new programs."

Sensei also announced today early *in vivo* data from its SNS-VISTA program. VISTA is recognized as an important immune checkpoint regulator. Disrupting the interaction of VISTA and its receptor on T-cells, known as PSGL1, has been shown to enhance T-cell activation and tumor cell killing. The VISTA-PSGL1 T-cell checkpoint is activated under low pH conditions such as the tumor microenvironment. Sensei's research team has identified a set of fully-human, highly selective, pH-dependent anti-VISTA antibodies. In a human VISTA knock-in mouse model, these parental antibodies significantly enhanced anti-tumor responses in combination with PD-1 blockade compared to treatment with PD-1 blockade alone. Based on these nonclinical data, the company plans to initiate IND-enabling studies with a lead candidate and present data at a scientific conference by the end of 2021.

"Since the inception of our SNS-VISTA program, we have believed the key to unlocking the power of this immune checkpoint is to design an antibody that selectively binds and blocks VISTA at low



pH levels in the tumor microenvironment," said Robert Pierce, MD, chief scientific officer of Sensei Biotherapeutics. "This pH-driven, tumor-selective approach is an important feature of our VISTA platform due to high levels of expression on blood cells at physiologic pH. Thus, blood represents a significant pharmacokinetic sink, which can hinder distribution into the tumor microenvironment. Additionally, we believe that by engineering pH-sensitivity into our VISTA antibody, the safety profile may be improved by limiting on-target and off-tumor binding and activity. We believe these nonclinical data are an important proof point for our platform. We look forward to selecting a lead candidate and moving into IND-enabling studies."

Recent Updates and Second Quarter Highlights:

Strengthened Board of Directors and Immuno-Oncology Advisory Board – In August, Sensei announced that it appointed Kristian Humer as an independent director to its Board. Additionally, in the second quarter, Sensei announced the addition of Jessie English, Ph.D. to its Board of Directors and Maura Gillison, M.D. and Richard Ulevitch, Ph.D. to its Immuno-Oncology Advisory Board.

Prioritized pipeline toward next-generation platform programs – In June, Sensei announced its decision to reprioritize its resources toward its pipeline of next generation product candidates, including: its multi-antigenic next generation ImmunoPhage candidate SNS-401-NG, which uses an optimized antigen linkage technology developed at Sensei; its monoclonal antibody SNS-VISTA (V-set Immunoglobulin Domain Suppressor of T cell Activation) candidate; and complete discovery work for its VSIG4 (V-Set And Immunoglobulin Domain Containing 4) TMAb program. As part of the company's prioritization, it discontinued development of SNS-301, a first-generation, single-antigen ImmunoPhage that expressed a fragment of the tumor-associated antigen, human aspartate β-hydroxylase (ASPH).

Strengthened TMAb (Tumor Microenvironment Antibody Biologics) platform – In July, Sensei expanded the scope of its collaboration with AdiMab, LLC to include additional antibody campaigns focused on the generation of human monoclonal antibodies for its next generation pH sensitive antibody programs.

Selected Contract manufacturer (CDMO) for SNS-VISTA – In July, Sensei selected a CDMO for the manufacture of GMP-grade material to advance its SNS-VISTA program toward clinical studies.

Expanded Operational Footprint – In June, Sensei expanded its research footprint by adding an additional 5,000 square feet of laboratory space at its 451D Street Boston headquarters. The



additional lab space will support the advancement of Sensei technologies used for the discovery of nanobodies used in its ImmunoPhage platform or as standalone therapeutics.

Upcoming Program Milestones:

Sensei is focused on progressing novel product candidates generated from both its ImmunoPhage platform and Phortress LibraryTM, and TMAb platform. Sensei's Phortress Library of Immunophages, derived from antigens found across multiple patient populations and tumor types, enables a personalized, yet off-the-shelf therapeutic option to patients.

TMAb (Tumor Microenvironment Antibody Biologics) Platform

VISTA (V-domain Ig suppressor of T cell activation) is an immune checkpoint that inhibits anti-tumor immune responses. VISTA may play a role in both intrinsic and acquired PD-1/PD-L1 resistance.

 Sensei plans to select a lead product candidate, to present nonclinical data at a scientific conference and to initiate IND-enabling studies by the end of 2021.

VSIG4 (V-Set and Immunoglobulin Domain Containing 4) is a B7-family related protein and a potent inhibitor of T-cell activity, often overexpressed on macrophages within the tumor microenvironment. VSIG4 may play a role in enforcing the immunosuppressive program in macrophage-rich tumors. Inhibition of VSIG4 activity could also enhance T-cell-mediated anti-tumor immune responses.

• Sensei plans to select a product candidate from this program in 2023.

ImmunoPhage[™] Platform

SNS-401-NG is a potential first-in-class, multi-antigenic personalized ImmunoPhage candidate being developed in collaboration with the University of Washington. The first clinical application is directed to the treatment of Merkel Cell Carcinoma (MCC), an aggressive form of skin cancer commonly driven by the Merkel Cell Polyoma Virus. Once clinical proof of concept is achieved, Sensei plans to evaluate a broader basket study in patients with head and neck cancer, lung cancer, melanoma, and triple negative breast cancer based on the prevalence of Phortress antigens.

Sensei intends to initiate IND-enabling studies for this product candidate in the second half of 2022.



Second Quarter 2021 Financial Results

Cash Position – Cash, cash equivalents and marketable securities were \$162.5 million as of June 30, 2021, as compared to \$16.6 million as of December 31, 2020. Sensei expects the current cash balance to fund operations at least into the first half of 2024.

Research and Development (R&D) Expenses – R&D expenses were \$5.9 million for the quarter ended June 30, 2021, compared to \$2.9 million for the quarter ended June 30, 2020. 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 \$3.9 million for the quarter ended June 30, 2021, compared to \$1.3 million for the quarter ended June 30, 2020. The increase in G&A expenses was primarily attributable to higher personnel costs, including stock-based compensation expense, and costs associated with operating as a public company.

Net Loss – Net loss was \$9.8 million, for the quarter ended June 30, 2021, compared to \$4.9 million for the quarter ended June 30, 2020.

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 ImmunoPhage platform that leverages bacteriophage to fully engage the immune system, and its TMAb (Tumor Microenvironment Antibody Biologics) platform, comprising unique human monoclonal antibodies and alpaca derived nanobodies that are selectively active in the tumor microenvironment. Using the ImmunoPhage platform, Sensei is developing a library of ImmunoPhage, called Phortress™, to target 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. Using its TMAb platform, the company has developed SNS-VISTA, an antibody-based therapeutic in lead generation targeting an immune checkpoint gene that inhibits anti-tumor immune responses called V-domain Ig suppressor of T cell activation (VISTA). 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, and its belief that its existing cash and cash equivalents will be sufficient to fund its operations at least into the first half of 2024. 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 30, 2021 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.



Condensed Statements of Operations

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

	7	Three Months Ended June 30,			Six Months Ended June 30,			
		2021		2020		2021		2020
Operating expenses:						,		,
Research and development	\$	5,898	\$	2,858	\$	9,263	\$	5,053
General and administrative		3,886		1,311		8,490		3,219
Alvaxa IPR&D				738				738
Total operating expenses		9,784		4,907		17,753		9,010
Interest Income		188				188		
Interest expense		(147)		(3)		(150)		(1,632)
Fair value adjustments on embedded debt derivatives		_		_		_		995
Gain on debt extinguishment		_		_		_		45
Other (expense), net		(28)		_		(28)		
Net loss		(9,771)		(4,910)		(17,743)		(9,602)
Cumulative dividends on convertible preferred stock		_		_		_		(104)
Net loss attributable to common stockholders	\$	(9,771)	\$	(4,910)	\$	(17,743)	\$	(9,706)
Net loss per share, basic and diluted	\$	(0.32)	\$	(3.02)	\$	(0.72)	\$	(6.87)
Weighted-average common shares outstanding, basic and diluted	30),588,495	1	,625,011	2	4,778,949	1	,413,062

Selected Condensed Balance Sheet Data

(Unaudited, in thousands)

	June 30, 2021	December 31, 2020
Cash and cash equivalents	\$ 15,599	\$ 16,596
Marketable securities	146,899	_
Total assets	167,724	21,428
Total liabilities	4,599	5,535
Total stockholders' equity (deficit)	163,125	(56,443)

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