

Sensei Biotherapeutics Presents Preclinical Data for SNS-101, a Conditionally Active VISTA-blocking Antibody, at the Keystone Symposia on Next Generation Antibody Therapeutics

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- New crystal structure data supporting SNS-101 mechanism of action -

BOSTON, Feb. 21, 2023 (GLOBE NEWSWIRE) -- Sensei Biotherapeutics, Inc. (Nasdaq: SNSE), an immuno-oncology company focused on the discovery and development of next-generation therapeutics for cancer patients, presented preclinical data on SNS-101, a conditionally active, pH-selective VISTA-blocking antibody, in an oral presentation at Next Generation Antibody Therapeutics: From Discovery to Patient, organized by Keystone Symposia.

"Preclinical studies to date have demonstrated SNS-101's potential to significantly enhance the anti-tumor effects of PD-1 blockade while abrogating target-mediated drug disposition (TMDD) and with lower risk of cytokine release syndrome (CRS). New crystal structure analysis further elucidates the antibody's mechanism of action, showing that SNS-101 directly blocks the pH-dependent interaction between VISTA and PSGL-1," said Edward van der Horst, Ph.D., Chief Scientific Officer of Sensei Biotherapeutics. "Together, these preclinical data support the biological rationale for our pH-dependent approach, which we believe is key to targeting active protonated VISTA with exquisite selectivity."

#### Presentation highlights:

- The epitope of SNS-101 was determined by co-crystallization of VISTA with the fragment antigen-binding domain of SNS-101. Crystal structure analysis suggests SNS-101 directly blocks the pH-dependent interaction between VISTA and PSGL-1, as well as interactions with other putative receptors.
- In vitro and in vivo assays demonstrated that treatment with SNS-101 potentially has a significantly lower risk of inducing CRS than a non-pH-dependent VISTA antibody.
- SNS-101 exhibited linear elimination kinetics in non-human primates, overcoming TMDD-induced pharmacokinetic limitations observed with other anti-VISTA antibodies.
- SNS-101 induced expansion of naïve and memory T-cell phenotypes *in vivo* without activation or depletion of monocytes, differentiating it from non-pH-selective antibodies.
- SNS-101 demonstrated significant enhancement of anti-tumor effects in combination with anti-PD-1 antibodies in syngeneic tumor models.

Sensei expects to submit an Investigational New Drug (IND) application for SNS-101 in or before April 2023, with a Phase 1/2 clinical trial expected to commence in 2023, pending regulatory clearance.

A poster summarizing content from Dr. van der Horst's oral presentation will be on display at the conference during Poster Session 2, being held today, February 21, 2023, at 7:30 p.m. MST. The poster will be available on the <u>Sensei website</u> following the poster session.

### **About Sensei Biotherapeutics**

Sensei Biotherapeutics (NASDAQ: SNSE) is an immuno-oncology company focused on the discovery and development of next-generation therapeutics for cancer patients. Through its TMAb<sup>TM</sup> (Tumor Microenvironment Activated biologics) platform, Sensei develops conditionally active therapeutics designed to disable checkpoints and other immunosuppressive 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 <a href="www.senseibio.com">www.senseibio.com</a>, and follow the company on Twitter @SenseiBio and <a href="LinkedIn">LinkedIn</a>.

# **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 of Sensei's product candidates and platforms, including SNS-101; the potential safety profile of Sensei's product candidates, including SNS-101; the potential benefits of Sensei's product candidates, including SNS-101, including the

potential to overcome pharmacokinetic and safety issues associated with targeting the VISTA immune checkpoint, including target-mediated drug disposition and cytokine release syndrome, as well as the potential to enhance anti-tumor effects in combination with anti-PD-1 antibodies. 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 studies, including the preclinical studies described in this press release, 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-Q filed with the U.S. Securities and Exchange Commission (SEC) on November 8, 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-lo

# **Investor Contact:**

Michael Biega Senior Director, Investor Relations Sensei Biotherapeutics mbiega@senseibio.com

#### **Media Contact:**

Chris Railey
Ten Bridge Communications
<a href="mailto:chris@tenbridgecommunications.com">chris@tenbridgecommunications.com</a>