



sensei™ BIO

Sensei Biotherapeutics Presents New Preclinical Data on SNS-103 Targeting ENTPDase1 (CD39) at the American Association for Cancer Research (AACR) Annual Meeting 2023

April 18, 2023

BOSTON, April 18, 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, today presented new preclinical data on its SNS-103 program aimed at developing a conditionally active, monoclonal antibody program targeting ENTPDase1 (also known as CD39) at the American Association for Cancer Research (AACR) Annual Meeting 2023.

"CD39 is an important target because it is the rate-limiting enzyme that creates an immunosuppressive tumor microenvironment through the production of adenosine. However, it has been difficult to target effectively due to its broad expression on various cells in both tumors and normal tissues," said Edward van der Horst, Ph.D., Chief Scientific Officer at Sensei Biotherapeutics. "The hypothesis driving our program is that a pH-sensitive antibody may inhibit the pro-tumoral activities of CD39 selectively within the tumor microenvironment while avoiding on-target/off-tumor binding and pharmacokinetic issues observed with prior CD39 antibodies."

Presentation highlights:

Poster presentation titled, "Identification of conditionally active antibodies that selectively block CD39 activity in the acidic tumor microenvironment"

- CD39 is commonly upregulated in the tumor microenvironment, which is characterized by high levels of extracellular ATP (eATP) and low pH. Upregulation and activation of CD39 results in significant reductions of eATP and a rise in immunosuppressive adenosine.
- SNS-103 is aimed at developing an antibody that binds to CD39 only under low pH conditions such as those found in the tumor microenvironment and achieves a high target occupancy selectively in the tumor, while maintaining extracellular ATP and inhibiting adenosine generation to enhance anti-tumor immunity.
- From a panel of 83 antibodies identified and characterized for CD39 inhibition at neutral and acidic pH, Sensei has selected 8 antibodies for further optimization.
- Sensei intends to select a lead product candidate for SNS-103 in 2023.

The full poster is available for viewing on [Sensei's corporate website](#).

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™ (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](#).

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 "aims", "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-103; the potential safety profile of Sensei's product candidates, including SNS-103; the potential benefits of Sensei's product candidates, including SNS-103, including the potential to overcome pharmacokinetic and safety issues associated with targeting the CD39 immune checkpoint, including target-mediated drug disposition and cytokine release syndrome. 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 that Sensei will not identify an antibody that is suitable for selection as the lead product candidate for SNS-103; 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-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.

Investor Contact:

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

Media Contact:

Chris Railey
Ten Bridge Communications
chris@tenbridgecommunications.com