Sensei Biotherapeutics Presents Preclinical Data for SNS-101, a Conditionally Active VISTA-blocking Antibody, at the Sixth Annual CRI-ENCI-AACR International Cancer Immunotherapy Conference: Translating Science into Survival

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- SNS-101 demonstrated a favorable pharmacokinetic profile, enhanced anti-tumor effects in combination with anti-PD-1 antibodies and a significantly improved cytokine release profile as compared to a pH-independent VISTA antibody

BOSTON, Sept. 30, 2022 (GLOBE NEWSWIRE) -- Sensei Biotherapeutics, Inc. (Nasdaq: SNSE), an immuno-oncology company focused on the discovery and development of next-generation therapeutics for cancer, today presented additional preclinical data on SNS-101, a monoclonal antibody targeting the immune checkpoint VISTA (V-domain Ig suppressor of T cell activation), at the Sixth Annual CRI-ENCI-AACR International Cancer Immunotherapy Conference: Translating Science into Survival. The presentation contains data from an ongoing collaboration with scientists at Washington University, St. Louis, investigating the mechanism of action of SNS-101.

“VISTA remains a promising but difficult-to-drug immuno-oncology target due to significant on-target/off-tumor activity. We’re excited to collaborate with Sensei Bio on studies exploring the efficacy and mechanism of action of their conditionally active, pH-dependent VISTA-blocking antibody, SNS-101,” said Robert D. Schreiber, Ph.D., Andrew M. and Jane M. Bursky Distinguished Professor, Pathology & Immunology at the Washington University School of Medicine in St. Louis and a member of Sensei’s Immuno-Oncology Advisory Board. “In our PD-1-resistant, immunocompetent 1956 tumor model, we observed strong synergistic anti-tumor activity of SNS-101 in combination with PD-1 inhibition, resulting in five out of eight complete responses versus only one out of eight in the PD-1 monotherapy control group.”

“These preclinical data demonstrate that the selectivity of our conditionally active VISTA-blocking antibody has the potential to avoid poor pharmacokinetics from target-mediated drug disposition and lower the risk of cytokine release syndrome, while significantly enhancing the anti-tumor effects of PD-1 blockade selectively within tumors,” said Edward van der Horst, Ph.D., Senior Vice President, Biologics Discovery & Early Development. “These findings support the scientific rationale for Sensei’s pH-selective approach, which we believe could offer numerous safety and efficacy advantages over pH-independent antibodies targeting VISTA, including the potential to inhibit tumor growth across a range of indications.”

Summary of Key Data:

- SNS-101 potently inhibited the critical pH-dependent interaction between VISTA and PSGL-1, as well as interactions with other putative receptors.
- *In vitro* and *in vivo* cytokine release syndrome (CRS) assays demonstrate that SNS-101 significantly reduced cytokine induction as compared to a pH-independent VISTA antibody, suggesting that SNS-101 has potential to significantly lower the risk of CRS.
- Pharmacokinetics studies demonstrate that the pH-sensitive binding of SNS-101 avoided the rapid clearance by target-mediated drug disposition (TMDD) that has been observed with pH-independent VISTA antibodies.
- SNS-101 demonstrated significant enhancement of anti-tumor effects in combination with anti-PD-1 antibodies in multiple syngeneic tumor models.

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. Sensei has designed two unique approaches to develop highly selective therapeutics – its TMAb™ (Tumor Microenvironment Activated biologics) platform, which disables checkpoints and other immunosuppressive signals in the tumor microenvironment to unleash existing T cells against tumors, and the ImmunoPhage™ platform, which trains new T cells to recognize and kill malignant cells. Using its TMAb platform, the company is developing SNS-101, a fully human antibody designed to block the V-domain Ig suppressor of T cell activation (VISTA) checkpoint selectively only 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 using its platforms to develop other preclinical programs targeting multiple solid tumor indications. 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 “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; and the potential benefits of 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 and inhibit tumor growth across a range of indications. 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-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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