Senti Bio to Present Preclinical Advances on Pipeline Candidate SENTI-202 at ASH 2021 Annual Meeting

November 4, 2021

- Preclinical data demonstrates functionality of SENTI-202 OR/NOT Logic Gated gene circuits for the elimination of AML cells while sparing healthy cells -

- SENTI-202 is one of several pipeline candidates engineered with gene circuit technologies -

SOUTH SAN FRANCISCO, Calif., November 4, 2021 —Senti Bio, a leading gene circuit company, today announced that new preclinical data from its gene circuit-engineered allogeneic CAR-NK cell therapy pipeline will be presented at the 63rd American Society of Hematology (ASH) Annual Meeting and Exposition being held December 11–14. The presentation will highlight one of Senti Bio's pipeline candidates, SENTI-202, a next-generation cell therapy engineered with Logic Gated gene circuit technologies.

An underlying challenge with oncology cell therapy is to effectively kill cancer cells while avoiding toxicity to healthy cells. This is particularly true in developing therapies to treat acute myeloid leukemia (AML), which lacks AML-specific tumor-associated antigens. SENTI-202 is a Logic Gated allogeneic CAR-NK cell therapy product candidate designed to target and eliminate multiple AML tumor cell types, including the critical leukemic stem cells that contribute to disease relapse, while sparing a patient's healthy hematopoietic stem and progenitor cells (HSCs/HSPCs). Senti Bio is designing gene circuits to create a new generation of "smarter medicines" to potentially enhance the therapeutic activity of cell and gene therapies against a broad range of diseases that cannot be readily addressed by current standards of care.

In the abstract titled *FLT3 OR CD33 NOT EMCN Logic Gated CAR-NK Cell Therapy (SENTI-202) for Precise Targeting of AML*, the authors engineered allogeneic CAR-NK cells using Logic Gated gene circuits that broadly target AML cancer cells while sparing healthy cells. The OR GATE gene circuit is designed to address tumor heterogeneity and limit antigen escape by attacking multiple tumor-associated antigens. The NOT GATE gene circuit is designed to widen the therapeutic window by preserving healthy cells while enabling effective killing of cancer cells. Senti Bio is developing an OR GATE + NOT GATE allogeneic CAR-NK cell therapy product candidate that targets and eliminates AML cells while sparing healthy HSCs/HSPCs. The preclinical results are summarized as follows:

- OR Gated CAR-NK cells targeting CD33 and FLT3 demonstrated enhanced killing of AML cell lines, in primary patient samples *in vitro*, and multiple xenograft models *in vivo*, with the clinical aim of providing increased clearance of AML blasts and leukemic stem cells, respectively, and ultimately allowing for a deeper patient response and lower relapse rate; and
- NOT Gated CAR-NK cells demonstrated enhanced protection of model healthy cells from off-tumor killing via detection of the Safety Antigen Endomucin (EMCN), which is broadly expressed on healthy HSCs/HSPCs, but not on AML tumor cells.

"This will be Senti Bio's first public presentation of preclinical data that demonstrates a complete set of proof-of-concept functions with our bivalent OR Gate and NOT Gate gene circuits. These data support the development of our SENTI-202 allogeneic CAR-NK product candidate to effectively kill cancer cells while avoiding toxicity against healthy cells," said Brian Garrison, PhD, a Director of Research at Senti Bio. "These preclinical results from our SENTI-202 program provide an exciting proof-of-concept that Logic Gated allogeneic CAR-NK cell technology may enable enhanced broader-spectrum cancer targeting while limiting off-tumor toxicity."

The abstract is available on the ASH website.

About Senti Bio
Our mission is to create a new generation of smarter medicines that outmaneuver complex diseases in ways previously inconceivable. To accomplish this mission, we are building a synthetic biology platform that we believe may enable us to program next-generation cell and gene therapies with what we refer to as "gene circuits." These gene circuits, which are created from novel and proprietary combinations of DNA sequences, are designed to reprogram cells with biological logic to sense inputs, compute decisions and respond to their cellular environments. We aim to design gene circuits to improve the "intelligence" of cell and gene therapies in order to enhance their therapeutic effectiveness against a broad range of diseases that conventional medicines do not readily address. For more information, please visit the Senti Bio website at https://www.sentibio.com.

###

Contact Senti Bio:
Curt Herberts, COO
Denise Powell (Media)

Email: corporate@sentibio.com

Email: denise@redhousecomms.com

Find more information at sentibio.com
Follow us on Linkedin: Senti Biosciences
Follow us on Twitter: @SentiBio