



## Senti Bio Presents Preclinical Data from CAR-NK Cell Programs at AACR Virtual Annual Meeting

April 12, 2021

*-Preclinical proof-of-concept data show that Logic Gating gene circuits can be used in CAR-NK cells to prevent target-mediated toxicity on healthy tissues-*

**South San Francisco, Calif., April 12, 2021** —Senti Bio, a leading gene circuit company, today announced that results from its discovery-stage oncology program using allogeneic CAR-NK cells were presented during a poster session at the American Association for Cancer Research (AACR) Virtual Annual Meeting on April 10, 2021. The presentation describes the use of Logic Gating gene circuits to program CAR-NK cells to simultaneously recognize tumor-associated antigens predominantly expressed on cancer cells as well as safety antigens that are expressed on healthy cells, thereby enabling the effective killing of cancer cells while sparing undesired activity against healthy cells.

Created from novel and proprietary combinations of DNA sequences, gene circuits are intended to reprogram cells to sense inputs, compute decisions and respond to their cellular environments. Logic Gating gene circuits are designed to integrate information about multiple targets with biological logic in order to enable the more accurate and efficient targeting of heterogeneous disease cells while sparing healthy ones. This presentation outlines the development of a NOT GATE gene circuit that incorporates an inhibitory CAR (iCAR) to recognize a Safety Antigen (SA), that is uniquely expressed on healthy cells and not on tumor cells. Data presented demonstrate that, upon CAR-NK cell engagement with the Safety Antigen, CAR-mediated cytotoxicity and cytokine production were functionally inhibited. This feature allows CAR-NK cells to sample each target cell, effectively pinpointing cancer cells while sparing healthy cells.

"While most tumor-associated antigens are highly expressed on tumor cells, they are also expressed on healthy cells at some level, therefore, developing targeted cancer therapies that are able to distinguish between tumor cells and healthy cells has been a major industry challenge," said Gary Lee, PhD, chief scientific officer at Senti Bio. "Using in vitro models of acute myeloid leukemia and colorectal cancer, we demonstrated that Logic Gating gene circuits can be used in CAR-NK cells to prevent target-mediated healthy tissue toxicities and widen the therapeutic window. We believe that our gene circuits are capable of carrying out sophisticated biological functions and have the potential to be used to enhance the properties of cell and gene therapies, improving their efficacy, precision and control."

A downloadable copy of the poster is available on the [Company's website](#).

### About Senti Bio

Our mission is to create a new generation of smarter medicines that outmaneuver complex diseases in ways previously inconceivable. We have built a synthetic biology platform that enables 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, reprogram cells with biological logic to sense inputs, compute decisions and respond to their cellular environments. We design and optimize gene circuits through our design-build-test-learn engine 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 are unable to address. For more information, please visit the Senti Bio website at <https://www.sentibio.com>.

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