



Senti Bio Announces Publication of SENTI-202 Preclinical Data Demonstrating Potential of Logic-Gated CAR-NK Cell Therapy for the Treatment of Acute Myeloid Leukemia (AML)

April 30, 2024

– Preclinical data demonstrates the potential for improved treatment outcomes and reduced toxicity for patients with AML –

– Data supports the design of Phase 1 clinical trial of SENTI-202 with patient dosing anticipated in the second quarter of 2024 –

SOUTH SAN FRANCISCO, Calif., April 30, 2024 (GLOBE NEWSWIRE) -- Senti Biosciences, Inc. (Nasdaq: SNTI) ("Senti Bio"), a biotechnology company developing next-generation cell and gene therapies using its proprietary Gene Circuit platform, today announced the publication of preclinical data demonstrating the ability of natural killer (NK) cells engineered with multi-input Gene Circuits to selectively target and eliminate leukemic cells, including both blasts and leukemic stem cells, while sparing healthy stem cells. The data was [published](#) in *Cell Reports* on April 25, 2024.

The publication, titled "*Precision off-the-shelf natural killer cell therapies for oncology with logic-gated gene circuits*," demonstrates the activity of logic-gated NK cells *in vitro* and *in vivo* preclinical studies.

"AML, an aggressive form of leukemia with a poor prognosis, has long presented a challenge for targeted therapies due to the lack of a single tumor-associated antigen that distinguishes cancer cells from healthy cells," said Timothy Lu, MD, PhD, Chief Executive Officer and Co-Founder of Senti Bio. "By harnessing the power of logic-gated NK cells, this preclinical data demonstrates SENTI-202's ability to precisely target and eliminate leukemic cells while sparing healthy stem cells, thereby illustrating the potential to minimize the risk of harmful side effects and maximizing the potential for deep therapeutic efficacy. We are encouraged about the possibility of translating these findings into our Phase 1 clinical trial of SENTI-202, which is on track to begin this quarter, offering new hope for patients with limited options today."

The peer-reviewed publication describes preclinical studies of engineered NK cells with a Gene Circuit consisting of chimeric antigen receptors (CARs) controlled by OR and NOT logic gates. This approach allows NK cells to detect and respond to multiple antigen inputs, enabling precise targeting of AML cells while protecting healthy cells. Using the OR gate, NK cells were able to kill a range of AML cells, including leukemic stem cells and blasts, by recognizing FLT3 and/or CD33, which are validated therapeutic targets for AML. The NOT gate component of the Gene Circuit protected healthy HSCs by reducing CAR-mediated killing through an inhibitory CAR recognizing the endomucin antigen, which is selectively expressed on healthy HSCs but not cancer cells. In preclinical mouse models, the engineered NK cells killed multiple AML subtypes while protecting primary hematopoietic stem cells (HSCs).

This data supports the design of Phase 1 clinical trial of SENTI-202, a potential first-in-class, off-the-shelf logic-gated CAR-NK investigational cell therapy for the treatment of AML. Senti Bio is on track to initiate patient dosing in the second quarter of 2024, with initial efficacy data anticipated by year-end 2024 and initial durability data following in 2025.

About Senti Bio

Senti Biosciences is a biotechnology company developing a new generation of cell and gene therapies for patients living with incurable diseases. To achieve this, Senti Bio is leveraging a synthetic biology platform called Gene Circuits to create therapies with enhanced precision and control. These Gene Circuits are designed to precisely kill cancer cells, spare healthy cells, increase specificity to target cells and control the expression of drugs even after administration. The Company's wholly-owned pipeline utilizes off-the-shelf chimeric antigen receptor natural killer (CAR-NK) cells, outfitted with Gene Circuits, to target challenging liquid and solid tumor indications. Senti Bio has also preclinically demonstrated the potential breadth Gene Circuits in other modalities, diseases outside of oncology, and continues to advance these capabilities through partnerships with Spark Therapeutics and BlueRock Therapeutics.

Forward-Looking Statements

This press release and document contain certain statements that are not historical facts and are considered forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements generally are identified by the words "believe," "could," "predict," "continue," "ongoing," "project," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," "forecast," "seek," "target" and similar expressions that predict or indicate future events or trends or that are not statements of historical matters. Forward-looking statements are predictions, projections, and other statements about future events that are based on current expectations of Senti Bio's management and assumptions, whether or not identified in this document, and, as a result, are subject to risks and uncertainties. Forward-looking statements include, but are not limited to: expectations regarding its growth, strategy, progress and timing of its preclinical studies, including SENTI-202, and clinical trials, including the anticipated dosing of patients and availability of data, and the timing thereof; the ability of any product candidate to perform in humans in a manner consistent with earlier nonclinical, preclinical or clinical trial data; and the ability to initiate new clinical programs. These forward-looking statements are provided for illustrative purposes only and are not intended to serve as and must not be relied on by any investor as, a guarantee, an assurance, a prediction, or a definitive statement of fact or probability. Actual events and circumstances are difficult or impossible to predict and will differ from assumptions. Many actual events and circumstances are beyond the control of Senti Bio. Many factors could cause actual future results to differ materially from the forward-looking statements in this document, including but not limited to: (i) changes in domestic and foreign business, market, financial, political and legal conditions, (ii) changes in the competitive and highly regulated industries in which Senti Bio operates, variations in operating performance across competitors, changes in laws and regulations affecting Senti Bio's business, (iii) the ability to implement business plans, forecasts and other expectations, (iv) the risk of downturns and a changing regulatory landscape in Senti Bio's highly competitive industry, (v) risks relating to the uncertainty of any projected financial information with respect to Senti Bio, (vi) risks related to uncertainty in the timing or results of Senti Bio's clinical trial start up, clinical studies, patient enrollment, and GMP manufacturing startup activities, (vii) Senti Bio's dependence on third parties in connection with clinical trial startup, clinical studies, and GMP manufacturing activities, (viii) risks related to delays and other impacts from macroeconomic and geopolitical events, increasing rates of inflation and rising interest rates on business operations, and (ix) the success of any future research and development efforts by Senti Bio. The foregoing list of factors is not exhaustive. You should carefully consider the foregoing factors and the other risks and uncertainties described in the "Risk Factors" section of Senti Bio's Annual Report on Form 10-K, filed with the SEC on March 21, 2024, and other documents filed by Senti Bio from time to time with the SEC, and other documents filed by Senti Bio from time to time with the SEC. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements in this document. There may be additional risks that Senti Bio does not presently know, or that Senti

Bio currently believes are immaterial that could also cause actual results to differ from those contained in the forward-looking statements in this document. Forward-looking statements speak only as of the date they are made. Senti Bio anticipates that subsequent events and developments may cause Senti Bio's assessments to change. Except as required by law, Senti Bio assumes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events, or otherwise.

Availability of Other Information About Senti Biosciences, Inc.

For more information, please visit the Senti Bio website at <https://www.sentibio.com> or follow Senti Bio on Twitter (@SentiBio) and LinkedIn (Senti Biosciences). Investors and others should note that we communicate with our investors and the public using our company website (www.sentibio.com), including, but not limited to, company disclosures, investor presentations and FAQs, Securities and Exchange Commission filings, press releases, public conference call transcripts and webcast transcripts, as well as on Twitter and LinkedIn. The information that we post on our website or on Twitter or LinkedIn could be deemed to be material information. As a result, we encourage investors, the media and others interested to review the information that we post there on a regular basis. The contents of our website or social media shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended.

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