Senti Bio Announces First Patient Dosed in Phase 1 Clinical Trial of SENTI-202 for the Treatment of Relapsed or Refractory Hematologic Malignancies Including Acute Myeloid Leukemia

– SENTI-202 is a potential first-in-class Logic Gated off-the-shelf CAR-NK cell therapy –

– Initial clinical efficacy data expected by year-end 2024 and durability data expected in 2025 –

SOUTH SAN FRANCISCO, Calif., May 13, 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 that patient dosing has commenced in the Phase 1 clinical trial of SENTI-202 for the treatment of relapsed/refractory hematologic malignancies including acute myeloid leukemia ("AML"). AML is a cancer of the blood and bone marrow and is the most common type of acute leukemia in adults. SENTI-202, a potential first-in-class Logic Gated off-the-shelf chimeric antigen receptor natural killer ("CAR-NK") investigational cell therapy, is designed to selectively target and eliminate CD33 and/or FLT3 expressing hematologic malignancies, including AML, while sparing healthy bone marrow cells. Initial efficacy data is anticipated by year-end 2024 and initial durability data following in 2025.

"Launching the Phase 1 clinical trial of SENTI-202 marks an important step forward in our mission to redefine the standard of care for patients with AML, offering hope where options are scarce and outcomes are dire. By systematically engineering SENTI-202 to address the complexities of AML heterogeneity while safeguarding healthy marrow cells, we aim to address the critical limitations of existing therapies," said Kanya Rajangam, MD, PhD, Head of Research & Development and Chief Medical Officer of Senti Bio. "This milestone underscores our unwavering commitment to advancing our clinical program for the betterment of patients, and we eagerly anticipate the potential impact SENTI-202 may have in transforming the lives of people with cancer."

The Phase 1 clinical trial of SENTI-202 (NCT06325748) is enrolling adult patients with relapsed or refractory ("r/r") CD33 and/or FLT3 expressing hematologic malignancies, including AML, at multiple sites in the United States and Australia. The dose finding trial is evaluating two dose levels, either 1 or 1.5 billion SENTI-202 cells, administered in cycles, each comprising of three once-per-week doses, after disease specific lymphodepleting conditioning. Patients may continue to receive multiple cycles of treatment based on safety and efficacy data.

Through Senti Bio's previously announced agreement with GeneFab, the Company has prepaid the majority of manufacturing-related expenses through the completion of the Phase 1 trial.

About SENTI-202
SENTI-202 is a Logic Gated off-the-shelf CAR-NK cell therapy product candidate designed to selectively target and eliminate CD33 and/or FLT3 expressing hematologic malignancies, such as AML and myelodysplastic syndrome ("MDS"), while sparing healthy bone marrow cells. SENTI-202 has three main components. First, the OR GATE, which is an activating CAR that targets CD33 and FLT3. By targeting either or both of these antigens, SENTI-202 could effectively kill both the leukemic blasts and leukemic stem cells that form an important basis for AML disease. Second, the NOT GATE, which is designed to recognize the healthy cells and protect those healthy cells from being killed. Third, the calibrated-release IL-15 technology, which is designed to significantly increase cell persistence, expansion and activity of both the CAR- NK cells and the host immune cells. The NK cells used to construct SENTI-202 are sourced from healthy adult donors, which have been screened based on a set of criteria that reflect manufacturability and product quality, and are then cryopreserved prior to use in manufacturing to minimize variability. Senti Bio is currently enrolling adult patients with r/r CD33 and/or FLT3 expressing heme malignancies in a Phase 1 clinical trial for SENTI-202, which can be a potential first-in-class allogenic treatment for AML/MDS patients.

Senti Bio has published SENTI-202 preclinical data demonstrating the potential of Logic Gated CAR-NK cell therapy for the treatment of AML.

About Acute Myeloid Leukemia
Acute myeloid leukemia is a cancer of the blood and bone marrow and is the most common type of acute leukemia in adults. It is estimated there will be 20,800 new cases of AML in the United States in 2024. The five-year survival rate for these patients is approximately 30%. AML is currently treated with chemotherapy, targeted therapies, and/or allogeneic or autologous stem cell transplant. For patients with relapsed or refractory AML, there are few treatment options and median overall survival is typically less than seven months.

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 clinical trials for SENTI-202, including data announcements; the ability of any product candidate to perform in humans in a manner consistent with nonclinical, preclinical or previous clinical study data; and expectations regarding its growth, strategy, progress and timing of its clinical trials, including the anticipated dosing of patients and availability of data, and the timing thereof; 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 Quarterly Report on Form 10-Q, filed with the SEC on May 9, 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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