Senti Bio Announces Three Preclinical Data Presentations from Gene Circuit-Enhanced CAR-NK Cell Oncology Pipeline at Annual AACR Meeting

March 14, 2023

AACR abstracts highlight the Company's proprietary gene circuit engineered allogeneic CAR-NK cell therapies being developed for hematologic and solid tumors

SOUTH SAN FRANCISCO, Calif., March 14, 2023 (GLOBE NEWSWIRE) -- Senti Biosciences, Inc. (Nasdaq: SNTI) ("Senti Bio"), a biotechnology company innovating next-generation cell and gene therapies using its proprietary gene circuit platform, today announced the acceptance of three abstracts for presentation at the American Association for Cancer Research (AACR) Annual Meeting being held April 14-19, 2023, in Orlando, Florida. Senti Bio is using gene circuits to create next-generation cell and gene therapies and is advancing a pipeline of gene circuit-enabled chimeric antigen receptor natural killer (CAR-NK) cell therapies.

AACR presentation information:

Title: Preclinical development of SENTI-202, an off-the-shelf logic gated CAR-NK cell therapy, for the treatment of CD33/FLT3+ hematologic malignancies including AML
Authors: Alba Gonzalez, Gozde Yucel, Enping Hong, Elizabeth Leitner, Pearley Chinta, Han Deng, Ian Li, Alice Lam, Abla Bakir, Brandon Lee, Papia Chakraborty, Carmina Blanco, Kelly Lee, Niran Almudhfar, Mengxi Tian, Wenqi Song, Andrew Banicki, Otto Contreras, Marty Gieldin, Brian Garrison, Timothy Lu, Kanya Rajangam
Date and Time: Monday Apr 17, 2023 1:30 PM - 5:00 PM
Session Name: Adoptive Cell Therapy 2
Abstract Number: 3195

Preclinical data will be presented describing the efficacy and safety profile of SENTI-202, a first-in-class logic gated (OR+NOT) off-the-shelf CAR-NK cell therapy designed to selectively target and eliminate CD33 and/or FLT3 expressing hematologic malignancies like acute myeloid leukemia (AML) and myelodysplastic syndromes (MDS) while sparing the healthy bone marrow. SENTI-202 is also multi-armed with a calibrated release IL-15 (crIL-15) gene circuit to provide NK cell activation and persistence. These data support the clinical development of SENTI-202 as a novel therapeutic option for patients with CD33+ and/or FLT3+ tumors. Senti Bio plans to file an Investigational New Drug (IND) Application for SENTI-202 in the second half of 2023.

Title: Off-the-Shelf CAR-NK cells engineered to express calibrated release IL-15 exhibit enhanced persistence and anti-tumor activities
Authors: Chen-Ting Lee, Michelle Hung, Andrew Banicki, Wenqi Song, Niran Almudhfar, Deepika Kaveri, Priscilla Wong, Lawrence Naitmazi, Marcela Guzman, Alice Lam, Gozde Yucel, Timothy Lu, Alba Gonzalez Junca, Brian Garrison and Philip Lee
Date and Time: Monday Apr 17, 2023 1:30 PM - 5:00 PM
Session Name: Natural Killer and Natural Killer T Cell-based Cellular Therapies
Abstract Number: 2902

Preclinical data will be presented demonstrating that multi-armed NK cells engineered to co-express a CAR and a calibrated release (cr) IL-15 can improve persistence and anti-tumor activity of CAR-NK cells. The crIL-15 gene circuit is incorporated into all current internal pipeline products including SENTI-202 being developed for CD33 and/or FLT3 expressing hematologic malignancies including AML and MDS, SENTI-401 being developed for CEA expressing tumors including colorectal cancer and other solid tumors, and SENTI-301A for GPC3 expressing tumors including hepatocellular carcinoma.

Title: SENTI-301A, an off-the-shelf multi-armed preclinical CAR-NK cell therapy, for the treatment of GPC3 expressing tumors
Authors: Deepika Kaveri, Enping Hong, Elizabeth Leitner, Priscilla Wong, Ronni Ponek, Lawrence Naitmazi, Pearley Chinta, Wesley Gorman, Mengxi Tian, Niran Almudhfar, Kelly Lee, Nicholas Frankel, Russell Gordley, Philip Lee, Alba Gonzalez Junca, Timothy Lu, Kanya Rajangam, Marcela Guzman Ayala
Date and Time: Monday Apr 17, 2023 1:30 PM - 5:00 PM
Session Name: Natural Killer and Natural Killer T Cell-based Cellular Therapies
Abstract Number: 2905

Preclinical data will be presented from SENTI-301A, an off-the-shelf CAR-NK product candidate engineered with a GPC3 CAR and calibrated-release interleukin-15 (crIL-15) targeting GPC3 expressing solid tumors such as hepatocellular carcinomas (HCC). Senti Bio is pursuing strategic geographic partnerships for SENTI-301A to enable clinical development in areas with high HCC incidence such as in China.

Following the poster presentation session, a copy of the posters will be available on the Scientific Presentations & Publications page on the Senti Bio website.

About Senti Bio
Our mission is to create a new generation of smarter medicines that outmaneuver complex diseases using novel and unprecedented approaches. To accomplish this, we are building a synthetic biology platform that may enable us to program next-generation cell and gene therapies with what we refer to as Gene Circuits. These novel and proprietary Gene Circuits 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, precision, and durability against a broad range of diseases that conventional medicines do not readily address.

Our synthetic biology platform utilizes off-the-shelf chimeric antigen receptor natural killer (CAR-NK) cells, outfitted with Gene Circuit technologies, to target particularly challenging liquid and solid tumor oncology indications. Our lead product candidate is SENTI-202 for the treatment of CD33 and/or FLT3 expressing hematologic malignancies, such as AML and MDS. Additionally, our SENTI-401 program is being designed for the treatment of colorectal cancer (CRC) and other CEA-positive cancers. We have also demonstrated in preclinical studies the potential breadth of our Gene Circuits in other modalities, including T cells, AAVs and iPSCs, and diseases outside of oncology; and we have executed partnerships with Spark Therapeutics and BlueRock Therapeutics to advance these capabilities.

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, statements regarding Senti Bio’s research and development activities, including the development of the Company’s SENTI-202 product candidate and the advancement of its SENTI-401 program, its plans to submit an IND application for SENTI-202, its plans to present preclinical data, its plans to pursue potential strategic partnerships for SENTI-301A, as well as the timing of these events,as well as statements about the potential attributes and benefits of Senti Bio’s product candidates and platform technology. 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: the risk that results observed in studies of the Company’s product candidates, including preclinical studies and future clinical trials of any of its product candidates, will not be observed in ongoing or future studies involving these product candidates, the risk that Senti Bio may cease or delay development of any of its product candidates for a variety of reasons (including requirements that may be imposed by regulatory authorities on the initiation or conduct of clinical trials, the amount and type of data to be generated, or otherwise to support regulatory approval, difficulties or delays in subject enrollment and continuation of clinical trials, difficulties in manufacturing or supplying Senti Bio’s product candidates for preclinical and clinical testing, and any adverse events or other negative results that may be observed during preclinical or clinical development), Senti Bio’s ability to obtain, maintain, and protect its intellectual property, Senti Bio’s dependence on third parties for development and manufacture of product candidates, Senti Bio’s ability to manage expenses and to obtain additional funding when needed to support its business activities and establish and maintain strategic business alliances and new business initiatives, the impacts of macroeconomic and geopolitical events, including changing conditions from the COVID-19 pandemic, the hostilities in Ukraine, increasing rates of inflation and rising interest rates on business operations and expectation, and the risk that Senti Bio’s product candidates may not have beneficial attributes or may cause other unanticipated adverse effects. 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 November 10, 2022, 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 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 social media. The information that we post on our website or on social media 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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