



Senti Bio Highlights Initial Gene Circuit Data From Collaborations at the American Society of Gene and Cell Therapy (ASGCT) Annual Meeting

May 20, 2023

Five presentations showcase the modularity and applicability of Senti's Gene Circuit technology in NK cells, T cells, AAVs, iPSCs, and macrophages

SOUTH SAN FRANCISCO, Calif., May 20, 2023 (GLOBE NEWSWIRE) -- Senti Biosciences, Inc. (Nasdaq: SENTI) ("Senti Bio"), a biotechnology company innovating next-generation cell and gene therapies using its proprietary Gene Circuit platform, today announced multiple presentations highlighting the broad application of its Gene Circuit technologies in multiple modalities at the American Society of Gene and Cell Therapy (ASGCT) annual meeting in Los Angeles, CA.

"Our Gene Circuits are poised to potentially disrupt high-priority, unmet need diseases with smarter cell and gene therapies that can confer better activity, precision, and control," said Timothy Lu, M.D., Ph.D., Chief Executive Officer and Co-Founder of Senti Bio. "Having such a strong presence at ASGCT validates the utility of our technology across multiple modalities, including NK cells, T cells, AAVs, iPSCs, and macrophages. We thank our partners for the productive collaborations and look forward to continued application of our platform to other disease indications."

The presentations and posters can be accessed on the [Scientific Presentations & Publications](#) section of the Senti Bio website.

PRESENTATIONS HIGHLIGHTS

Oral Presentations

Engineering pharmacologically relevant, FDA-approved small-molecule-regulated gene circuits for therapeutic applications in the brain
Showcases gene circuit application in iPSC-derived cells in collaboration with BlueRock Therapeutics

Massively parallel and systematic engineering platform for highly compact, cell-type specific, and potent Smart Sensor promoters for precision retinal gene therapies
Showcases gene circuit application in AAV gene therapy in collaboration with Spark Therapeutics

Senti Bio's Poster Presentations

High-throughput engineering of Logic Gated-gene circuits for precision CAR cell therapies

- Senti Bio has developed a robust platform for automated high throughput screening (HTS) of hundreds of CARs in parallel, in one self-contained, concurrent, end-to-end process.
- Automated HTS enables the programming of Logic Gated CAR cells to achieve high protection of healthy cells using the NOT GATE technology without compromising tumor-killing function.
- The data validates the Company's NOT GATE technology in T cells as well as NK cells, thus enabling the ability to expand the Logic Gate technology into a wide range of cancers.

Designing cell-state-specific synthetic promoters as Smart Sensors to control macrophage polarization

In collaboration with BlueRock Therapeutics

- Senti Bio discovered and validated M1-state-specific macrophage promoters that can be rationally re-engineered to improve promoter strength and M1 state-specific activity.
- State-specific synthetic promoter libraries were bioinformatically designed for high-throughput Massively Parallel Reporter Assay (MPRA) screening. The data shows that hits from these promoter libraries can be stronger and more selective than native promoters.
- The data demonstrated that state-specific promoters can be built into Smart Sensor circuits to control macrophage polarization logic.

BlueRock Therapeutics' Poster Presentation

Engineering a gene circuit-enabled cell therapy with a Tamoxifen regulated safety switch for inducible cell death in human pluripotent stem cells (hPSCs) and their derivatives

BlueRock Therapeutics poster utilizing Senti Bio's Gene Circuit technology

- One potential safeguard against risks associated with hPSCs is the implementation of a safety switch that can ablate transplanted cells from a patient.
- Senti Bio's Safety Switch gene circuit has been successfully engineered into BlueRock's hPSCs for robust, stable, and ubiquitous expression of biological cargo.
- BlueRock has demonstrated that hPSCs harboring a novel TamCasp9-engineered Safety Switch gene circuit, expressed robustly from the GAPDH locus, enables transplanted cells to be removed with pharmacologically relevant concentrations of tamoxifen metabolites.

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 acute myeloid leukemia (AML) and myelodysplastic syndromes (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, adeno-associated viruses (AAVs) and induced pluripotent stem cells (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 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: (i) Senti Bio’s ability to implement business plans, forecasts and other expectations, (ii) changes in domestic and foreign business, market, financial, political and legal conditions, (iii) 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, (iv) the ability to implement business plans, forecasts and other expectations, (v) the risk of downturns and a changing regulatory landscape in Senti Bio’s highly competitive industry, (vi) risks relating to the uncertainty of any projected financial information with respect to Senti Bio, (vii) risks related to uncertainty in the timing or results of Senti Bio’s preclinical studies, IND filings, and GMP manufacturing startup activities, (viii) Senti Bio’s dependence on third parties in connection with preclinical and IND-enabling studies, IND filings, and GMP manufacturing buildout and startup activities, (ix) risks related to delays and other impacts from macroeconomic and geopolitical events, including changing conditions from the COVID-19 pandemic, increasing rates of inflation and rising interest rates on business operations, and (x) 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 registration statement on Form 10-Q filed with the SEC on May 9, 2023, 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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