Senti Bio Reports Third Quarter Financial Results and Pipeline Updates

November 10, 2022

- SENTI-202 on track for IND filing in 2023; clinical plans for SENTI-202 expand beyond AML to CD33 and/or FLT3 expressing hematologic malignancies including MDS -

- Selected development candidate for program to treat GPC3-expressing solid tumors including HCC, SENTI-301A; expected IND filing in 2023 -

- Preclinical data from two solid tumor CAR-NK programs highlighted at SITC -

- Cash position of $114.9 million as of September 30, 2022; maintain expectation of cash runway into 2024 -

SOUTH SAN FRANCISCO, Calif., Nov. 10, 2022 (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 reported financial results for the third quarter ended September 30, 2022, and highlighted recent pipeline advances, including an outline for its proposed Phase 1 clinical trial plans for SENTI-202, to include patients with CD33 and/or FLT3 expressing hematologic malignancies including acute myeloid leukemia (AML) and myelodysplastic syndrome (MDS). Senti Bio also selected SENTI-301A as the development candidate from its GPC3 targeting solid tumor program. SENTI-301A is a Multi-Armed off-the-shelf chimeric antigen receptor natural killer (CAR-NK) cell therapy candidate designed for the treatment of GPC3 expressing tumors including hepatocellular carcinoma (HCC), the most common form of liver cancer in adults.

In addition, Senti Bio’s data presentation at the Society for Immunotherapy of Cancer (SITC) Annual Meeting outlined continued progress with the solid tumor CAR-NK product candidate SENTI-301A and the SENTI-401 program. Both programs use Senti Bio’s proprietary gene circuit technology to potentially enhance activity against solid tumors by incorporating potent activating CARs and multifunctional cytokines to influence the tumor milieu as well as support enhanced CAR-NK activity. Specifically, SENTI-401 targets carcinoembryonic antigen (CEA) cell adhesion molecule 5 expressing solid tumors, including colorectal cancer (CRC), and also includes a NOT Logic Gate gene circuit to protect CEA expressing healthy cells from potential “on target, off tumor” killing. This Logic Gating strategy is designed to enable selective cytotoxicity of CAR-NK cells against tumor cells while protecting healthy cells.

“I am proud of our continued progress toward the clinic with our CAR-NK cell therapy oncology programs for both hematologic malignancies and solid tumors. With SENTI-202, we believe that we have generated compelling preclinical data demonstrating the killing of primary AML and MDS tumor cells, while maintaining protection of healthy hematopoietic stem cells, to support a clinical trial aimed at both cancer types, and we remain on track to file an IND in 2023,” said Timothy Lu, MD, PhD, Chief Executive Officer and Co-Founder of Senti Bio. “In addition, we recently selected our development candidate, SENTI-301A, which is designed to treat GPC3 positive tumors including HCC, and are on track to file an IND in 2023.”

Lu added, “Our scientists continue to generate exciting data across our pipeline; data from SENTI-301A and SENTI-401 are being highlighted today at the SITC Annual Meeting, and we are extremely excited to preview new data on SENTI-202 at the American Society of Hematology meeting next month. We remain steadfast in our vision of developing smarter medicines based on truly innovative advancements with our gene circuit technology platform.”

RECENT PIPELINE HIGHLIGHTS

CAR-NK Cell Oncology Pipeline and Gene Circuit Platform Highlights:

SENTI-202: A Logic Gated off-the-shelf CAR-NK cell therapy development candidate designed to selectively target and eliminate CD33 and/or FLT3 expressing hematologic malignancies, such as AML and MDS, while sparing the healthy bone marrow.

- Announced the acceptance of an abstract for presentation at the American Society of Hematology (ASH) meeting in December 2022; preclinical data to highlight the use of Logic Gating gene circuits to target and eliminate AML cells while sparing healthy hematopoietic stem cells.
- Outlined plans for a proposed Phase 1 clinical trial, including a dose-finding phase in patients with relapsed and/or refractory CD33 and/or FLT3 expressing hematologic malignancies. Disease-specific expansion cohorts would include relapsed and/or refractory AML. Multiple doses of SENTI-202 administration following standard fludarabine/cyclophosphamide (Flu/Cy) lymphodepleting chemotherapy is planned along with a potential to receive multiple cycles. Clinical trial endpoints would evaluate safety and identification of a recommended Phase 2 dose of SENTI-202, as well as efficacy using standard disease-specific response criteria.
- Manufacturing efforts and GMP facility buildout remain on track towards enabling flexible clinical manufacturing of CAR-NK cells in 2023.
- An IND application for SENTI-202 is expected to be submitted to the U.S. Food and Drug Administration (FDA) in 2023.

SENTI-301A: A Multi-Armed off-the-shelf CAR-NK cell therapy development candidate designed for the treatment of GPC3 expressing tumors, including HCC.

- Selected a development candidate, SENTI-301A, based on extensive optimization using Senti Bio’s proprietary screening platform for off-the-shelf CAR-NK cells with potent anti-tumor activity. SENTI-301A uses the following components:

- Engineered NK cells that target glypican 3 (GPC3), which is highly expressed in 70% to 90% of HCCs and has low or no expression on normal adult tissues.
- Calibrated release interleukin-15 (crIL-15), a multi-functional immuno-stimulatory payload designed to simultaneously stimulate surrounding immune cells and promote CAR-NK cell expansion, persistence and tumor killing.

- Preclinical data presented today at the SITC Annual Meeting demonstrates the use of gene circuits to improve the cytotoxicity and persistence of GPC3 targeting CAR-NK cells in treating HCC. Senti Bio's novel GPC3 targeting activating CAR combined with crIL-15 technology provide the CAR-NK cells multi-arming to enhance persistence and killing activity of the NK cells, and to leverage the endogenous immune system for increased anti-tumor activity. The data presents evidence of robust *in vitro* and *in vivo* killing of relevant tumor cells with SENTI-301A.
- An IND application for SENTI-301A is expected to be submitted to the FDA in 2023

The presentation at the SITC Annual Meeting also includes data from ongoing development of Regulator Dial gene circuits that control expression of crIL-12 in response to FDA-approved small molecules. These data indicate that the Company's Regulatory Dial gene circuits may be used with an expanded number of FDA-approved drugs to modulate crIL-12 expression, including tamoxifen and grazoprevir, among others. These data give the Regulator Dial the potential for broader applicability beyond GPC3 expressing cancers and thus, the Company is actively exploring the continued development of this gene circuit for product opportunities across a wide range of additional solid tumors.

SENTI-401: A Logic Gated, Multi-Armed off-the-shelf selective CAR-NK cell therapy development program designed to precisely target CEA positive solid tumors (e.g., colorectal, pancreatic and lung cancers) while sparing healthy cells using the NOT Logic Gate.

- Presented preclinical proof-of-concept data at the SITC Annual Meeting that demonstrates the robust anti-cancer functionality of Logic Gated, Multi-Armed CAR-NK cells against a variety of colorectal cancer models:
  - Evaluated ways to enhance NK cell persistence and function using a combination of crIL-15 and IL-21, a previously undisclosed Multi-Arming combination, resulting in significantly enhanced and durable killing of CEA positive target cells *in vitro* and *in vivo*.
  - Long-term anti-tumor responses: a single dose of CEA targeting CAR-NK cells armed with crIL-15+IL-21 resulted in durable anti-tumor activity in human CRC xenograft models that express CEA, including complete tumor regressions.
  - CAR-NK cells equipped with an optimized inhibitory CAR (iCAR) suppressed activating CAR (aCAR)-mediated killing of healthy cells that co-expressed VSIG2-and CEA without diminishing aCAR-mediated anti-tumor activity of CEA expressing tumor cells.

THIRD QUARTER 2022 FINANCIAL RESULTS

- Cash and Cash Equivalents: As of September 30, 2022, Senti Bio held cash and cash equivalents of $114.9 million, which the Company believes is sufficient to fund operations into 2024.
- R&D Expenses: Research & development expenses were $8.1 million for the quarter ended September 30, 2022, compared to $5.4 million for the same period in 2021. The increase includes an additional $0.5 million in non-cash stock-based compensation expense.
- G&A Expenses: General and administrative expenses were $10.8 million for the quarter ended September 30, 2022, compared to $7.1 million for the same period in 2021. The increase includes an additional $1.2 million in non-cash stock-based compensation expense.
- Net Loss: Net loss was $16.6 million, or $0.38 per basic and diluted share, for the quarter ended September 30, 2022.
- CapEx: Capital expenditures were $14.2 million for the quarter ended September 30, 2022, primarily driven by the GMP manufacturing facility buildout and related equipment purchases.

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. We are developing an additional CAR-NK product candidate, SENTI-301A, for the treatment of hepatocellular carcinoma (HCC) and other GPC3 positive cancers. We also have a CAR-NK program for the treatment of colorectal cancer (CRC) and other CEA positive cancers, SENTI-401. We have also demonstrated the breadth of our Gene Circuits in other modalities and diseases outside of oncology and have executed partnerships with Spark Therapeutics and BlueRock Therapeutics to advance these capabilities.

Forward-Looking Statements

This document contains 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,” “explore,” “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 estimates and forecasts of financial and cash runway and the sufficiency of such cash runway, Senti Bio’s ability to continue to advance its pipeline of preclinical programs and product candidates, Senti Bio’s research and development activities, the generation and release of additional preclinical data, commencement of IND-enabling studies and the timing of submission of IND filings, plans for a Phase 1 clinical trial, and GMP manufacturing start up activities, 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 events 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 preclinical studies, IND filings, and GMP manufacturing startup activities, (vii) Senti Bio’s dependence on third parties in connection with preclinical and IND-enabling studies, IND filings, and GMP manufacturing buildout and startup activities, (viii) risks related to delays and other impacts from the COVID-19 pandemic, 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 registration statement on Form S-1 (File No. 333-267390), 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 Bio

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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Senti Biosciences, Inc.
Unaudited Selected Consolidated Balance Sheet Data

(in thousands)

	September 30, 2022	December 31, 2021
Cash and cash equivalents	$ 114,940	$ 56,034
Restricted cash	3,295	3,257
Property and equipment, net	47,259	12,368
Operating lease right-of-use assets	18,883	20,708
Total assets	189,441	96,702
Total liabilities	49,098	36,326
Redeemable convertible preferred stock	—	171,833
Total stockholders’ equity (deficit)	140,343	(111,457)

Senti Biosciences, Inc.
Unaudited Consolidated Statements of Operations

(in thousands, except share and per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021

Total revenue	$ 1,766	$ 1,103	$ 4,227	$ 1,968
Operating expenses:				
Research and development	8,056	5,410	24,904	15,548
General and administrative	10,795	7,116	29,936	15,981
Total operating expenses	18,851	12,526	54,840	31,529
Loss from operations	(17,085)	(11,423)	(50,613)	(29,561)
Total other income (expense), net	445	17	10,613	(14,854)
Net loss	$ (16,640)	$ (11,406)	$ (40,000)	$ (44,415)
Net loss per share, basic and diluted	$ (0.38)	$ (3.90)	$ (1.99)	$ (15.33)
Weighted-average shares outstanding, basic and diluted	43,424,172	2,925,957	20,150,459	2,897,850

Senti Bio Contacts: Investors: investors@sentibio.com Media: Kelli Perkins kelli@redhousecomms.com