

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 9, 2023

SENTI BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-40440
(Commission
File Number)

86-2437900
(IRS Employer
Identification No.)

2 Corporate Drive, First Floor
South San Francisco, California 94080
(Address of principal executive offices including zip code)

Registrant's telephone number, including area code: (650) 382-3281

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$0.0001 per share	SNTI	The Nasdaq Global Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 2.02 Results of Operations and Financial Condition.

On May 9, 2023, Senti Biosciences, Inc. issued a press release announcing its financial results for the quarter ended March 31, 2023.

In accordance with General Instruction B.2. of Form 8-K, the information in this Item 2.02 of Form 8-K and Exhibit 99.1 attached hereto is furnished and shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press Release, dated May 9, 2023
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

SENTI BIOSCIENCES, INC.

Date: May 9, 2023

By: /s/ Timothy Lu
Name: Timothy Lu, M.D., Ph.D.
Title: Chief Executive Officer & President

Senti Bio Announces First Quarter 2023 Results and Pipeline Updates

- *New preclinical data at AACR supports SENTI-202 as a potential first-in-class logic gated CAR-NK cell therapy; remains on track for IND submission and clearance in 2H 2023 –*
- *Initial collaboration data with BlueRock and Spark to be presented at ASGCT, validating that Senti's Gene Circuit enabled cell platform can work in T cells, AAVs, and iPSCs –*
- *Cash, cash equivalents, and short-term investments of \$76.1 million as of March 31, 2023; continue to expect cash runway through at least 1Q 2024 –*

SOUTH SAN FRANCISCO, Calif., May 9, 2023 — 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 first quarter of 2023.

“I’m excited by the progress the team has made this year as Senti transitions to a clinical stage company,” said Timothy Lu, MD, PhD, Chief Executive Officer and Co-Founder of Senti Bio. “Our recent preclinical data on SENTI-202 and other Gene Circuit-enabled programs support the continued development of our platform. Additionally, our upcoming presentations at ASGCT will highlight preclinical data from collaborations with our partners, and reinforce the application of Senti’s Gene Circuits including the NOT gates in multiple modalities, such as T cells, AAVs, and iPSCs.”

RECENT PIPELINE HIGHLIGHTS

CAR-NK Cell Programs

SENTI-202: A Logic Gated off-the-shelf CAR-NK cell therapy program designed to selectively target and eliminate CD33 and/or FLT3 expressing hematologic malignancies, such as acute myeloid leukemia (AML) and myelodysplastic syndrome (MDS), while sparing healthy cells via a NOT logic gate.

- Last month, at the American Association for Cancer Research (AACR) Annual Meeting, the Company presented new preclinical data on SENTI-202, demonstrating the in vitro ability to maintain colony formation potential in hematopoietic stem cells (HSCs) that would otherwise be killed in the absence of the NOT logic gate. The data also showed that SENTI-202 chimeric antigen receptor natural killer (CAR-NK) cells demonstrated increased cytotoxic activity, serial killing, and cytokine production compared to unengineered NK cells within in vitro and in vivo AML models, as well as killing of primary tumor-derived samples from AML, including leukemic stem cells, and MDS patients.
- Senti Bio remains on track to file an Investigational New Drug (IND) application for SENTI-202 in patients with CD33 and/or FLT3 expressing hematologic malignancies in the second half of 2023 with the planned Phase 1 trial focusing on relapsed/refractory patients including AML.

SENTI-401: A Logic Gated, Multi-Armed off-the-shelf selective CAR-NK cell therapy program designed to precisely target CEA positive solid tumors (e.g., colorectal cancer) while sparing healthy cells via a NOT logic gate.

- Senti Bio will present preclinical data at the upcoming American Society of Gene and Cell Therapy (ASGCT) Annual Meeting on SENTI-401, demonstrating that automated high throughput

screening can optimize Gene Circuits in primary NK cells to achieve high protection of healthy cells using the NOT Logic Gate while maintaining effective killing against cancer cells.

- The Company was also able to show the ability of the Gene Circuit platform to evaluate and rank the performance of hundreds of gene circuits with different iCARs in parallel, in one self-contained, concurrent, end-to-end process.

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

- Senti Bio presented new pre-clinical data at AACR showing serial killing of GPC3 expressing gastric cancer cell lines by SENTI-301A, along with in vitro and in vivo activity against GPC3 expressing hepatocellular carcinoma.
- The Company is continuing to actively pursue strategic geographical partnerships for clinical development of SENTI-301A. Senti Bio believes that there is significant market opportunity for SENTI-301A in various Asian territories where HCC is more prevalent, and the Company is looking for regional collaboration opportunities for further development of the program.

Collaboration Programs

Last week, Senti Bio announced that the company will have multiple data presentations at the upcoming ASGCT Annual Meeting. Importantly, the presentations will showcase the Company's initial preclinical data from its ongoing collaborations with BlueRock Therapeutics (BlueRock) and Spark Therapeutics (Spark).

- **BlueRock Collaboration:** Two presentations reinforcing Senti Bio's proprietary Gene Circuit platform, demonstrating the application of Smart Sensors and Regulator Dials in induced pluripotent stem cells (iPSCs). The company aims to highlight preclinical data around Tamoxifen controlled Regulator Dial performance and the discovery and validation of M1-state specific promoters as it relates to the BlueRock collaboration.
- **Spark Collaboration:** One poster presentation validating the use of Senti Bio's gene circuitry in AAV-based delivery systems. The data will demonstrate the application of the Company's Smart Sensors to uncover highly compact promoters that retain strong selectivity for photoreceptors, which may be applicable to drive expression cassettes encoding large transgenes for ocular diseases.

Manufacturing

In March, the Company announced that it initiated technology transfer to its Alameda current good manufacturing practice (cGMP) facility to support clinical-scale manufacturing for the Company's CAR-NK cell development candidates. Senti Bio expects to complete this transfer prior to submitting the IND application for SENTI-202.

- Additionally, Senti Bio can leverage its 92,000 square foot Alameda facility and potentially monetize the property under suitable circumstances.

FIRST QUARTER 2023 FINANCIAL RESULTS

- As of March 31, 2023, Senti Bio held cash, cash equivalents and short-term investments of \$76.1 million, which the Company believes is sufficient to fund operations through at least the first quarter 2024.

- Research & development expenses were \$11.3 million for the quarter ended March 31, 2023, compared to \$7.6 million for the same period in 2022. The increase was related to increased headcount to support preclinical development of Senti Bio's wholly-owned programs.
- General and administrative expenses were \$9.8 million for the quarter ended March 31, 2023, compared to \$5.3 million for the same period in 2022. The increase was driven by equity award grants in connection with the SPAC transaction, as well as increased costs associated with transitioning to a publicly traded company.
- Net loss was \$18.7 million, or \$0.42 per basic and diluted share, for the quarter ended March 31, 2023.

Senti Biosciences, Inc.
Unaudited Selected Consolidated Balance Sheet Data

(in thousands)

	March 31, 2023	December 31, 2022
Cash and cash equivalents	\$ 31,600	\$ 57,621
Short-term investments	44,506	40,942
Restricted cash	3,551	3,366
Property and equipment, net	58,987	56,136
Operating lease right-of-use assets	17,905	18,418
Total assets	161,425	180,792
Total liabilities	49,085	53,529
Total stockholders' equity (deficit)	112,340	127,263

Senti Biosciences, Inc.
Unaudited Consolidated Statements of Operations

(in thousands, except share and per share data)

	Three Months Ended March 31,	
	2023	2022
Total revenue	\$ 1,286	\$ 1,104
Operating expenses:		
Research and development	11,318	7,603
General and administrative	9,802	5,259
Total operating expenses	21,120	12,862
Loss from operations	(19,834)	(11,758)
Total other income (expense), net	1,112	(50)
Net loss	(18,722)	(11,808)
Other comprehensive loss	2	—
Comprehensive loss	\$ (18,720)	\$ (11,808)
Net loss per share, basic and diluted	\$ (0.42)	\$ (3.72)
Weighted-average shares outstanding, basic and diluted	44,070,974	3,171,254



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, Senti Bio’s ability to continue to advance its pipeline of preclinical programs and product candidates, statements regarding Senti Bio’s research and development activities, the release of additional preclinical data, 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: (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 filing, 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), filed with the SEC on September 12, 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 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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