

**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): **March 22, 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
<b>Common Stock, par value \$0.0001 per share</b>	<b>SENTI</b>	<b>The Nasdaq Global Market</b>

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 March 22, 2023, Senti Biosciences, Inc. issued a press release announcing its financial results for the year ended December 31, 2022.

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

<b>Exhibit No.</b>	<b>Description</b>
99.1	<a href="#">Press Release, dated March 22, 2023</a>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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**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: March 22, 2023

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

## Senti Bio Reports Fourth Quarter and Full Year 2022 Financial Results and Reviews Recent Highlights

- SENTI-202 on track to submit an Investigational New Drug (IND) application in second half of 2023 for treatment of CD33 and/or FLT3 expressing hematologic malignancies including AML and MDS -
- Preclinical data from multiple Gene Circuit enhanced CAR NK programs to be presented at American Association for Cancer Research (AACR) Annual Meeting in April 2023 -
- Cash, cash equivalents, and short-term investments of \$98.6 million as of December 31, 2022; continue to expect cash runway through at least 1Q 2024 -

**SOUTH SAN FRANCISCO, Calif., March 22, 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 fourth quarter and full year ended December 31, 2022.

“2022 was a year of important progress for Senti in developing Gene Circuit-enhanced next-generation cell therapies that are designed to precisely target cancer cells and overcome the complex tumor environment in oncology. We advanced our product candidates towards clinical development by selecting the lead development candidate in our SENTI-202 program, and expanded our manufacturing capabilities with the ongoing build out of our cGMP facility,” said Timothy Lu, MD, PhD, Chief Executive Officer and Co-Founder of Senti Bio. “Importantly, in 2022 we became a public company and are well positioned in 2023 to continue to be at the forefront of the synthetic biology field as we prepare to submit our first IND application for SENTI-202, continue to advance our pipeline programs, and establish robust clinical-scale manufacturing of CAR NK cells. Furthermore, our ongoing collaboration efforts to develop next-generation cell and gene therapies in areas outside of oncology with Spark Therapeutics and BlueRock Therapeutics underscore our continued leadership position in Gene Circuits.”

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

- Announced strategic plan to focus research and development efforts on lead oncology candidate SENTI-202 for the treatment CD33 and/or FLT3 expressing hematologic malignancies including acute myeloid leukemia (AML) and myelodysplastic syndromes (MDS), to continue to advance SENTI-401 through preclinical studies to target colorectal cancer and other CEA-positive solid tumors, and to pursue strategic geographic partnerships for clinical development of SENTI-301A for liver cancer, or which there is high prevalence in Asian territories.
- Presented SENTI-202 preclinical data at the American Society of Hematology (ASH) meeting in December 2022 highlighting the use of Logic Gating Gene Circuits to target and eliminate AML cells while sparing healthy hematopoietic stem cells (HSCs). The *in vitro* and *in vivo* data demonstrated the ability of SENTI-202 to broadly kill primary leukemic blasts and leukemic stem cells, as well as relevant AML cell lines, while concurrently protecting healthy human HSCs.
- Initiated IND-enabling studies for SENTI-202 to support a planned Phase 1 trial with submission of an IND application to the FDA anticipated in the second half of 2023.
- Initiated process and analytical technology transfer to Senti Bio’s Alameda current good manufacturing practice (cGMP) facility to support clinical-scale manufacturing for the company’s CAR NK cell development candidates.
- Announced presentation of three abstracts highlighting preclinical data from the company’s Gene Circuit CAR NK cell oncology pipeline including SENTI-202, the calibrated release IL-15 Gene Circuit technology, and SENTI-301A, at the AACR Annual Meeting taking place April 14-19, 2023, in Orlando, Florida.

- Presented preclinical proof-of-concept data from the SENTI-401 CAR NK cell therapy development program at the Society for Immunotherapy of Cancer (SITC) Annual Meeting in November 2022 that showed robust anti-cancer functionality of Logic Gated, Multi-Armed CAR NK cells against a variety of colorectal cancer (CRC) models, including durable activity in vivo; Senti Bio is continuing to advance the SENTI-401 program through preclinical studies intended to support development candidate selection.
- Achieved discovery-stage objectives supporting continued advancement of next-generation Smart Sensor cell-type and cell-state specific promoters for various non-oncology indications in collaboration with Spark Therapeutics, and advanced a Regulator Dial Gene Circuit designed to enable small molecule-controlled release of cytokines/ “safety switches” in collaboration with BlueRock Therapeutics.

#### Fourth Quarter and Full Year 2022 Financial Results

- Cash, Cash Equivalents and Short-term Investments: As of December 31, 2022, Senti Bio held cash, cash equivalents and short-term investments of \$98.6 million, which the Company believes is sufficient to fund operations through at least the first quarter of 2024.
- R&D Expenses: Research & development expenses were \$9.2 million for the quarter ended December 31, 2022, compared to \$6.4 million for the same period in 2021. Research and development expenses for the year ended December 31, 2022 were \$34.1 million, compared to \$22.0 million in 2021. The increase includes an additional \$2.7 million in non-cash stock-based compensation expense.
- G&A Expenses: General and administrative expenses were \$10.9 million for the fourth quarter of 2022, compared to \$5.3 million for the same period in 2021. General and administrative expenses for the year ended December 31, 2022 were \$40.8 million, compared to \$21.3 million in 2021. The increase includes an additional \$11.4 million in non-cash stock-based compensation expense.
- Net Loss: Net loss was \$18.2 million, or \$0.42 per basic and diluted share, for the quarter ended December 31, 2022. Net loss for the year ended December 31, 2022, was \$58.2 million, or \$2.23 per share, compared to a net loss of \$55.3 million, or \$19.00 per share, in 2021.
- CapEx: Capital expenditures were \$8.5 million for the quarter ended December 31, 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 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 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 and the continuation of its collaborations with Spark Therapeutics and BlueRock Therapeutics. 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 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](http://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.

Find more information at [sentibio.com](http://sentibio.com)

Follow us on LinkedIn: [Senti Biosciences](#)

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Senti Biosciences, Inc.  
Unaudited Selected Consolidated Balance Sheet Data

(in thousands)

	December 31, 2022	December 31, 2021
Cash and cash equivalents	\$ 57,621	\$ 56,034
Short-term investments	40,942	—
Restricted cash	3,366	3,257
Property and equipment, net	56,136	12,368
Operating lease right-of-use assets	18,418	20,708
Total assets	180,792	96,702
Total liabilities	53,529	36,326
Redeemable convertible preferred stock	—	171,833
Total stockholders' equity (deficit)	127,263	(111,457)

Senti Biosciences, Inc.  
Unaudited Consolidated Statements of Operations

(in thousands, except share and per share data)

	Three Months Ended December 31,		Year Ended December 31,	
	2022	2021	2022	2021
Total revenue	\$ 59	\$ 793	\$ 4,286	\$ 2,761
Operating expenses:				
Research and development	9,163	6,409	34,067	21,957
General and administrative	10,912	5,269	40,848	21,250
Total operating expenses	20,075	11,678	74,915	43,207
Loss from operations	(20,016)	(10,885)	(70,629)	(40,446)
Total other income (expense), net	1,806	(19)	12,419	(14,873)
Net loss	(18,210)	(10,904)	(58,210)	(55,319)
Other comprehensive loss	1	—	1	—
Comprehensive loss	\$ (18,209)	\$ (10,904)	\$ (58,209)	\$ (55,319)
Net loss per share, basic and diluted	\$ (0.42)	\$ (3.69)	\$ (2.23)	\$ (19.00)
Weighted-average shares outstanding, basic and diluted	43,823,607	2,955,009	26,110,785	2,912,275