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, 2024

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) 239-2030

(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 Capital 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 \boxtimes

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, 2024, Senti Biosciences, Inc. issued a press release announcing its financial results for the quarter ended March 31, 2024. A copy of the press release is being furnished as Exhibit 99.1 to this Report on Form 8-K.

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, 2024 |
| 104 | Cover Page Interactive Data File (embedded within the Inline XBRL document) |

SIGNATURES

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, 2024

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



Senti Bio Announces First Quarter 2024 Results and Reviews Recent Corporate Highlights

- First patient dosing of SENTI-202, a first-in-class logic-gated treatment for acute myeloid leukemia ("AML"), on track for the second quarter of 2024 -

SOUTH SAN FRANCISCO, Calif., May 9, 2024 -- Senti Biosciences, Inc. (Nasdaq: SNTI) ("Senti Bio" or the "Company"), a biotechnology company developing next-generation cell and gene therapies using its proprietary Gene Circuit platform, today reported operational updates and financial results for the first quarter of 2024.

"Over the past quarter, we have continued to execute on our research and clinical development milestones. We are on track to begin dosing patients in our Phase 1 clinical trial of SENTI-202 in AML and our pilot trial of SENTI-301A in hepatocellular carcinoma ("HCC") in China through our partnership with Celest," said Timothy Lu, MD, PhD, Chief Executive Officer and Co-Founder of Senti Bio. "This important progress positions us to further advance our partnered and wholly-owned programs. Looking ahead, we remain committed to leveraging the power of synthetic biology to drive transformative changes in medicine across a wide range of unmet clinical needs."

PIPELINE HIGHLIGHTS

SENTI-202 for AML: The Phase 1 clinical trial of SENTI-202 (NCT06325748), a first-in-class, off-the-shelf Logic Gated CAR-NK investigational cell therapy for the treatment of AML, will focus on relapsed/refractory AML patients in the U.S. and Australia. The Company is on track to initiate patient dosing in the second quarter of 2024, with initial efficacy data anticipated by year-end 2024, and initial durability data in 2025.

SENTI-202 Preclinical Data Published in Peer-Reviewed Journal: In April 2024, Senti Bio announced the publication of preclinical data demonstrating the ability of natural killer ("NK") cells engineered with multi-input Gene Circuits to selectively target and eliminate leukemic cells, including both blasts and leukemic stem cells, while sparing healthy stem cells. The publication, titled "Precision off-the-shelf natural killer cell therapies for oncology with logic-gated gene circuits," highlights the activity of logic-gated NK cells in *in vitro* and *in vivo* preclinical studies, and supports the design of the Phase 1 clinical trial of SENTI-202.

SENTI-301A for HCC: In November 2023, Senti Bio announced a strategic collaboration agreement with Celest Therapeutics (Shanghai) Co. Ltd ("Celest"), a China-based biotechnology company, for the clinical development of SENTI-301A to treat solid tumors in China. Celest plans to enroll patients initially through a pilot trial in mainland China and expects to dose the first patient in the second quarter of 2024. SENTI-301A is a calibrated release ("cr") IL-15 multi-armed off-the-shelf investigational CAR-NK cell therapy designed for the treatment of GPC3-expressing tumors, including HCC, the most common type of primary liver cancer.

PLATFORM HIGHLIGHTS

Three Presentations at ASGCT 2024 Annual Meeting

The Company is presenting on several platform and technology advancements at the American Society of Gene and Cell Therapy (ASGCT) Annual Meeting being held May 7-11, 2024, in Baltimore, MD. The oral presentation describes the discovery of novel CARs for solid tumors using Senti's high-throughput REVEALTM platform. Two poster presentations, in collaboration with BlueRock Therapeutics and GeneFab LLC, highlight continued progress in control over macrophage polarization and IMiD-regulated therapeutic payload expression. Details are as follows:

- Oral Presentation: Discovery of Novel CARs for Solid Tumors Using Senti REVEALTM, a Massively Parallel Technology Platform Comprising Pooled Screening, Machine Learning, and Lab Automation Abstract Number: 330
 - Date and Time: May 10, 2024, 5:15 p.m. ET
- Poster Presentation: Iterative Engineering of Polarization-State Responsive Synthetic Promoters for Autonomous Control of Macrophage Polarization Logic

In collaboration with BlueRock Therapeutics and GeneFab, LLC **Abstract Number:** 1799 **Date and Time:** May 10, 2024, 12:00 pm - 7:00 pm ET



 Poster Presentation: Engineered IMiD Regulated Synthetic Transcriptional Switch for Controlled and Dose-Responsive Expression of Therapeutic Payload within FDA-Approved Drug Doses In collaboration with BlueRock Therapeutics and GeneFab, LLC Abstract Number: 1285 Date and Time: May 9, 2024, 12:00 pm - 7:00 pm ET

Following the presentations, copies of materials will be available on the Scientific Presentations & Publications section of the Company's website.

FIRST QUARTER 2024 FINANCIAL RESULTS

- Cash and Cash Equivalents: As of March 31, 2024, Senti Bio held cash and cash equivalents of \$23.7 million. The Company also holds \$18.9 million in receivables anticipated from the GeneFab transaction upon satisfaction of certain conditions.
- R&D Expenses: Research and development expenses were \$8.8 million for the quarter ended March 31, 2024, compared to \$7.1 million for the same period in 2023. The increase was primarily related to manufacturing costs to support development of Senti Bio's wholly-owned programs.
- G&A Expenses: General and administrative expenses were \$7.5 million for the quarter ended March 31, 2024, compared to \$9.2 million for the same period in 2023. The decrease was mainly attributed to a reduction in headcount from the reduction in force in early January 2024.
- Net Loss: Net loss was \$12.1 million, or \$0.26 per basic and diluted share, for the quarter ended March 31, 2024.

UPCOMING EVENTS

Senti Bio plans to participate in the following upcoming biotechnology conference:

BIO International Convention 2024

About Senti Bio

Senti Bio is a biotechnology company developing a new generation of cell and gene therapies for patients living with incurable diseases. To achieve this, Senti Bio is leveraging a synthetic biology platform called Gene Circuits to create therapies with enhanced precision and control. These Gene Circuits are designed to precisely kill cancer cells, spare healthy cells, increase specificity to target cells and control the expression of drugs even after administration. The Company's wholly-owned pipeline utilizes off-the-shelf chimeric antigen receptor natural killer (CAR-NK) cells, outfitted with Gene Circuits, to target challenging liquid and solid tumor indications. Senti Bio has also preclinically demonstrated the potential breadth Gene Circuits in other modalities, diseases outside of oncology, and continues to advance these capabilities through partnerships with Spark Therapeutics and BlueRock Therapeutics.

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 anticipated receivables under its agreements with GeneFab; expectations regarding its growth, strategy, progress and timing of its clinical trials, including the anticipated dosing of patients and availability of data, and the timing thereof; the ability to initiate new clinical programs; as well as statements about the potential attributes and benefits of Senti Bio's platform technology and the progress and continuation of its collaborations with Celest, Spark Therapeutics and BlueRock Therapeutics and other collaboration and strategic partners. 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, 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 contro

June 3-6 – San Diego, CA



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 clinical trial start up, clinical studies, patient enrollment, and GMP manufacturing startup activities, (vii) Senti Bio's dependence on third parties in connection with clinical trial startup, clinical studies, and GMP manufacturing activities, (viii) risks related to delays and other impacts from macroeconomic and geopolitical events, increasing rates of inflation and rising interest rates on business operations, 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 Annual Report on Form 10-K, filed with the SEC on March 21, 2024, 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.

Senti Biosciences, Inc. Unaudited Selected Consolidated Balance Sheet Data (in thousands)

| | March 31, 2024 | December 31, 2023 |
|--|-----------------------|--------------------------|
| Cash and cash equivalents | \$ 23,723 | \$ 35,926 |
| GeneFab receivable – related party | 17,847 | 17,592 |
| GeneFab prepaid expenses – related party | 11,300 | 14,787 |
| Restricted cash | 4,028 | 3,522 |
| Property and equipment, net | 24,354 | 25,338 |
| Operating lease right-of-use assets | 15,797 | 16,274 |
| Total assets | 102,185 | 119,484 |
| Total liabilities | 46,091 | 52,571 |
| Total stockholders' equity | 56,094 | 66,913 |



Senti Biosciences, Inc. Unaudited Consolidated Statements of Operations (in thousands, except share and per share data)

| | Three Months Ended March 31, | | | |
|--|---------------------------------|------------|----|------------|
| | | 2024 | | 2023 |
| Total revenue | \$ | — | \$ | 1,286 |
| Operating expenses: | | | | |
| Research and development (included related party cost of \$3,632 and \$ -, respectively) | | 8,779 | | 7,059 |
| General and administrative | | 7,522 | | 9,191 |
| Total operating expenses | | 16,301 | | 16,250 |
| Loss from operations | | (16,301) | | (14,964) |
| Total other income, net | | 4,190 | | 1,112 |
| Net loss from continuing operations | | (12,111) | | (13,852) |
| Net loss from discontinued operations | _ | — | | (4,870) |
| Net loss | | (12,111) | | (18,722) |
| Other comprehensive gain | | — | | 2 |
| Comprehensive loss | \$ | (12,111) | \$ | (18,720) |
| | | | - | |
| Net loss per share from continuing operations, basic and diluted | \$ | (0.26) | \$ | (0.31) |
| Net loss per share, from discontinued operations basic and diluted | | — | | (0.11) |
| Net loss per share, basic and diluted | \$ | (0.26) | \$ | (0.42) |
| Weighted-average shares outstanding, basic and diluted | | 45,708,601 | | 44,070,974 |

Senti Bio Contacts

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