

**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): December 16, 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	SENTI	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

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 8.01 Other Events

On December 16, 2024, Senti Biosciences, Inc. (the “Company”) issued a press release announcing the first patient dosed in a clinical trial of SN301A in hepatocellular carcinoma in collaboration with Celest Therapeutics (Shanghai) Co. Ltd. A copy of the press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

The information in this Item 8.01 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 December 16, 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: December 16, 2024

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



Senti Bio Announces First Patient Dosed in Clinical Trial of SN301A in Hepatocellular Carcinoma in Collaboration with Celest Therapeutics

– Dose-finding clinical trial in China designed to evaluate safety and preliminary anti-tumor activity of SN301A (SENTI-301A manufactured in China) in hepatocellular carcinoma (“HCC”) –

SOUTH SAN FRANCISCO, Calif., December 16, 2024 – Senti Biosciences, Inc. (Nasdaq: SNTI) (“Senti Bio”), a clinical-stage biotechnology company developing next-generation cell and gene therapies using its proprietary Gene Circuit platform, today announced that the first patient has been dosed in the pilot trial of SN301A in HCC in mainland China in collaboration with Celest Therapeutics (Shanghai) Co. Ltd (“Celest”). SN301A utilizes the anti-GPC3 + crIL-15 (each as defined below) SENTI-301A Gene Circuit developed by Senti Bio and refers to the chimeric antigen receptor natural killer (“CAR-NK”) product candidate manufactured by Celest in China.

Through this collaboration, Celest is leading clinical development, operations and manufacturing of SN301A with technical, strategic and clinical input from Senti Bio. The clinical trial is designed to evaluate safety, pharmacokinetics and preliminary anti-tumor activity of SN301A and will include patients with advanced glypican 3 (“GPC3”)-expressing HCC across multiple dose cohorts. The study endpoints include safety assessments for adverse events and dose limiting toxicities, as well as efficacy analyses using standard response criteria for liver cancer.

“Today’s announcement is a significant demonstration of the progress in our strategic partnership with Celest to advance the clinical development of SENTI-301A, our solid tumor pipeline product candidate in China,” said Timothy Lu, MD, PhD, Chief Executive Officer and Co-Founder of Senti Bio. “We are proud of the rapid development to date, and value how our partnership with the Celest team is playing an important role in bringing Senti Bio’s Gene Circuit technology to patients who have limited or no therapeutic options today. We are excited by the recent positive initial clinical data from our first Gene Circuit enabled cell therapy SENTI-202 in blood cancer, and the potential to expand our platform to treat solid tumors with high unmet clinical needs.”

“We are thrilled to share this progress in the clinical development of SN301A. In successfully initiating this trial, we are now seeing the potential of integrating Senti’s novel Gene Circuit technology to our proprietary NK cell manufacturing and clinical operations expertise,” said Erdong Hua, Chairman of Celest and Managing Partner of 6 Dimensions Capital. “Importantly, as the second leading cause of cancer-related death in Asia, liver cancer remains a large health threat in China. Statistically, over 40 percent of global HCC cases are reported in China, underscoring the significant unmet need that we hope SN301A may help address.”

Additionally, Celest and Senti Bio have the option to expand clinical development of SN301A to Hong Kong, Macau and Taiwan. Senti Bio will retain all development and commercialization rights outside of mainland China, Hong Kong, Macau and Taiwan for SENTI-301A.

About the SN301A Clinical Trial

The safety and efficacy of SN301A is being evaluated in an investigator-initiated open-label, single-center study (NCT06652243) in adult patients with advanced GPC3-expressing HCC. Three dose levels of SN301A will be administered in cycles, each comprising of 3 weekly doses (Days 0, 7, 14) during a 28-day treatment cycle following a standard lymphodepletion conditioning regimen of fludarabine and cytarabine. Patients may continue to receive multiple cycles of treatment based on their safety and efficacy results.

About SENTI-301A/SN301A

SENTI-301A is a multi-armed off-the-shelf healthy donor derived CAR-NK cell therapy designed for the treatment of GPC3 expressing tumors. The engineered NK cells target the GPC3 antigen, which is highly expressed in 70% to 90% of HCCs and has low or no expression on normal adult tissues. Additionally, SENTI-301A incorporates the 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. Senti Bio has shown comprehensive preclinical data demonstrating robust in vitro and in vivo killing of relevant tumor cells with SENTI-301A. This program, in collaboration with Celest, is being developed in China as SN301A. SN301A utilizes the same Gene Circuit as SENTI-301A and refers to the CAR-NK product manufactured by Celest in China.

About Senti Bio

Senti Bio is a clinical-stage 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. Senti Bio’s wholly-owned pipeline includes off-the-shelf CAR-NK cells, outfitted with Gene Circuits, to target challenging liquid and solid tumor indications. Senti Bio’s lead program SENTI-202, a Logic Gated CD33 and/or FLT3-targeting hematologic cancer therapeutic candidate, demonstrated complete remissions in 2 of 3 patients in initial clinical data as of September 19, 2024. Senti Bio has also preclinically demonstrated that its Gene Circuits can function in T cells. Additionally, Senti Bio has preclinically demonstrated the potential breadth of Gene Circuits in other cell and gene therapy modalities, diseases outside of oncology, and continues to advance these capabilities through partnerships with Roche/Spark Therapeutics and Bayer/BlueRock Therapeutics.

About Celest

Celest was founded to develop intelligent CAR-immune cell therapy for effective treatment of challenging solid tumors. Celest technology platforms employ a suite of in-house developed immunological technologies, including platforms to screen for tumor microenvironment (“TME”) induced immune cell enrichment, trafficking and persistence. In parallel, the platforms also identify and optimize CAR-NK cell signaling domains using high-throughput methods including pooled library screenings. Incubated by 6

Dimensions Capital and 120 Capital with operations in Shanghai, China, Celest is building next-generation innovative cell therapy products with full-fledged capabilities from early R&D, cell manufacturing to clinical development and commercialization.

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, expectations regarding Senti Bio’s growth, strategy, progress and timing of its clinical trials and the timing of availability of data from the ongoing clinical trials; the ability of any product candidate to perform in humans in a manner consistent with nonclinical, preclinical or previous clinical study data; the growth, strategy, progress and timing of clinical trials for SENTI-301A through Celest in China; expectations regarding the anticipated dosing of patients and availability of data from clinical trials, 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 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, 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 Celest’s and 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 most recent periodic report filed with the U.S. Securities and Exchange Commission (“SEC”), 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 X (formerly 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 Bio Contacts

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