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): February 27, 2024

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

DELAWARE (State or other jurisdiction of incorporation) 001-39717 (Commission File Number) 20-2903526 (IRS Employer Identification No.)

680 East Colorado Boulevard, Suite 180 Pasadena, California 91101 (Address of principal executive offices)

(631) 830-7092 (Registrant's telephone number, including area code)

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 (See General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act of 1933 (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(e) under the Exchange Act (17 CFR 240.13e-4(c))

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

Title of Each ClassTrading Symbol(s)Name of each exchange on which registeredCommon StockLIXTThe Nasdaq Stock Market LLCWarrant to Purchase Common StockLIXTWThe Nasdaq Stock Market LLC

Item 8.01 Other Events.

On February 27, 2024, Lixte Biotechnology Holdings, Inc. (the "Company") issued a press release announcing that René Bernards, PhD, will present new pre-clinical data on the Company's lead compound, LB-100, at the Joint Conference of European and American Associations for Cancer Research being held in Dublin, Ireland on February 27 - 29, 2024. Dr. Bernards is professor of molecular carcinogenesis at Utrecht University in Amsterdam and head of molecular carcinogenesis at the Netherlands Cancer Institute, and is also a member of the Company's Board of Directors.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The Company is filing as part of this report the exhibits listed on the accompanying Index to Exhibits, which information is incorporated herein by reference.

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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.

Date: February 27, 2024

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

By: /s/ BASTIAAN VAN DER BAAN Bastiaan van der Baan President and Chief Executive Officer

INDEX TO EXHIBITS

Exhibit No.	Description
99.1	Press release announcing the presentation of Dr. René Bernards at the Joint Conference of European and American Associations for Cancer Research
104	Cover Page Interactive Data File (embedded within the Inline XBRL Document)

Professor René Bernards to Present New Pre-Clinical Data on LIXTE's LB-100 at Joint Conference of European and American Associations for Cancer Research

Conference In Dublin, Ireland on February 27 - 29, 2024 Focuses on How to Bring Basic Science Discoveries to the Clinic

PASADENA, CA, February 27, 2024 — <u>LIXTE Biotechnology Holdings, Inc. (Nasdaq: LIXT and LIXTW</u>) ("LIXTE" or the "Company"), a clinical stage biotechnology company developing a novel class of cancer therapy called PP2A inhibitors, today announced that **René** Bernards, PhD, professor of molecular carcinogenesis at Utrecht University in Amsterdam and head of molecular carcinogenesis at the Netherlands Cancer Institute, will present new pre-clinical data on LIXTE's lead compound, LB-100, at the Joint Conference of European and American Associations for Cancer Research this week in Dublin, Ireland Dr. Bernards is also a member of LIXTE's Board of Directors.

In his presentation, "Unexpected, but Highly Synergistic Combinations for Cancer Therapy," Dr. Bernards will present data on how stress imposed onto colon cancer cells by LB-100 drives cancer cells to evolve to less cancerous behavior.

"The findings underscore the unique and what we believe to be exciting features and mechanism of action of LIXTE's PP2A inhibitor, LB-100," said Dr. James Miser, LIXTE's Chief Medical Officer. "While conventional cancer drugs aim to inhibit oncogenic signaling, which tends to drive cancer cells into more aggressive behavior, LB-100 does exactly the opposite, overloading oncogenic signaling, and thereby forcing cells to downregulate the signals that are characteristic for cancer cells. As a consequence, cancer cells are forced to evolve to a less aggressive behavior."

"This new data greatly helps to position LB-100 clinically to the benefit of patients and is in addition to the well-established effects of LB-100 on enhancing the efficacy of checkpoint immunotherapy," added Bas van der Baan, LIXTE's President and CEO.

LIXTE yesterday announced it has entered into an exclusive Patent License Agreement with the National Institute of Neurological Disorders and Stroke and the National Cancer Institute, both units of the National Institute of Health. The Company also recently announced dosing of the first patient in a Phase 1b/2 clinical trial at MD Anderson Cancer Center to assess whether adding LIXTE's LB-100 to GSK's programmed death receptor-1 (PD-1)-blocking monoclonal antibody, dostarlimab-gxly, may enhance the effectiveness of immunotherapy in the treatment of ovarian clear cell carcinoma (OCCC).

About LIXTE Biotechnology Holdings, Inc.

<u>LIXTE Biotechnology Holdings, Inc.</u> is a clinical-stage pharmaceutical company focused on new targets for cancer drug development and developing and commercializing cancer therapies. LIXTE has demonstrated that its first-in-class lead clinical PP2A inhibitor, LB-100, is well-tolerated in cancer patients at doses associated with anti-cancer activity. Based on extensive published preclinical data (see <u>www.lixte.com</u>), LB-100 has the potential to significantly improve outcomes for patients undergoing various chemotherapies or immunotherapies. LIXTE's new approach has no known competitors and is covered by a comprehensive patent portfolio. Proof-of-concept clinical trials are in progress.

Forward-Looking Statement Disclaimer

This announcement contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934. For example, statements regarding the Company's financial position, business strategy and other plans and objectives for future operations, and assumptions and predictions about future activities, including the continuing development of proprietary compounds, the planning, funding, coordination and potential results of clinical trials, the patent and legal costs to protect and maintain the Company's intellectual property worldwide, and the Company's ability to obtain and maintain compliance with Nasdaq's continued listing requirements, are all forward-looking statements. These statements are generally accompanied by words such as "intend," anticipate," "believe," "estimate," "potential(ly)," "continue," "forecast," "predict," "plan," "may," "will," "could," "would," "should," "expect" or the negative of such terms or other comparable terminology.

The Company believes that the assumptions and expectations reflected in such forward-looking statements are reasonable, based on information available to it on the date hereof, but the Company cannot provide assurances that these assumptions and expectations will prove to have been correct or that the Company will take any action that the Company may presently be planning. However, these forward-looking statements are inherently subject to known and unknown risks and uncertainties. Actual results or experience may differ materially from those expected or anticipated in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, regulatory policies, available cash resources, research results, competition from other similar businesses, and market and general economic factors.

Readers are urged to read the risk factors set forth in the Company's filings with the United States Securities and Exchange Commission at https://www.sec.gov. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

For more information about LIXTE, Contact: <u>info@lixte.com</u> General Phone: (631) 830-7092; Investor Phone: (888) 289-5533

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