

**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 10, 2025

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 Class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	LIXT	The Nasdaq Stock Market LLC
Warrant to Purchase Common Stock	LIXTW	The Nasdaq Stock Market LLC

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 March 10, 2025, Lixte Biotechnology Holdings, Inc. (the "Company") issued a news release to announce new findings that show how Lixte's lead clinical compound, LB-100, is metabolized to its active form.

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.

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.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
(Registrant)

Date: March 11, 2025

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

INDEX TO EXHIBITS

Exhibit No. **Description**

99.1	News release to announce new findings that show how Lixte's lead clinical compound, LB-100, is metabolized to its active form
104	Cover Page Interactive Data File (embedded within the Inline XBRL Document)



New Findings Show how LIXTE's Lead Clinical Compound, LB-100, is Metabolized to its Active Form

— As Published in Two Scientific Journals,
Findings Open Potential Biomarker Strategy for Patient Response to LB-100 —

PASADENA, CALIF., March 10, 2025 — LIXTE Biotechnology Holdings, Inc. ("LIXTE" or the "Company") (Nasdaq: LIXT and LIXTW), a clinical-stage pharmaceutical company, today announced online publication of new pre-clinical data in BioRxiv and International Journal of Pharmaceutics demonstrating how the Company's lead clinical compound, LB-100, is converted into its active form, endothall, a protein phosphatase (PP2A) inhibitor that has been found to be effective in cancer treatment in combination with immunotherapy.

As published in BioRxiv, scientists at the Netherlands Cancer Institute have discovered an enzyme that mediates the conversion of LB-100 into the active metabolite endothall. Accordingly, this protein represents a potential biomarker to identify patients who are most likely to respond to LB-100. The biomarker discovery study was performed in the laboratories of Professor Rene Bernards, group leader at the Netherlands Cancer Institute and LIXTE board member.

As published in the International Journal of Pharmaceutics, Dr. Hans Rollema and colleagues, medicinal chemists and biochemists at BioPharmaWorks LLC, a consultant to LIXTE, studied how LB-100 can spontaneously convert into the active metabolite endothall by hydrolysis. Their data indicate that this conversion is slow under physiological conditions. The enzymatic conversion of LB-100 identified by the Bernards laboratory expedites the activation of LB-100 inside the cell.

Bas van der Baan, LIXTE's Chief Executive Officer, said, "Clinical trials with LB-100 currently are underway for treatment of ovarian cancer and colorectal cancer. The latest pre-clinical data published in the International Journal of Pharmaceutics and in BioRxiv provide a better understanding of the underlying biological availability of LB-100 and endothall in patients, and will help us in optimizing patient selection for future clinical trials."

About LIXTE Biotechnology Holdings, Inc.

LIXTE Biotechnology Holdings, Inc. 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, 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. LB-100 is part of a pioneering effort in an entirely new field of cancer biology – activation lethality – that is advancing a new treatment paradigm. Additional information about LIXTE can be found at www.lixte.com.

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: info@lixte.com

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