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 20, 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 s General Instruction A.2. below):	simultaneously satisfy the filing obligati	on of the registrant under any of the following provisions (See
 □ Written communications pursuant to Rule 425 under the Securities □ Soliciting material pursuant to Rule 14a-12 under the Exchange Ac □ Pre-commencement communications pursuant to Rule 14d-2(b) un □ Pre-commencement communications pursuant to Rule 13e-4(e) under the Securities 	ct (17 CFR 240.14a-12) nder the Exchange Act (17 CFR 240.14d	
Securities registered pursuant to Section 12(b) of the Act:		
Title of Each Class Common Stock Warrant to Purchase Common Stock	Trading Symbol(s) LIXT LIXTW	Name of each exchange on which registered The Nasdaq Stock Market LLC The Nasdaq Stock Market LLC
Item 8.01 Other Events. On May 20, 2024, Lixte Biotechnology Holdings, Inc. (the "C	Company") issued a press release provid	ing an update on the Company's recent activities, including
notable pre-clinical developments.		
Item 9.01 Financial Statements and Exhibits.		
(d) Exhibits		
The Company is filing as part of this Report the exhibits listed	d on the accompanying Index to Exhibit	s, which information is incorporated herein by reference.
	SIGNATURES	
Pursuant to the requirements of the Securities Exchange Act o duly authorized.	of 1934, the registrant has duly caused the	nis report to be signed on its behalf by the undersigned hereunto
Date: May 20, 2024	LIXTE BIOTECHNOLOGY HOLDINGS, INC.	
	By: /s/ BASTIAAN I Bastiaan van de President and C	

99.1	Press release providing an update on the Company's recent activities, including notable pre-clinical developments

Cover Page Interactive Data File (embedded within the Inline XBRL Document)

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LIXTE Biotechnology Holdings Provides Update on Recent Activities

- Publishing of Findings in Recent Pre-Clinical Study for LIXTE's Proprietary Compound, LB-100, in New Field of Cancer Biology, "Activation Lethality"
- Presentation at MedInvest Biotech and Pharma Investor Conference
- · Co-Sponsorship/Presentation of Workshop at Harvard University's Dana Farber Cancer Institute

PASADENA, CA, May 20, 2024 — LIXTE Biotechnology Holdings, Inc. ("LIXTE" or the "Company") (Nasdaq: LIXT and LIXTW), a clinical-stage pharmaceutical company developing a new class of cancer therapy to enhance chemotherapy and immunotherapy, today provided an update on the Company's recent activities, including notable pre-clinical developments.

"LIXTE continues to make progress with its proprietary compound, LB-100, in ongoing clinical trials for lung, ovarian and sarcoma cancers," said Bas van der Baan, LIXTE's President and Chief Executive Officer. "We also are pleased with the findings of recent pre-clinical data with LB-100 in an entirely new field of cancer biology — activation lethality — that we believe has outstanding potential in advancing new treatment options."

Recent Company highlights include:

- Pre-clinical studies in a new field of cancer biology activation lethality have shown that LB-100 can force cancer cells to give up their cancer-causing properties. The findings open a potentially new treatment strategy in addition to LIXTE's current three ongoing clinical trials. René Bernards, Ph.D., a leader in the field of molecular carcinogenesis and Senior Staff Scientist at the Netherlands Cancer Institute, presented the new pre-clinical data at the Joint Conference of European and American Associations for Cancer Research in Dublin, Ireland. The paper, "Paradoxical Activation of Oncogenic Signaling as a Cancer Treatment Strategy," was posted in the online medical journal Cancer Discovery on April 30, 2024. Dr. Bernards is a member of LIXTE's Board of Directors.
- Bas van der Baan, LIXTE's President and Chief Executive Officer, presented at the MedInvest Biotech and Pharma Investor Conference on April 3, 2024 in New York
 City. The two-day event featured presentations from more than 40 companies, developing and commercializing technologies across a broad spectrum of indications,
 including oncology. The conference also featured talks from key industry opinion leaders, investor panel discussions, and conversations with the National Cancer
 Institute on patenting, facilitating collaborations, licensing and technology analysis and marketing.
- <u>LIXTE co-sponsored an international scientific workshop on "Therapeutic Over-Activation in Cancer"</u> at Harvard University's Dana Farber Cancer Institute in Boston, Massachusetts on May 9 and 10, 2024. The workshop brought together leading experts from the pharmaceutical industry and academia who discussed a radically different approach to cancer therapy that is being spearheaded by LIXTE's outsourced research team at the Netherlands Cancer Institute.

LIXTE has clinical trials underway at the University of Texas MD Anderson Cancer (<u>ovarian clear cell carcinoma</u>); City of Hope Cancer Center and the Sarah Cannon Research Institute (<u>small cell lung cancer</u>); and the Spanish Sarcoma Group(<u>advanced soft tissue sarcoma</u>). In February 2024, LIXTE signed an exclusive patent license agreement with the National Institute of Neurological Disorders and Stroke (NINDS) and the National Cancer Institute (NCI), each an institute or center of the National Institute of Health (NIH).

Click here for a brief video overview by LIXTE's Chief Executive Officer.

Filing of Quarterly Report on Form 10-Q for the three months ended March 31, 2024

Additional information with respect to LIXTE's business, clinical trials and financial condition is contained in the Company's Quarterly Report on Form 10-Q for the three months ended March 31, 2024, which has been filed with the U.S. Securities and Exchange Commission at www.sec.gov.

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 pre-clinical data (see www.lixte.com), LB-100 has the potential to significantly enhance chemotherapies and immunotherapies and improve outcomes for patients with cancer. LIXTE's new approach has no known competitors and is covered by a comprehensive patent portfolio. Proof-of-concept clinical trials are in progress. 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," "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 U.S. Securities and Exchange Commission ahttps://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:

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or

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