March 10, 2025

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 (GLOBE NEWSWIRE) -- 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 *BioXriv* 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 *BioXriv,* 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 *BioXriv* 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.

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Source: Lixte Biotechnology Holdings, Inc.