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Lixte Biotechnology's LB-100 Shown in Animal Models to Significantly Reduce Behavioral Sensitization, an Important Feature of Methamphetamine Addiction

A series of recent pre-clinical reports demonstrates LB-100's effectiveness in various non-neoplastic diseases that may benefit from PP2A inhibition

PASADENA, CA, Aug. 17, 2021 (GLOBE NEWSWIRE) -- [Lixte Biotechnology Holdings, Inc.](#) (Nasdaq: LIXT) ("Lixte"), a clinical-stage drug discovery company developing pharmacologically active drugs for use in cancer treatment, noted that in pre-clinical studies its lead clinical compound, LB-100, a protein phosphatase 2A (PP2A) inhibitor, was reported to reduce behavioral sensitization underlying addiction to methamphetamine (METH). Behavioral sensitization is widely considered a key neurobiological mechanism in drug addiction.

Studies in animal models have shown that dysregulation in the activity of PP2A could be a factor in diseases of the central nervous system, including drug addiction. A recent scientific paper ([Shang et al., NeuroReport, April 2021](#)) explains how LB-100, by inhibiting PP2A, blocked METH-induced behavioral sensitization in rodents.

Lixte's Chief Executive Officer, John S. Kovach, M.D., commented, "These findings are the latest in a series of pre-clinical studies demonstrating the impact of LB-100 in various diseases that may benefit from PP2A regulation. While our clinical focus today is on highly aggressive cancers, such data may open doors for future clinical trials of LB-100 for additional indications."

Last month, Lixte commented on outside research citing LB-100's PP2A inhibition as a potential therapeutic strategy for [triple-negative breast cancer](#). This announcement was followed by a report that LB-100, combined with another investigational agent, stimulated bone growth in models of [dwarfism](#).

Lixte's pipeline presently includes clinical studies of LB-100 for myelodysplastic (MDS) syndromes, advanced soft tissue sarcomas (ASTS), small cell lung cancer (SCLC), and glioblastoma multiforme (GBM). The total market for these cancer targets exceeds \$5 billion.

About Lixte Biotechnology Holdings, Inc.

[Lixte Biotechnology Holdings, Inc.](#) (Nasdaq:LIXT) is a clinical-stage pharmaceutical company dedicated to discovering drugs for more effective treatments for many forms of cancer and other serious common diseases. A major driver of cancer is defects in the switches that turn the biochemical pathways in cells on and off. Most cancer research over the past 30 years has focused on the "on" switches because the "off" switches, especially the master "off"

switch protein phosphatase (PP2A), were believed to cause intolerable toxicity in patients. Lixte has achieved a breakthrough with its novel, first-in-class lead compound, PP2A inhibitor LB-100, by demonstrating that it is readily tolerated in cancer patients at doses associated with anti-cancer activity. This innovative approach encourages cancer cells, damaged by chemo or other cancer therapies, to continue to replicate before repairing the damage, leading to the more efficient death and elimination of those cells from the body. Lixte has partnered with top medical institutions and leading academic research centers to advance the clinical development of its compounds. The LB-100 compound, of which there are no competitors known to Lixte, is being tested in three clinical cancer treatment studies with others in planning. lixte.com

Forward-Looking Statements

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 product demand, supply, manufacturing, costs, marketing and pricing factors 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, research results, competition from other similar businesses, and market and general economic factors. This discussion should be read in conjunction with the Company's filings with the United States Securities and Exchange Commission at sec.gov/edgar.shtml.

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