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Lixte Biotechnology Holdings Compound LB-205 Reported to Have Therapeutic Potential for Gaucher Disease

EAST SETAUKET, N.Y., Dec. 19, 2011 /PRNewswire/ -- An article in the early edition (December 12, 2011) of the *Proceedings of the National Academy of Sciences USA*, reported that Lixte's investigational drug, LB-205, was shown to have therapeutic potential in a laboratory model of Gaucher disease (<http://www.pnas.org/content/early/2011/12/08/1119181109.full.pdf+html>).

John Kovach, MD, founder and president of Lixte said, "This is a novel use of the class of drugs known as histone deacetylase inhibitors (HDACi's). HDACi's have been used clinically primarily as anticancer treatments. To our knowledge, this is the first time HDACi's have been shown to have therapeutic potential in a model of Gaucher disease. We were pleased that the effectiveness of LB-205 compared favorably with a clinically approved HDACi.

Primary treatment for many Gaucher disease patients is injection of the enzyme, glucocerebrosidase, which decreases the toxic accumulation of glucocerebroside in many tissues. Unfortunately, in some patients, the brain is significantly affected by glucocerebroside accumulation and the injected enzyme does not enter the brain readily. Although the effectiveness of HDACi's for Gaucher treatment remains to be proven in clinical studies, the discovery is intriguing because some HDACi's, like LB-205, penetrate the brain and may be effective given by mouth rather than injection, simplifying long term management."

About Lixte Biotechnology Holdings, Inc.

Lixte is a cancer drug discovery company, using biomarker technology and innovative chemistry to develop new potentially more effective anti-cancer drugs. It has lead compounds in two classes of drugs, protein phosphatase inhibitors for which a US patent was recently issued with world-wide patent applications pending for a lead compound LB-100 and structural variants, and novel histone deacetylase inhibitors for which broad patent applications are also pending. The Company is targeting treatments for several types common and rarer but devastating cancers. The primary emphasis is on the most common and most aggressive type of brain cancer of adults, glioblastoma multiforme and other cancers of neural tissue (nerve and brain), including medulloblastoma, the most common brain tumor of children, and neuroblastoma, the most common cancer of children, as well as non-neural cancers of adults, including breast and pancreatic cancer, melanomas and sarcomas.

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 condensed consolidated financial statements and notes thereto in the SEC Report on Form 10-QSB for the quarter ending September 30, 2011.

For additional information, please see: www.Lixte.com

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