

August 19, 2008



Lixte Biotechnology Holdings Announces Filing of a New Patent Application for Cancer Therapy Based on Targeting a Biomarker by Novel Investigational Agents

EAST SETAUKET, N.Y., Aug. 19 /PRNewswire-FirstCall/ -- Lixte Biotechnology Holdings, Inc. (OTC Bulletin Board: LIXT) announced today that the National Institute of Neurological Disorders and Stroke (NINDS), National Institutes of Health (NIH) and Lixte filed a joint patent application identifying a biomarker, present in many common cancers, that is a target of drugs being evaluated by Lixte and NINDS for the treatment of brain tumors.

Dr. John S. Kovach, President and CEO of Lixte, said, "Studies with the research team at the Molecular Pathogenesis Unit, Surgical Neurology Branch, NINDS, identified a biomarker that appears to be preferentially targeted by novel anti-cancer drugs currently being evaluated by NINDS and Lixte as new treatments for human brain tumors. Molecular studies revealed that these drugs alter the state of this biomarker in a way that leads to the death of cancer cells. Since the biomarker appears to be important to the survival of several human cancers in addition to brain cancers, studies will be done to determine the effectiveness of targeting the biomarker in other tumor types and as a guide to drug discovery of new anti-cancer compounds."

About Lixte Biotechnology Holdings, Inc.:

Lixte Biotechnology Holdings, Inc. is a cancer therapeutics and diagnostics company. Founded as a biomarker-diagnostics company in 2005, Lixte develops new chemotherapy drugs targeting molecular abnormalities of common human cancers.

About the National Institute of Neurological Disorders and Stroke (NINDS), (NIH):

NINDS (www.ninds.nih.gov) is a component of the National Institutes of Health (NIH), and is the nation's primary supporter of biomedical research on the brain and nervous system.

The National Institutes of Health (NIH) - The Nation's Medical Research Agency - includes 27 Institutes and Centers and is a component of the U.S. Department of Health and Human Services. It is the primary federal agency for conducting and supporting basic, clinical and translational medical research, and it investigates the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit www.nih.gov.

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 included on Form 10-QSB for the quarter ending June 30, 2008.

Please see our Website:

www.Lixte.com

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