



For Immediate Release  
Bill Wells – 404-281-7490

## **University of Virginia Study Shows that Lisofylline Reduces Obesity-related Inflammation and Insulin Resistance**

ATLANTA, GA (April 16, 2008) – [DiaKine Therapeutics](#) today announced that its developmental drug [Lisofylline](#) (LSF), significantly reduced indicators of inflammation in visceral fat tissue that are predictive of heart disease and diabetes risk, according to results of a pre-clinical study presented at the Arteriosclerosis, Thrombosis and Vascular Biology Annual Conference 2008.

“This study using ‘Western’ type high-fat, diet fed obese mice, suggests that medications with the actions of LSF could reduce inflammation and insulin resistance associated with central obesity – therefore providing a novel opportunity to treat heart disease and prevent type 2 diabetes development,” said Dr. Jerry Nadler, Chief Science Officer of DiaKine.

“The growing collection of data shows LSF, and its associated analogues, can fill many unmet medical needs in the treatment of diabetes and the complications of the disease,” said Keith D. Ignatz, DiaKine CEO and President. These new study results further underline the potential for drugs in DiaKine’s technology platform to treat patients with not only type 1 and insulin-requiring type 2 diabetes, but also patients who suffer from diseases that are the result of their diabetes progressing and damaging major organs.”

Obesity generates a state of low-grade inflammation that is associated with increased risk for cardiovascular diseases and the development of type 2 diabetes. LSF is a drug designed to control selected inflammatory responses of the body that have been linked to cardiovascular disease and diabetes. The research - lead by Drs. Nadler and Hong Pei, and conducted at the University of Virginia - showed that mice fed a heavy fat content diet developed the inflammatory markers for heart disease and diabetes. Mice treated with LSF had responses that were similar to normal, low-fat diet fed mice.

LSF is an inhibitor of IL-12 signaling and thereby reduced macrophage infiltration to adipose tissue in the treated animals. Importantly, LSF also reduced insulin levels in mice fed Western diet, suggesting improved insulin sensitivity. As obesity leads to increased inflammation and activation of the innate immune system in visceral fat tissue, targeting inflammation through the IL-12 pathway with LSF or one of the Company’s oral drugs, could provide a novel therapeutic approach to reducing the burden of cardiovascular disease associated with obesity and diabetes.

###MORE###

The Council on Arteriosclerosis, Thrombosis and Vascular Biology contributes to the mission and objectives of the American Heart Association through efforts in the fields of arteriosclerosis, thrombosis and vascular biology. The council advances and coordinates research, addresses prevention, improves methods for diagnosis and treatment, and works actively with other organizations concerned with these issues. The council disseminates reliable information related to these fields through its annual conference, many awards and lectures, and the *Journal on Arteriosclerosis, Thrombosis and Vascular Biology*.

LSF, being developed by DiaKine Therapeutics, Inc., is a synthetic small molecule with novel anti-inflammatory properties. LSF has been shown to reduce interleukin 12 (IL12) signaling and STAT4 activation in target cells and tissues, important pathways linked to inflammation and immune damage to insulin producing cells.

#### **About DiaKine --**

DiaKine Therapeutics, Inc. is a development stage company commercializing novel immune modulators initially targeting the treatment of autoimmune and inflammatory diseases such as diabetes and related complications. These new drugs regulate cytokines, part of the body's immune system, which mistakenly attack tissue and cause inflammation. Therapeutics under development by DiaKine include: adjunct therapy to islet cell transplants, halting the progression of type 1 diabetes in newly diagnosed adults, treatment and prevention of Latent Autoimmune Diabetes of Adults (LADA), treatment and prevention of insulin requiring type 2 diabetic, treatment and prevention of diabetes complications. For more information, visit [www.diakine.com](http://www.diakine.com).

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