



For Immediate Release
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Combination Drug Therapy May Hold the Key to Reversing Type 1 Diabetes

People with diabetes could one day receive medications to put disease in remission

SNOWBIRD, UTAH (April 8, 2008) – Seventy percent of mice with type 1 diabetes treated with a combination therapy of [Lisofylline](#) (LSF) ([DiaKine Therapeutics](#)) and INGAP Peptide ([Kinexum Metabolics](#)) went into complete remission and no longer needed insulin, LSF or INGAP Peptide in order to maintain normal blood sugar levels. Additionally, mice treated with this novel combination therapy required less insulin during the treatment regimen than the controls according to results of a preclinical study presented at the prestigious [Keystone Symposia on Beta Cell and Islet Biology](#).

The research was lead by Drs. [Jerry Nadler](#) and Sarah Tersey and conducted at the University of Virginia. “We are very encouraged by the results of this study and others that indicate LSF in combination with certain peptides, or small molecules, is a potential therapy for the reversal of type 1 diabetes,” said Dr. Nadler, Chief Science Officer of DiaKine. “Our goal with these drugs is to address large unmet medical needs which will change the daily routine of people with diabetes from fingerstick blood tests and insulin injections to a therapy which will allow individuals the opportunity to live a healthy and productive life.”

“We believe that a two-prong approach with an immune modulator such as LSF, in combination with an islet cell growth factor, such as INGAP Peptide, offers the best hope of allowing the body to generate insulin-producing cells.” said [Keith D. Igotz](#), DiaKine CEO and President. “We are aggressively pursuing a commercialization path for LSF as the primary autoimmune modulator for diabetes combination therapy.”

According to the presentation, *Unique Drug Combination for Reversal of Type 1 Diabetes*, the study animals were given a placebo and variations of single and combination LSF/INGAP treatments. The remission rate was most compelling when a novel approach to the combination therapy was administered to fully diabetic mice that were first treated with LSF in an effort to dampen the autoimmune system and then treated with the combination of LSF and INGAP Peptide. This regimen resulted in a remission of diabetes in 70% of the mice after all treatments were withdrawn, including animals with blood glucose levels above 350 mg/dL. Mice treated with INGAP Peptide alone, and INGAP Peptide/LSF combinations averaged markedly higher serum insulin levels than saline treated

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controls and were similar to non-diabetic NOD mice. It was only when the combination of the two was used that a reversal of hyperglycemia was observed.

This study was supported in part by the NIH-NIDDK, the Farish Foundation, the Ella Fitzgerald Foundation, and the Iacocca Foundation. DiaKine Therapeutics, Inc. provided the Lisofylline and Kinexum, Inc. provided the INGAP Peptide.

LSF, being developed by [DiaKine Therapeutics, Inc.](#), is a synthetic small molecule with novel anti-inflammatory properties. LSF has been shown to block interleukin 12 (IL-12) signaling and STAT-4 activation in target cells and tissues, important pathways linked to inflammation and autoimmune damage to insulin producing cells.

Islet neogenesis associated protein (INGAP) is a member of the Reg3 family of pancreatic proteins and has been shown to induce new islet formation in multiple species. It is currently under development by Kinexum Metabolics, Inc.

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.

About Kinexum Metabolics, Inc.

Kinexum Metabolics, Inc. is dedicated to identifying and developing metabolic and endocrine therapies in early and mid stages of development. It seeks to develop its product portfolio through research collaboration and in-licensing (www.kinexummetabolics.com).

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