



Thermalin Diabetes, LLC awarded \$1.49M NIH Phase II SBIR Grant

Boston, MA & Cleveland, OH, May 12, 2014 – Thermalin Diabetes, LLC has received a \$1.49M Phase II SBIR grant award from the National Institute of Diabetes and Digestive Kidney Diseases (NIDDK) to further the development of its rapid-acting, ultra-concentrated insulin. The funding is a continuation of a Phase I SBIR grant awarded in 2012.

Thermalin's rapid-acting, ultra-concentrated insulin, called Fluorolog™ U-500, is based on research performed by Dr. Michael Weiss, Chairman of Biochemistry at Case Western Reserve Medical School and Chief Scientific Officer of Thermalin. This novel insulin analog could, once approved for human use, offer superior therapeutic options for patients with high-dose insulin requirements and patients using insulin pumps. About 400,000 patients in the U.S., many from disadvantaged minorities, must take painful, high-volume and slow to absorb injections to manage their blood sugar levels. An ultra-concentrated insulin formulation would reduce the volume of these injections, improve blood sugar control, and facilitate patient compliance. Such an insulin would also enable the miniaturization of insulin pump reservoirs, a critical factor in decreasing the size of next-generation insulin pumps. Smaller insulin pumps would be less obtrusive and more practical for patients, increasing pump adoption and improving compliance.

This grant award will fund animal safety studies needed for Thermalin to file an IND application for Fluorolog, a prerequisite to in-human trials planned for 2015.

"Thermalin is honored by the continued support of the NIDDK. These highly-competitive grant awards have allowed us to extend private resources, undertake expanded animal studies, explore alternate strategies for addressing clinical needs, and advance the development of this and other important breakthroughs. Moreover, the high quality scientific review of the study sections has helped us to improve our research plans and do better science. We are grateful for the NIDDK's current and past support and excited to continue this successful formula for a high quality, rigorously prosecuted, public-private partnership," said Thermalin CEO Rick Berenson.

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About Thermalin

Thermalin's insulin engineering platform has led to a pipeline of new insulins. To date, Thermalin has raised \$9.4M in equity and been awarded \$9.3M in grants from the NIH. Our Clinical Advisory Board includes some of the leading endocrinologists in the nation.

About Insulin

Insulin is the hormone that lowers blood glucose levels by fitting into a receptor on liver, muscle, and fat cells, instructing those cells to take-in and store glucose. When blood glucose runs high, for example after a meal, a healthy pancreas releases insulin to bring blood sugar levels back down to normal. Diabetes is a condition where an individual's pancreas produces either no insulin (T1D) or insufficient insulin to overcome the body's insulin resistance (T2D).

