



Metabolomics for drug development

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### SiDMAP Technology Used to Characterize Novel Drug for Type 2 Diabetes

Los Angeles, California – July 21, 2010 – SiDMAP, LLC ([www.sidmap.com](http://www.sidmap.com)), a privately held life-science company that provides metabolomics research services to the pharmaceutical and biotechnology industries and the academic biomedical research community worldwide, announced today results of a study conducted in collaboration with scientists at Roche (Nutley, NJ), a leading pharmaceutical company, on a novel Roche drug for Type 2 diabetes.

The study, entitled “A Novel Approach for the Treatment of Type 2 Diabetes (T2D): Characterization of a Potent, Orally Active, Small Molecule Glycogen Synthase Activator,” was presented in Abstract 1389-P at the recently concluded American Diabetes Association (ADA), 70<sup>th</sup> Scientific Sessions, in Orlando, Florida.

Laszlo G. Boros, M.D., SiDMAP’s Chief Scientist, was SiDMAP’s lead investigator on the study. Andree R. Olivier, Ph.D., was lead investigator for Roche.

Using study methods designed by Dr. Boros in collaboration with Roche, the glycogen synthase activator GSA3 was administered to DIO mice (75 mg/kg), along with a stable isotope (non-emitting) glucose tracer. Subsequent laboratory analysis by SiDMAP of mouse tissue samples using the Company’s proprietary Stable Isotope Dynamic Metabolic Tracer technology demonstrated that GSA3 increased glycogen synthesis in mouse muscle and liver tissues, but the source of tracer-glucose in liver glycogen is primarily derived from an indirect pathway.

Dr. Boros said, “The purpose of the SiDMAP’s analysis of plasma and tissues from GSA3-treated DIO mice that had absorbed a stable isotope glucose tracer was to see if we could further validate Roche’s previous findings on the effects and mechanism of action of their potential T2D compound. The SiDMAP results were supportive of the previous Roche findings. The SiDMAP results also provided detailed pictures regarding glucose disposal mechanisms and system response using the highest scoring [U-13C6]-D-glucose tracer for TCA/pentose cycle and hepatic glucose production type clamp equivalent studies.”

As described in the study abstract, the SiDMAP findings, taken together with data on Roche GSA3 activator RO5289867, “provide evidence that direct pharmacological activation of GYS1 and GYS2 can lead to beneficial effects in whole body substrate metabolism and may be a viable approach for treating T2D and its co-morbidities.”

Dr. Olivier said, “The SiDMAP technology added value by giving Roche further confirmation and understanding of our compound’s mechanism of action, and enabled Roche to achieve its study objectives.”

According to Dr. Boros, “The precise and previously inaccessible flux map resulting from our *in vivo* study with Roche further support the use of Stable Isotope Dynamic Metabolic Profiling technology in the characterization of potential new drugs and their targets for Type 2 diabetes.”

The full text for Abstract 1389-P can be found at the following web address:

<http://ww2.aievolution.com/ada1001/index.cfm?do=cnt.page&pg=1009>

#### About SiDMAP

SiDMAP, LLC is a metabolomics company that provides research services for drug discovery and development, biomedical research, and drug toxicology research. SiDMAP clients include global pharmaceutical companies, leading biotechnology companies, major academic research institutions and drug regulatory authorities.

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