Good results for zone MPC-based artificial pancreas

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(HealthDay)—A zone model predictive control (MPC)-based artificial

pancreas (AP) system improves glycemic control in a home-use environment, according to a study published online June 5 in *Diabetes Care*.

Gregory P. Forlenza, M.D., from the University of Colorado Denver, and colleagues conducted an outpatient randomized crossover trial to examine the safety and efficacy of a zone-MPC-based AP system versus sensor-augmented pump (SAP) therapy. Nineteen adults participated in the crossover study involving two weeks of use of a smartphone-based AP system and two weeks of SAP therapy.

The researchers found that AP correlated with improved percent time at 70 to 140 mg/dL (48.1 versus 39.2 percent) and time at 70 to 180 mg/dL (71.6 versus 65.2 percent) compared with SAP and with decreased percent time