

Good results for zone MPC-based artificial pancreas

June 15 2017



(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

Citation: Good results for zone MPC-based artificial pancreas (2017, June 15) retrieved 2 May 2024 from <https://medicalxpress.com/news/2017-06-good-results-zone-mpc-based-artificial.html>

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