

# Study: Improvement in glycemic parameters by adding dapagliflozin to metformin in T2D

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Researchers used continuous glucose monitoring (CGM) to assess the effects of adding dapagliflozin to a regimen of either metformin or insulin in patients with type 2 diabetes (T2D) and found significant reductions in mean glucose and other glycemic factors, with greater improvements seen in patients taking metformin compared to insulin. The design and results of this trial are published in *Diabetes Technology & Therapeutics (DTT)*.

CGM was used to determine daily variations in glucose during the week before [patients](#) received dapagliflozin and during the last week of treatment.

Dapagliflozin is a U.S. FDA-approved inhibitor of sodium-glucose cotransporter 2 (SGLT2) and by blocking SGLT2 it increases urinary glucose excretion and improves glucose control. CGM was able to show the effects of adding dapagliflozin to either metformin or insulin in terms of overall mean glucose concentration, fasting [plasma glucose](#), postprandial glucose, time spent in the target glucose range, and glucose variability.

The article entitled "[Effects of Dapagliflozin on 24-Hour Glycemic Control in Patients with Type 2 Diabetes: A Randomized Controlled Trial](#)," was coauthored by Robert Henry, MD, University of California San Diego School of Medicine and colleagues from UC San Diego School of Medicine, Integrated Medical Development (Princeton Junction, NJ), Medpace (Cincinnati, OH), and AstraZeneca (Fort Washington, PA).

"[As we move beyond A1c to measure glucose control, the use of CGM is becoming more important especially in insulin-requiring patients with diabetes. Time in range (TIR) and other metrics to measure glucose variability may closely relate with a patient's overall [glucose](#) control," says DTT Editor-in-Chief Satish Garg, MD, Professor of Medicine and Pediatrics at the University of Colorado Denver (Aurora). "Henry and colleagues emphasize the importance of adding an SGLT2 inhibitor on different metrics of [glucose control](#) as measured by CGM."

**More information:** Robert R. Henry et al, Effects of Dapagliflozin on 24-Hour Glycemic Control in Patients with Type 2 Diabetes: A Randomized Controlled Trial, *Diabetes Technology & Therapeutics* (2018). DOI: [10.1089/dia.2018.0052](https://doi.org/10.1089/dia.2018.0052)

Provided by Mary Ann Liebert, Inc

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