

Efficacy and safety of tirzepatide in overweight and obese individuals with type 1 diabetes

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A new study [published](#) in the journal *Diabetes Technology & Therapeutics* has evaluated the use of tirzepatide in overweight/obese adults with type 1 diabetes. Tirzepatide is approved for managing type 2 diabetes. It improves glucose control, facilitates weight loss, and improves cardiovascular disease outcomes.

Satish Garg, MD, from the University of Colorado, Denver, and co-authors, compared a group of adults with type 1 [diabetes](#) who were prescribed tirzepatide (off-label) to a control group of adults with type 1 diabetes who were not using any [weight-loss](#) medication.

The investigators reported significantly larger declines in [body mass index](#) (BMI) and weight in the treated group compared to controls. HbA1c decreased in the treated group as early as three months and was sustained through a one-year follow-up. Insulin dose decreased at 3 months in the treated group and throughout the study period.

"We conclude that tirzepatide facilitated an average 18.5% weight loss (>46 pounds) and improved glucose control in patients with T1D at one year," stated the investigators.

"Most of the patients with diabetes, both type 1 diabetes (T1D) and T2D are either overweight or obese in the United States and Western Europe," state Satish Garg, MD, and co-authors of an [accompanying Editorial](#).

The newer therapies for diabetes, which are known to not only improve [glucose control](#) but also cause significant weight loss and improve [cardiovascular disease](#) and diabetic kidney disease are currently not approved in the U.S. for use in type 1 diabetes.

"Using GLP analogs in patients with T1D poses many challenges, but with close follow-up both patients and the health care provider may see many benefits such as significant weight loss and reduction of insulin dose, increased time-in-range on continuous glucose monitoring, and improve HbA1c levels," state the authors.

Long -term side-effects like gastroparesis, GERD, Cholelithiasis etc. from use of GLP analogs in patients with diabetes are not known. The authors recommend proper randomized control trials especially in patients with T1D.

More information: Satish K Garg et al, Efficacy and Safety of Tirzepatide in Overweight and Obese Adult Patients with Type 1 Diabetes, *Diabetes Technology & Therapeutics* (2024). [DOI: 10.1089/dia.2024.0050](https://doi.org/10.1089/dia.2024.0050)

Satish K. Garg et al, Challenges of GLP Analog Use for People with Type 1 Diabetes: Issues with Prior Approvals and Tips for Safer Use, *Diabetes Technology & Therapeutics* (2024). [DOI: 10.1089/dia.2024.0023](https://doi.org/10.1089/dia.2024.0023)

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