

# 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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