
Efficacy and Safety of Tirzepatide



A recent investigation featured in the Diabetes Technology & Therapeutics journal explored the use of tirzepatide among overweight/obese adults with type 1 diabetes.

Tirzepatide, approved for managing type 2 diabetes, has garnered attention for its ability to enhance glucose regulation, foster weight reduction, and promote cardiovascular health.

Led by Satish Garg of the University of Colorado Denver, the study juxtaposed a cohort of type 1 diabetes adults prescribed tirzepatide (off-label) against a control group without any weight-loss medication. The treated group demonstrated significant reduction in body mass index (BMI) and weight compared to the control group. HbA1c levels showed a notable decrease within three months for the treated group, a trend sustained over a one-year follow-up. Insulin dosage similarly decreased in the treated group across the study duration.

Overall, tirzepatide facilitated an average 18.5% weight reduction (>46 pounds) and enhanced glucose management in individuals with T1D at the one-year mark.

According to the study researchers, the majority of diabetes patients, encompassing both type 1 (T1D) and type 2 (T2D), struggle with overweight or obesity. The absence of U.S. approval for newer diabetes therapies is something to be considered, despite their demonstrated efficacy in refining glucose control and inducing substantial weight loss while improving cardiovascular and renal health, specifically in type 1 diabetes. The authors highlight the challenges posed by employing GLP analogues in T1D patients but highlighted potential benefits such as significant weight reduction, reduced insulin dependence, improved time-in-range metrics on continuous glucose monitoring, and enhanced HbA1c levels, contingent upon diligent monitoring.

Concerns regarding potential long-term complications like gastroparesis, GERD, and cholelithiasis from GLP analog usage remain uncertain. Hence, the authors advocate for rigorous randomised control trials, particularly in T1D populations, to ascertain safety and efficacy.

Source: [Mary Ann Liebert, Inc./Genetic Engineering News](#)

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