

Tirzepatide found to reduce body weight, waist circumference in those with obesity regardless of duration of condition

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New research to be presented at this year's [European Congress on Obesity](#) (Venice, Italy, May 12-15) shows that the obesity medication tirzepatide consistently reduces body weight and waist circumference regardless of the length of time the person has been living with overweight or obesity. The study is by Dr. Giovanna Muscogiuri, University of Naples Federico II, Naples, Italy, and colleagues.

Tirzepatide (Mounjaro) was approved by the US Food and Drug administration (FDA) and the European Medicines Agency (EMA) for the treatment of type 2 diabetes in 2022. In November 2023, the FDA approved tirzepatide (Zepbound) for chronic [weight](#) management in adults with BMI ≥ 30 kg/m² or BMI ≥ 27 kg/m² with at least one weight-related comorbidity.

Also in November 2023, the EMA Committee for Medicinal Products for Human Use offered a positive opinion on extension of the Mounjaro label to include weight management in adults with BMI ≥ 30 kg/m² or BMI ≥ 27 kg/m² and at least one weight-related comorbid condition.

The SURMOUNT phase 3 trials evaluated tirzepatide versus placebo in people with obesity or overweight with at least 1 weight-related comorbidity without type 2 diabetes (SURMOUNT-1, 72 weeks), with type 2 diabetes (SURMOUNT-2, 72 weeks), and without type 2 diabetes after a 12-week intensive lifestyle intervention (SURMOUNT-3, 72 weeks from randomization) or after a 36-week open-label tirzepatide lead-in (SURMOUNT-4, 52 weeks from randomization).

In this [subgroup analysis](#), participants in each study were grouped based on overweight/obesity disease duration at baseline (10 years or less, between 10 and 20 years, and above 20 years, determined by patient report). Percentage body weight change, the proportions achieving

weight loss targets of 5, 10, 15, 20, and 25%, and the change in [waist circumference](#) were analyzed.

Participants randomized to tirzepatide achieved greater weight reductions compared to placebo at study endpoint regardless of the duration of disease. This was consistent across the different SURMOUNT studies, and the magnitude of reduction was generally similar across the disease duration categories.

Generally, more tirzepatide-treated participants achieved the weight reduction targets of 5, 10, 15, 20, and 25% compared with placebo-treated participants, regardless of disease duration. Tirzepatide reduced waist circumference to a greater extent than placebo for each disease duration category in SURMOUNT-1 to -4. These reductions were consistent across disease duration subgroups.

For example, in the SURMOUNT-1 trial, for patients given 10mg dose of tirzepatide, those with disease duration under 10 years lost 21% of their weight after 72 weeks, compared to 20% body weight loss for those with 10-20 years disease duration and 23% for those with over 20 years disease duration.

In the SURMOUNT-2 trial (where all participants were also living with type 2 diabetes), for patients given the 15mg dose of tirzepatide, those with disease duration under 10 years lost 13% of their body weight, compared with 16% in those with disease duration of 10–20 years and 17% body weight loss for those living with overweight or obesity for over 20 years. Waist circumference reductions followed similar trends.

The authors conclude, "Tirzepatide consistently reduced body weight and waist circumference in people living with [obesity](#) or overweight with weight-related comorbidities regardless of the duration of disease. These results are consistent with the overall findings from each study in the

SURMOUNT program."

Provided by European Association for the Study of Obesity

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