

press release

Novo Nordisk's Wegovy® cuts risk of heart attack, stroke or death by 57% compared to tirzepatide in real-world study of people with obesity and cardiovascular disease

- Compared with tirzepatide, Wegovy® (semaglutide 2.4 mg) showed a significant 57% greater reduction in the risk of heart attack, stroke or death from any cause, in people with overweight or obesity and cardiovascular disease (CVD) who stayed on treatment¹
- Similarly, the study showed a significant 29% reduction in the risk for heart attack, stroke and death from any cause in the Wegovy® users compared with tirzepatide users in all treated people, regardless of any gaps in their treatment¹
- This study adds to growing evidence suggesting that the heart-protective benefits seen with Wegovy® are specific to the semaglutide molecule and therefore cannot be extended to other GLP-1 or GIP/GLP-1-based treatments¹

Bagsværd, Denmark, 31 August 2025 – Novo Nordisk today presented data from the STEER real-world study of evidence gathered from actual patient experiences at the European Society of Cardiology (ESC) Congress 2025 in Madrid, Spain. The STEER study investigated the risk of major adverse cardiovascular events (MACE) with Wegovy® (semaglutide 2.4 mg) compared with tirzepatide treatment in people with overweight or obesity and established CVD without diabetes.¹

Compared with tirzepatide, Wegovy® showed a significant 57% greater risk reduction for heart attack, stroke and cardiovascular-related death or death from any cause, in people with overweight or obesity and CVD, who did not have any gaps in their treatment lasting more than 30 days. There were 15 (0.1%) of these cardiovascular events recorded with Wegovy®, and 39 events (0.4%) were recorded with tirzepatide. The average follow-up duration was 3.8 months for the Wegovy® group and 4.3 months for the tirzepatide group.¹

In all treated people, regardless of any gaps in their treatment, Wegovy® showed a significant 29% risk reduction for heart attack, stroke and death from any cause compared with tirzepatide (over an average follow-up of 8.3 months for Wegovy® and 8.6 months for tirzepatide).¹ "Our landmark trial, SELECT, showed that Wegovy® is associated with a significant 20% risk reduction of cardiovascular events, backed up with even greater risk reductions in the real-world studies SCORE and STEER. The results are clear – STEER demonstrates that Wegovy® cuts

the risk of heart attack, stroke or death by 57% compared to tirzepatide," said Ludovic Helfgott, executive vice president and head of Product & Portfolio Strategy at Novo Nordisk. "This data confirms that semaglutide stands apart as the only available GLP-1-based medication with proven cardiovascular benefits for people living with obesity and cardiovascular disease, without diabetes."

Additionally, in all treated people, regardless of any gaps in their treatment, people treated with Wegovy® experienced fewer events of heart attack, stroke and cardiovascular-related death than people treated with tirzepatide.¹

About obesity and cardiovascular disease

Every year, almost 21 million people die from CVD, which is the leading cause of disability and death worldwide.² Obesity directly leads to cardiovascular morbidity, mortality and hospitalisation.^{3,4} While cardiovascular mortality has decreased over the past two decades, obesity-related cardiovascular deaths have increased significantly, with two in three obesity-related deaths being linked to CVD.^{5,6}

About the real-world STEER study

Real-world studies of evidence gathered from actual patient experiences can complement randomised control trials, which are the gold standard for evaluating the safety and efficacy of a treatment. STEER was a retrospective, observational real-world study, evaluating the efficacy of Wegovy® (semaglutide 2.4 mg) versus tirzepatide for the prevention of MACE in US adults with overweight or obesity and established CVD with no prior history of diabetes, with a primary outcome measure of revised 5-point MACE (heart attack, stroke, hospitalisation for heart failure, coronary revascularisation, and death from any cause) and revised 3-point MACE (heart attack, stroke and death from any cause). Non-revised 5-point and 3-point MACE was also studied, which included cardiovascular-related death rather than death from any cause.

The study included people from the US Komodo Research database (1 January 2016 to 31 January 2025) aged ≥45 years and started treatment with Wegovy® or tirzepatide on or after 13 May 2022. Each treatment group comprised 10,625 people. To ensure both groups were comparable, researchers used propensity score matching to compare Wegovy® users and tirzepatide users with similar characteristics. After matching, characteristics were well-balanced between the treatment groups.¹

The main analysis included all people who started treatment, regardless of any gaps in their therapy, while a sensitivity analysis evaluated outcomes only in people who did not have any gaps in their treatment lasting more than 30 consecutive days.¹

About the SELECT trial and SCORE real-world study

SELECT was a randomised, double-blind, parallel-group, placebo-controlled trial designed to evaluate the efficacy of Wegovy[®] (semaglutide 2.4 mg) versus placebo as an adjunct to standard of care for the prevention of MACE in people with overweight or obesity and established CVD with no prior history of diabetes. People included in the trial were aged \geq 45 years with a body mass index (BMI) of \geq 27 kg/m².⁸

The primary objective of the SELECT trial was to demonstrate the superiority of Wegovy[®] compared to placebo with respect to reducing the incidence of 3-point MACE consisting of cardiovascular death, non-fatal heart attack (myocardial infarction) or non-fatal stroke.⁸

SCORE was a real-world study in the US that analysed MACE outcomes among Wegovy® (semaglutide 2.4 mg) users and non-users in real-world clinical practice, who met similar inclusion criteria as in the SELECT trial and were aged ≥45 years with overweight or obesity and established CVD without diabetes.9

About Wegovy®

Semaglutide 2.4 mg is marketed under the brand name Wegovy®. In the EU, Wegovy® is indicated as an adjunct to a reduced-calorie diet and increased physical activity for weight management in adults with a BMI of 30 kg/m² or greater (obesity) or adults with a BMI of 27 kg/m² or greater (overweight) in the presence of at least one weight-related comorbid condition. In the EU, Wegovy® is also indicated for paediatric patients aged 12 years and older with an initial BMI at the 95th percentile or greater for age and gender (obesity) and body weight above 60 kg. The clinical section of the label also includes data on Wegovy® major adverse cardiovascular events (MACE) risk reduction, improvements in heart failure with preserved ejection fraction (HFpEF)-related symptoms and physical function, as well as pain reduction related to knee osteoarthritis.¹0

In the US, Wegovy® is indicated in combination with a reduced calorie diet and increased physical activity to reduce the risk of MACE in adults with established cardiovascular disease and either obesity or overweight, as well as to reduce excess body weight and maintain weight reduction long term in paediatric patients aged 12 years and older with obesity and in adults with obesity or with overweight in the presence of at least one weight-related comorbid condition.¹¹

About Novo Nordisk

Novo Nordisk is a leading global healthcare company founded in 1923 and headquartered in Denmark. Our purpose is to drive change to defeat serious chronic diseases built upon our heritage in diabetes. We do so by pioneering scientific breakthroughs, expanding access to our medicines, and working to prevent and ultimately cure disease. Novo Nordisk employs about 78,400 people in 80 countries and markets its products in around 170 countries. For more information, visit novonordisk.com, Facebook, Instagram, X, LinkedIn and YouTube.

Contacts for further information

Media:

Ambre James-Brown

+45 3079 9289

abmo@novonordisk.com

Liz Skrbkova (US)

+1 609 917 0632

Izsk@novonordisk.com

Investors:

Jacob Martin Wiborg Rode

+45 3075 5956

jrde@novonordisk.com

Sina Meyer

+45 3079 6656

azey@novonordisk.com

Max Unq

+45 3077 6414

mxun@novonordisk.com

Christoffer Sho Togo Tullin

+45 3079 1471

cftu@novonordisk.com

Alex Bruce

+45 34 44 26 13

axeu@novonordisk.com

Frederik Taylor Pitter

+1 609 613 0568

fptr@novonordisk.com

References

- 1. Wilson L, Zhao Z, Divino V, *et al*. Semaglutide is associated with lower risk of cardiovascular events compared with tirzepatide in patients with overweight or obesity and ASCVD and without diabetes in routine clinical practice. Oral presentation at the European Society of Cardiology Congress 2025; 29 August–01 September 2025; IFEMA Madrid, Madrid, Spain.
- 2. World Heart Federation. World Heart Report 2023: Confronting the World's Number One Killer. Available at: https://world-heart-federation.org/wp-content/uploads/World-Heart-Report-2023.pdf. Last accessed: July 2025.

- 3. Haidar A and Horwich T. Obesity, Cardiorespiratory Fitness, and Cardiovascular Disease. *Curr Cardiol Rep.* 2023;25:1565–1571.
- 4. Zizza C, Herring AH, Stevens J, *et al.* Length of Hospital Stays Among Obese Individuals. *Am J Public Health*. 2004;94:1587–1591.
- 5. Raisi-Estabragh Z, Kobo O, Mieres JH, *et al.* Racial Disparities in Obesity-Related Cardiovascular Mortality in the United States: Temporal Trends From 1999 to 2020. *J Am Heart Assoc.* 2023;12: e028409.
- 6. Collaborators GBDO, Afshin A, Forouzanfar MH, *et al*. Health Effects of Overweight and Obesity in 195 Countries over 25 Years. *N Engl J Med*. 2017;377:13–27.
- 7. Blonde L, Khunti K, Harris SB, *et al*. Interpretation and Impact of Real-World Clinical Data for the Practicing Clinician. *Adv Ther*. 2018;35:1763–1774.
- 8. Lincoff AM, Brown-Frandsen K, Colhoun HM, *et al*. Semaglutide and Cardiovascular Outcomes in Obesity without Diabetes. *N Engl J Med*. 2023;389:2221–2232.
- 9. Zhao Z, Song J, Faurby M, *et al.* Lower Risk of MACE and All-Cause Death in Patients Initiated on Semaglutide 2.4 mg in Routine Clinical Care: Results from the SCORE Study (Semaglutide Effects on Cardiovascular Outcomes in People with Overweight or Obesity in the Real World). Moderated poster presentation at the American College of Cardiology Scientific Session & Expo 2025; 29–31 March 2025; McCormick Place Convention Center, Chicago, US. Presentation 947-13.
- 10. Wegovy® Summary of Product Characteristics. Available at:

 https://www.ema.europa.eu/en/documents/product-information/wegovy-epar-product-information en.pdf. Last accessed: August 2025.
- 11. Wegovy® prescribing information. Available at: https://www.accessdata.fda.gov/drugsatfda docs/label/2024/215256s015lbl.pdf. Last accessed: August 2025.