

## press release

### **Semaglutide 2.4 mg (Wegovy®) cardiovascular outcomes data presented at American Heart Association Scientific Sessions and simultaneously published in New England Journal of Medicine**

- Semaglutide 2.4 mg delivered a statistically significant 20% risk reduction in major adverse cardiovascular events (MACE) with risk reductions demonstrated consistently across age, gender, ethnicity and starting body mass index (BMI).
- Beneficial effects were seen consistently across measured cardiovascular endpoints with semaglutide 2.4 mg.
- Risk reductions in MACE were evident soon after initiation, suggesting an effect of semaglutide 2.4 mg beyond weight loss alone.

**Bagsværd, Denmark, 11 November 2023** – Novo Nordisk today announced the primary results of SELECT, its landmark phase 3 cardiovascular outcomes trial investigating the effects of once-weekly semaglutide 2.4 mg (Wegovy®) in adults with established cardiovascular disease (CVD) and overweight or obesity without diabetes at the American Heart Association (AHA) annual Scientific Sessions in Philadelphia. The data were simultaneously published in the *New England Journal of Medicine (NEJM)*.<sup>1</sup>

Previously reported top-line results showed semaglutide 2.4 mg delivered a statistically significant 20% risk reduction in MACE over a period of up to five years versus placebo (HR: 0.80; 95% confidence interval: 0.72; 0.90,  $p < 0.001$ ). Today's findings showed that risk reductions in MACE were achieved regardless of age, gender, ethnicity and starting body mass index (BMI).<sup>1</sup> The results also demonstrated that the beneficial effects in MACE risk reduction were evident soon after treatment initiation, suggesting an effect that is more rapid than what would be expected if the cardiovascular effects were entirely mediated with the effects of semaglutide 2.4 mg on body weight reduction.<sup>1</sup> This suggests that weight loss alone may not fully explain the benefits of semaglutide 2.4 mg in reducing the risk of MACE.<sup>1</sup>

Every year almost 18 million people die from CVD which is the leading cause of disability and death worldwide.<sup>2,3,4</sup> While cardiovascular mortality has decreased over the past two decades, obesity-related cardiovascular deaths have increased significantly.<sup>5</sup> Obesity leads to cardiovascular morbidity and mortality and is associated with risk factors such as high blood pressure and inflammation.<sup>3,6</sup>

“For the first time, we have evidence that semaglutide 2.4 mg improves cardiovascular outcomes in at-risk patients with BMI of 27 and above with established CVD, without diabetes,” said Dr Michael Lincoff, lead study author, vice chair for research in the Cleveland Clinic Department of Cardiovascular Medicine, and a paid consultant for Novo Nordisk. “The three-point MACE risk reduction observed in SELECT suggests the potential for a new option in obesity treatment, addressing some of the leading causes of preventable death worldwide.”

Analyses of the three components in MACE showed that the risk of non-fatal myocardial infarction or heart attack was reduced by 28% compared to placebo (HR: 0.72; 95% confidence interval: 0.61; 0.85), the risk of cardiovascular death was reduced by 15% (HR: 0.85; 95% confidence interval: 0.71; 1.01, not statistically significant over the length of the trial) and the risk of non-fatal stroke was reduced by 7% compared to placebo (HR: 0.93; 95% confidence interval: 0.74; 1.15, not statistically significant over the length of the trial).<sup>1</sup> In addition, beneficial effects were seen consistently across measured cardiovascular endpoints.<sup>1</sup> The confirmatory secondary endpoints showed that the risk of composite heart failure events, comprising cardiovascular death, urgent heart failure visits and hospitalisations, was reduced by 18% compared to placebo (HR: 0.82; 95% confidence interval: 0.71; 0.96) and the risk of death from any cause was reduced by 19% compared to placebo (HR: 0.81; 95% confidence interval: 0.71; 0.93).<sup>1</sup> As the result on cardiovascular death was not statistically significant over the length of the trial, the remaining secondary confirmatory endpoints were not tested for superiority due to hierarchical testing.<sup>1</sup>

The supportive secondary endpoints also showed beneficial effects of semaglutide 2.4 mg on other cardiovascular risk factors, including lowering blood pressure, cholesterol and blood sugar levels.<sup>1</sup> While the trial was not designed as a weight loss trial, participants in the trial who received semaglutide still lost an average of 9.4% of total body weight which was sustained throughout the trial.<sup>1</sup>

“This landmark study builds on more than 20 years of research in obesity, a serious chronic disease associated with severe co-morbidities and outcomes. The results from SELECT will be instrumental in changing the way we perceive and treat obesity,” said Martin Lange, executive vice president and head of Development at Novo Nordisk. “These results represent a pivotal moment for people with obesity and the global scientific community as we look ahead to a new era of managing obesity and potentially reducing cardiovascular risks with semaglutide 2.4 mg.”

In the trial, semaglutide 2.4 mg appeared to have a safe and well-tolerated profile in line with previous semaglutide 2.4 mg trials.<sup>1,7,8</sup>

Novo Nordisk has filed for a label update of Wegovy® in the US and EU to include an indication for risk reduction of major adverse cardiovascular events in adults with a BMI of  $\geq 27$  kg/m<sup>2</sup> and established cardiovascular disease. A decision is expected in 2024. The Food and Drug Administration (FDA) recently granted priority review for the addition of the SELECT data to the label for Wegovy® in the US.

## **About SELECT**

SELECT (Semaglutide Effects on Heart Disease and Stroke in Patients with Overweight or Obesity) was a randomised, double-blind, parallel-group, placebo-controlled trial designed to evaluate the efficacy of semaglutide 2.4 mg versus placebo as an adjunct to standard of care for reducing the risk of MACE in people with established CVD with overweight or obesity with no prior history of diabetes.<sup>1</sup>

People included in the trial were aged  $\geq 45$  years with a BMI  $\geq 27$  kg/m<sup>2</sup>. Baseline demographics by age group show that 24% were aged 45-54, 38% aged 55-64, 30% aged 65-74 and 8% aged 75 years plus. By race or ethnicity, 84% of trial participants were white, 10% Hispanic or Latino, 8% Asian, 4% black and 3% other. The split between male and female participants was 72% and 28% respectively.<sup>1</sup>

The trial enrolled 17,604 adults and has been conducted in 41 countries at more than 800 investigator sites. SELECT was initiated in 2018 and is the largest trial Novo Nordisk has ever conducted.<sup>1</sup>

## **About Wegovy® (semaglutide 2.4 mg)**

Wegovy® (once-weekly subcutaneous semaglutide 2.4 mg) is a GLP-1 receptor agonist indicated as an adjunct to a reduced calorie diet and increased physical activity for chronic weight management in adults with a BMI of 30 kg/m<sup>2</sup> or greater (obesity), adults with a BMI of 27 kg/m<sup>2</sup> or greater (overweight) in the presence of at least one weight-related comorbid condition, and paediatric patients aged 12 years and older with an initial BMI at the 95th percentile or greater for age and gender (obesity)<sup>8</sup>. Wegovy® is launched in the US, Denmark, Norway, Germany, UK, Iceland and Switzerland.

## **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 61,400 people in 80 countries and markets its products in around 170 countries. For more information, visit [novonordisk.com](https://www.novonordisk.com), [Facebook](#), [Instagram](#), [X](#), [LinkedIn](#) and [YouTube](#).*

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