

# Semaglutide 2.4 mg: the latest GLP-1RA approved for obesity

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Overweight and obesity are one of the most relevant health factors; according to the WHO, 39% of people globally are overweight and 13% obese.<sup>1</sup> Body weight loss of 3%–5% has been linked to a reduction in risk factors, whereas those with obesity and chronic illness should lose 5%–15% of their body weight to reduce risks.<sup>2</sup> Glucose lowering medications, particularly glucagon-like peptide 1 (GLP-1) receptor agonists (GLP-1RAs), might result in considerable weight loss.<sup>3</sup> Semaglutide 2.4 mg (brand name Wegovy) was recently authorized by the Food and Drug Administration for chronic weight management. It is indicated in patients with a body mass index (BMI)  $\geq 30$  kg/m<sup>2</sup>, or a BMI  $\geq 27$  kg/m<sup>2</sup> with comorbidities.<sup>4</sup>

The STEP studies were the landmark trials for assessing the safety and effectiveness of semaglutide. The study proved that weight loss in persons with obesity and type 2 diabetes (DM2), as well as on long-term follow-up, is higher with semaglutide versus placebo.<sup>5</sup> The STEP1 Study showed that participants in the semaglutide group lost a mean of 14.9% of their body weight compared with 2.4% in the placebo group after 68 weeks.<sup>6</sup> Of note, this study only included overweight or obesity patients. The STEP2 Study included patients with DM2 who were overweight or obese and demonstrated a 9.6% reduction in body weight compared with 3.4% in the placebo group.<sup>7</sup> The STEP3 Study incorporated lifestyle treatments in overweight and obese participants with comorbidities; those who received semaglutide plus lifestyle interventions lost 16% of their body weight, whereas the placebo group lost 5.7%.<sup>8</sup> The STEP4 Study allocated all patients with semaglutide up to week 20, later they randomized the group into semaglutide or placebo, noticing that patients in the semaglutide group lost 7.9% of their body weight, whereas patients in the placebo group gained 6.9% of their body weight following randomization.<sup>9</sup>

Wegovy is administered weekly through subcutaneous injection at a dose of 2.4 mg, as several clinical studies have shown that weekly treatment is as consistent as daily administration.<sup>5</sup> Weight reduction efficiency is dose-dependent, with Wegovy being more effective than Ozempic (semaglutide used for diabetes with a maximum dose of 1.0 mg).<sup>10</sup> The side effects of semaglutide have proven to be no

different or intense than any other GLP-1RAs.<sup>11 12</sup> In addition, a recent study found that patients treated with semaglutide for obesity or diabetes had a reduced risk at cardiovascular events including cardiovascular death, non-fatal myocardial infarction, or non-fatal strokes.<sup>10</sup>

In conclusion, semaglutide 2.4 mg has been shown to be more successful than other GLP-1RAs in terms of weight reduction.<sup>10 11</sup> When prescribing semaglutide, physicians must evaluate a number of criteria, the most significant of which is the price, since most insurance does not cover these therapies.<sup>4</sup> Nonetheless, the numerous advantages of semaglutide 2.4 mg makes it a great medication to consider for these populations, as it can enhance their weight reduction maintenance and quality of life, and add some cardiovascular protection.

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