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

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To cite: Villela R, Correa R. *J Investig Med* 2022;**70**:3–4. Overweight and obesity are one of the most relevant health factors; according to the WHO, 39% of people globally are overweight and 13% obese. 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.² Glucose lowering medications, particularly glucagon-like peptide 1 (GLP-1) receptor agonists (GLP-1RAs), might result in considerable weight loss.3 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) $\geq 30 \text{ kg/m}^2$, or a BMI≥27 kg/m² with comorbidities.⁴

The STEPs 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.⁵ 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. 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. The STEP3 Study incorporated lifestyle treatments in overweight and obese participants with comorbidites; those who received semaglutide plus lifestyle interventions lost 16% of their body weight, whereas the placebo group lost 5.7%.8 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.9

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.⁵ Weight reduction efficiency is dosedependent, with Wegovy being more effective than Ozempic (semaglutide used for diabetes with a maximum dose of 1.0 mg).¹⁰ The side effects of semaglutide have proven to be no

different or intense than any other GLP-1RAs. ^{11 12} 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. ¹⁰

In conclusion, semaglutide 2.4 mg has been shown to be more successful than other GLP-1RAs in terms of weight reduction. ¹⁰ ¹¹ 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. ⁴ 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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Editorial

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