Clinical Outcomes of Semaglutide 2.4 mg in Patients with Obesity or Overweight in a Real-World Setting: A 6-Month Retrospective Study in the United States

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Poster
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https://sciencehub.novonordisk.com/ispor-us2023/Ruseva1.html?cid=qr-8547854590

Patients treated with once-weekly semaglutide 2.4 mg achieved a mean weight loss of ~10% at 6 months, consistent with that observed at similar time points in clinical trials

Mean weight loss at **6 months**

9.8%

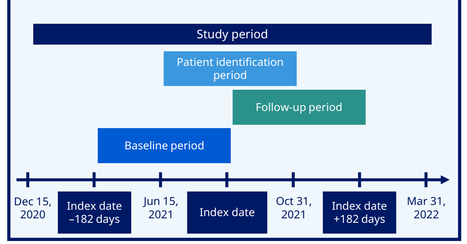
Aim

- Once-weekly semaglutide 2.4 mg, a glucagon-like peptide-1 receptor agonist (GLP-1 RA), is approved for chronic weight management in adults with obesity, or overweight with ≥1 weight-related condition.[1]
- While randomized controlled trials show robust efficacy of semaglutide 2.4 mg, real-world evidence is limited.
- The aim of this real-world study is to understand the impact of semaglutide 2.4 mg on weight loss in patients in the USA. Here, we present the 6-month results.

Methods

- This observational, retrospective cohort study used data from the IQVIA Ambulatory Electronic Medical Record linked to Longitudinal Access and Adjudication Data.
- Patients aged ≥18 years with ≥1 filled prescription of semaglutide 2.4 mg between June and October 2021 (earliest prescription date defined as index date) (**Figure 1**).
- Patient weight and/or body mass index (BMI) at the index date +/- 30 days and at day 182 +/- 30 days were included, with baseline demographic and clinical characteristics reported for the 6-month pre-index period.
- The primary endpoint was to assess change in weight from baseline to end of the 6-month follow-up period, calculated as percentage weight loss, and proportion of patients achieving ≥5%, ≥10%, and ≥15% weight loss.

Figure 1: Study schematic



Key results

- Of the 111 patients, 85.6% were female; mean (standard deviation [SD]) age was 47.3 (10.1) years; 81.1% had third-party insurance coverage (**Table 1**).
- Mean (SD) baseline BMI and weight were 37.5 (5.4) kg/m^2 and 105.0 (20.1) kg, respectively (**Table 1**).
- The most prevalent comorbidities in the total population were hypertension (39.6%), dyslipidemia (37.8%) and musculoskeletal pain (32.4%) (**Table 2**).
- Mean (SD) reduction in weight from baseline to the end of the 6-month follow-up period was 10.2 (6.3) kg, equating to a weight loss of 9.8%.
- At 6 months, weight loss of ≥5% was achieved by 87 (78.4%) patients, ≥10% by 53 (47.7%) patients, and ≥15% by 24 (21.6%) patients (**Figure 2**).

Table 1: Baseline characteristics

	Semaglutide 2.4 mg (N=111)
Mean age, years (SD)	47.3 (10.1)
Sex, n (%)	
Female	95 (85.6)
Male	16 (14.4)
Insurance, n (%)	
Commercial	90 (81.1)
Other	21 (18.9)
Region, n (%)	
Northeast	5 (4.5)
South	81 (73.0)
North Central	21 (18.9)
West	4 (3.6)
BMI	
Mean BMI (SD)	37.5 (5.4)
BMI group, n (%)	
Overweight	13 (11.7)
Obesity Class I	25 (22.5)
Obesity Class II	33 (29.7)
Obesity Class III	40 (36.0)
Mean weight, kg (SD)	105.0 (20.1)

BMI, body mass index; SD, standard deviation.

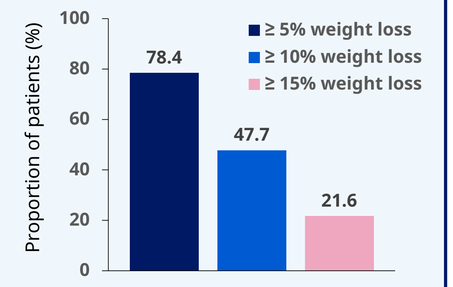
Table 2: Baseline obesity-related comorbidities

	Semaglutide 2.4 mg (N=111)
Hypertension, n (%)	44 (39.6)
Dyslipidemia, n (%)	42 (37.8)
Musculoskeletal pain, n (%)	36 (32.4)
Gastroesophageal reflux disease, n (%)	23 (20.7)
Obstructive sleep apnea, n (%)	17 (15.3)
Prediabetes, n (%)	26 (23.4)
Asthma, n (%)	13 (11.7)
Type 2 diabetes, n (%)	7 (6.3)
Knee osteoarthritis, n (%)	8 (7.2)
Polycystic ovary syndrome, n (%)	7 (7.4)
Urinary incontinence, n (%)	1 (1.05)
Psoriasis, n (%)	5 (4.5)
HFpEF, n (%)	1 (0.9)

HFpEF, heart failure with preserved ejection fraction.

Figure 2: Proportion of patients achieving targets at the 6-month follow-up

Key result



Conclusions

- In this real-world, retrospective study, patients treated with semaglutide 2.4 mg achieved a mean weight reduction of ~10% from baseline to the end of the 6-month follow-up consistent with that observed at similar time points in clinical trials.[2–6]
- Longer follow-up is needed to determine whether real-world results will continue to approximate clinical trial results beyond 6 months.

[1]Novo Nordisk Inc., Plainsboro, New Jersey, USA

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