Characterization of patients treated with semaglutide 2.4 mg for chronic weight management: a retrospective cohort study

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Plain Language Summary

• Weight management treatment for people with obesity may be at risk of physical, social, and financial difficulties. Weight management treatment options for people with obesity are limited, and outcomes of semaglutide 2.4 mg is an injectable glucagon-like peptide-1 GLP-1 receptor agonist used for chronic weight management,1,2 available in the US on June 1, 2021.

• This was a retrospective, observational cohort study of US Medicare beneficiaries (Medicare Part D beneficiaries) with obesity who were treated with semaglutide 2.4 mg in a real-world setting.

• Independent statistical comparisons were conducted using parametric tests on the mean and t-test on semaglutide and comparator groups, and for paired comparisons, we used the Wilcoxon signed-rank test on the median for continuous variables and the chi-square or Fisher exact test for categorical variables, as appropriate.

Introduction

• Obesity is a chronic disease that is associated with increased mortality and treatment burden.3,4

• Semaglutide 2.4 mg is an injectable glucagon-like peptide-1 GLP-1 receptor agonist used for chronic weight management,1,2 available in the US on June 1, 2021.

• There is limited evidence on characteristics and outcomes of patients treated with semaglutide 2.4 mg in a real-world setting.

• Our objective was to characterize and compare US patients with obesity or overweight with weight loss complications including semaglutide 2.4 mg or other bAOMs and bAOM users linked claims and EMR databases.

Methods

• This was a retrospective, observational cohort study.

• IQVIA’s Longitudinal Prescription Databases was linked to Professional Fee Claims and Ambulatory Electronic Medical Records databases and leveraged from June 1, 2020, to March 31, 2022.

• Cohorts were a real-world population in the US and were identified with patients with ≥1 prescription claim for 1) semaglutide 2.4 mg or 2) other bAOMs (naltrexone HCl 8 mg or other branded anti-obesity medications, such as extended-release capsules, liraglutide injection 3 mg, or anti-obesity medications with 9 or 10 claims with ≥1 pharmacy claims.

• Patient demographics were assessed on the index date. Clinical characteristics, healthcare resource utilization, and costs were measured over the 1-year baseline period prior to the index date (baseline). There was no patient follow up after the index date (Figure 1).

• Independent statistical comparisons were conducted using parametric tests on the mean and t-test on semaglutide and comparator groups, and for paired comparisons, we used the Wilcoxon signed-rank test on the median for continuous variables and the chi-square or Fisher exact test for categorical variables, as appropriate.

• The prevalence of patients in each cohort with obesity-related conditions is reported in Figure 2, with semaglutide 2.4 mg as the reference for pairwise comparisons.

• Compared with the semaglutide 2.4 mg cohort, the no bAOM cohort had a significantly higher proportion of participants with cardiovascular disease, dyslipidemia, hypertension, or type 2 diabetes mellitus.

• The proportion of patients using medications associated with weight change prior to first bAOM use is detailed for each treatment group in Figure 4.

• Significant differences were noted between semaglutide 2.4 mg and no bAOMs in all categories of medications associated with weight change.

• Compared with the semaglutide 2.4 mg/other bAOM cohorts, a higher percentage of patients in the no bAOM group were prescribed antidepressants and hypoglycemics and antihypertensives associated with weight gain.

• The mean total cost per patient was significantly higher in the semaglutide 2.4 mg treatment group vs the no bAOM cohort (Figure 5).

Conclusion

• Our findings highlight the unmet need for effective treatment for bAOM users and nonusers - bAOM nonusers had a higher prevalence of similar comorbidities as the semaglutide 2.4 mg cohort.

• Lack of AOM coverage under Medicare might be a barrier to access for older adults who would otherwise meet the criteria for chronic weight management with an AOM.

References: