Real-world persistence of ofatumumab vs. oral disease modifying therapies in patients with multiple sclerosis

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Background: Ofatumumab (OMB) is approved for relapsing forms of multiple sclerosis (MS). Real-world evidence on the persistence of OMB compared with oral disease modifying therapies (DMTs) is limited.

Objective: To compare real-world persistence of OMB vs. oral DMTs.

Methods: This was a retrospective cohort study using IQVIA PharMetrics Plus®, a longitudinal health plan database of medical and pharmacy claims in the US. Adult patients were included if they were diagnosed with MS, treated with OMB or oral DMTs (index treatment) between August 2020 and November 2021 and had at least 6 months of follow-up. Index date was defined as the date of the first pharmacy claim for the index treatment. Persistence was defined as the number of days from the index date until the earliest time of discontinuation (>60 days gap) or switch to a new DMT. Propensity score matching was used to reduce possible confounding by baseline demographics and disease characteristics.

Results: The matched cohort included 1,152 patients (OMB n=576, oral DMTs n=576 [dimethyl fumarate: n=93; fingolimod: n=37; teriflunomide: n=93; cladribine: n=86; siponimod: n=32; ozanimod: n=47; diroximel fumarate: n=187; monomethyl fumarate: n=1]). On average, patients were 46.5 (standard deviation [SD]: 10.2) years old with

majority being female (78.7%) and commercially insured (94.2%). Baseline demographics and disease characteristics were balanced between the two groups after matching. During the follow-up period, the proportion of patients who were persistent on OMB vs. oral DMTs was 81.9% vs. 77.8% at 6 months, 78.6% vs. 71.7% at 9 months, and 76.3% vs. 64.6% at 12 months ($p=0.002$). Sensitivity analyses were conducted using 45 days and 90 days as the allowed gap, respectively. The proportion of patients who remained on treatment during the 12 month follow-up remained significantly higher in the OMB vs. oral DMT group in both scenarios ($p<0.05$).

Conclusion: In this real-world study with 6 months of follow-up, patients treated with OMB demonstrated higher persistence vs. those treated with oral DMTs.