



PS38: A real-world analysis of outcomes in migraineurs receiving preventive migraine treatment

Ford, J.H.¹; Jackson, J.²; Milligan, G.²; Cotton, S.²; Ahl, J.¹

¹Eli Lilly and Company, Indianapolis, IN, USA; ²Adelphi Real World, Bollington, Cheshire, GBR

Background: Migraine is a disabling neurologic condition that places an enormous burden on patients. Preventive medications such as beta-blockers, calcium channel blockers, antidepressants and anticonvulsants are commonly prescribed, but efficacy has been based on randomized controlled trials and observational clinical studies that may have limited relevance to real-world clinical outcomes. The purpose of this study was to assess current migraine pharmacotherapies measured against preventive treatment (PT) goals.

Methods: Data were drawn from the Adelphi Migraine United States Disease Specific Programme; a crosssectional, point-in-time survey of physicians and their consulting patients (index period: January to March 2014). The primary objective of this study was to compare headache days per month (HDM) and headache related severity of disability assessed by the Migraine Disability Assessment (MIDAS) questionnaire in patients diagnosed with migraine headache who received PT versus patients who did not use PT (No PT). All patients reported ≥ 4 HDM at diagnosis and were eligible for PT. The analysis compared the change from physician-reported HDM at diagnosis to the current HDM for patients who stayed on the same PT for at least 6 months compared with patients who did not receive PT. Propensity Score Matching (PSM) was used to limit the effect of confounding factors, such as age, gender, body mass index (BMI), time since diagnosis, comorbid depression, cluster headaches, tension headaches, and neuropathic pain.

Results: The analysis included 459 patients; 324 in the PT group and 135 in the No PT group. Seventy percent of patients were female, mean age of 35 years at diagnosis, mean BMI of 28 kg/m², mean of 73 months since diagnosis, and an average of 10 HDM at diagnosis. Percentages of patients with depression, cluster headaches, tension headaches, or neuropathic pain were 23%, 10%, 38%, and 4%, respectively. Mean change from baseline in HDM was 24.1 in the PT group and 21.5 in the No PT group. The difference in the mean change in HDM between these groups in the controlled analysis was 21.4 (95% confidence interval [CI]: 23.0, 0.3), which was not statistically significant (p=0.10). The average overall MIDAS score was 17 indicating moderate disability and the mean difference between treatment groups was 0.2 (95% CI: 20.1, 0.6), which was also not statistically significant (p=0.12). However, interpretation of the MIDAS score is limited with regards to observed improvement because there were no baseline MIDAS



scores available for comparison. In addition, the overall interpretation of the results is limited by the crosssectional nature of the study which does not allow evaluation of the basis of the prescribed treatment.

Conclusion: This real-world analysis found that PT versus No PT was not associated with a significantly greater reduced number of HDM or difference in headache-related disability (MIDAS scores). These results suggest that there is still an unmet need for efficacious preventive therapies for patients who suffer from migraine headaches.