The Impact of Fremanezumab on Medication Overuse in Patients With Chronic Migraine

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Introduction: Fremanezumab, a fully humanized monoclonal antibody (IgG2Δa) that selectively targets calcitonin gene-related peptide, is approved for the preventive treatment of migraine. Herein we assessed the effect of fremanezumab on medication overuse and acute headache medication use in patients with chronic migraine (CM). Methods: In this multicenter, randomized, double-blind, placebo-controlled, Phase 3 study, patients with CM were randomized 1:1:1 to receive fremanezumab quarterly (675 mg at baseline, placebo at Weeks 4 and 8), fremanezumab monthly (675 mg at baseline, 225 mg at Weeks 4 and 8), or placebo over a 12-week treatment period. We assessed the proportion of patients who reverted from overusing medications at baseline (use of acute headache medication on ≥15 days, use of migraine-specific acute medication on ≥10 days, or use of combination medications for headache on ≥10 days during the 28-day baseline period) to not overusing medications at Week 12, and the change from baseline in the number of days of acute headache medication use among these patients. Results: Among patients with medication overuse at baseline (quarterly n=201; monthly n=198; placebo n=188), more fremanezumab-treated patients reported no medication overuse during the 12-week treatment period (quarterly: 55%, *P*=0.0389; monthly: 61%, *P*=0.0024) than those who received placebo (46%). This response was observed as early as Week 4 (quarterly: 51%, *P*=0.0091; monthly: 54%, *P*=0.0014; vs placebo: 39%). Among patients who responded (quarterly n=111; monthly n=120; placebo n=87), the baseline number of days with medication overuse was similar across treatment groups (quarterly [mean ± standard error]: 16.6±0.32 days; monthly: 16.7±0.33 days; placebo: 16.6±0.35). Within this population, fremanezumab treatment reduced the days of acute headache medication use (quarterly: –9.0±0.41 days, *P*=0.0017; monthly: –8.9±0.41 days, *P*=0.0040) versus those who received placebo (–7.1±0.46 days). Conclusions: Fremanezumab treatment was associated with reduced overuse of acute medications and fewer days using acute medications.