Reversion of Patients With Chronic Migraine to an Episodic Migraine Classification With Fremanezumab Treatment

Z. Katsarava, MD[1], S. D. Silberstein[2], S. Ashina[3], J. Ailani,[4], R. B. Halker Singh[5], M. J. Seminerio[6], J. M. Cohen[6], V. Ramirez Campos[7], R. Yang[6]
[1]*Department of Neurology, University of Essen, Germany*
[2]*Department of Neurology, Jefferson Headache Center, Thomas Jefferson University, USA*
[3]*Department of Neurology, Beth Israel Deaconess Medical Center Comprehensive Headache Center, Harvard Medical School, USA*
[4]*Department of Neurology, Medstar Georgetown University Hospital, USA*
[5]*Department of Sports Medicine and Neurology, Mayo Clinic, USA*
[6]*Global Medical Affairs, Teva Pharmaceuticals, USA*
[7]*Global Medical Affairs, Teva Pharmaceuticals, Argentina*

Introduction: Chronic migraine (CM) and episodic migraine (EM) are clinically, functionally, and anatomically differentiated, with evidence suggesting that they may be separate conditions. Furthermore, patients with CM usually have more comorbid conditions and more-frequent medication overuse, which complicates their clinical management. Fremanezumab, a fully humanized monoclonal antibody (IgG2Δa) that selectively targets calcitonin gene-related peptide, has demonstrated efficacy in migraine prevention. Herein we evaluated the effect of fremanezumab on reversion from CM to EM. Methods: In this Phase 3, multicenter, randomized, double-blind, placebo-controlled, parallel-group study, adults with prospectively confirmed CM were randomized 1:1:1 to receive subcutaneous injections of 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 matching placebo over a 12-week treatment period. *Post hoc* analyses evaluated the proportion of patients who reverted from CM to EM, defined as patients who had ≥15 headache days per month at baseline (28-day pre-treatment period) and then had 15 headache days per month in all 3 months of the treatment period. Results: In an analysis of the 1130 CM patients randomized in this trial (quarterly, n=376; monthly, n=379; placebo, n=375), significantly more fremanezumab-treated patients reverted from having ≥15 headache days per month at baseline to 15 headache days per month in Months 1, 2, and 3 (quarterly: 121 patients [32%]; monthly: 133 patients [35%]) than those who received placebo (86 patients [23%]; both, $P \leq 0.002$). On average, these fremanezumab-treated patients had 18–19 headache days per month at baseline and showed reductions to 6–9 headache days during any month in the treatment period, representing up to an approximately 70% reduction in headache days. Conclusions: Along with its efficacy as a migraine preventive treatment, fremanezumab demonstrated the potential benefit for reversion from CM to EM.