

PROFILING EPTINEZUMAB LONG-TERM EFFECTIVENESS AND DOSE-RESPONSE IN PATIENTS WITH CHRONIC MIGRAINE AND MEDICATION OVERUSE HEADACHE: A REAL-WORLD LONGITUDINAL STUDY

K. Eshja[1|2], A. Lanfranchi[1], A. Rizzardi[2], E. Cresta[1|2], M. Di Pasquale[1|2], A. Rondina[2], R. Rao[1|2], A. Padovani[1|2]

[1]Neurology Unit, Headache Centre, Department of "Continuità di Cura e Fragilità", ASST Spedali Civili, Italy; [2]Clinical Neurology, Department of Clinical and Experimental Sciences, University of Brescia, Italy

Background. Eptinezumab, an intravenous anti-CGRP monoclonal antibody, has demonstrated rapid and sustained efficacy in clinical trials. This real-world, longitudinal study aims to evaluate the long-term effectiveness of Eptinezumab in patients with chronic migraine (CM) and medication overuse headache (MOH), stratifying clinical outcomes between the 100 mg and 300 mg dosing regimens.

Methods. We conducted a prospective longitudinal study on a cohort of patients diagnosed with CM or MOH treated with Eptinezumab. Clinical parameters—including monthly migraine days (MMDs), monthly acute medication intake, Visual Analogue Scale (VAS) score, and disability scales - MIDAS, SF-36 VAS, HIT-6 , BDI- were collected at baseline (T0) and multiple subsequent timepoints up to 12 months. Patients were stratified based on the received dose (100 mg vs. 300 mg) a T3. Repeated measures analyses and mixed-effects models were utilized to examine trajectories over time.

Results. A total of 77 patients were analyzed. Both the 100 mg and 300 mg cohorts exhibited a robust, statistically significant reduction in MMDs and acute medication consumption starting from the first post-infusion evaluation ($p < 0.001$ compared to baseline), which was maintained throughout the 12-month follow-up. Patients in the 300 mg group presented with higher baseline disease severity and a greater prevalence of MOH. Despite a more severe baseline profile, the 300 mg dose led to a significantly higher proportion of ≥50% and ≥75% responders over time compared to the 100 mg dose, particularly in difficult-to-treat and MOH subgroups, showing superior long-term stability and prevention of medication overuse relapse.

Conclusions. In a real-world setting, Eptinezumab demonstrates exceptional and rapid effectiveness in reducing migraine burden and facilitating acute medication withdrawal. While both doses are highly effective, the 300 mg regimen provides substantial additional clinical benefit for patients with higher baseline severity and comorbid medication overuse, offering a personalized therapeutic target for refractory migraine management.