

SUSTAINED EFFECTIVENESS OF CGRP MONOCLONAL ANTIBODIES OVER FOUR CONSECUTIVE YEARS: A PROSPECTIVE REAL-WORLD STUDY

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Background. Long-term real-world data on continuous treatment with calcitonin gene-related peptide (CGRP) monoclonal antibodies (mAbs) beyond three years remain scarce. We evaluated the effectiveness and safety of four consecutive years of CGRP-mAb therapy in patients with high-frequency episodic migraine (HFEM) and chronic migraine (CM).

Methods. In this prospective real-world observational study, we included 52 patients (78.8% women; 86.5% CM) who initiated CGRP-mAbs between 2021 and 2022 and prospectively completed headache diaries throughout 48 months of continuous treatment. The primary outcome was the change from baseline in monthly headache days (MHDs). Secondary outcomes included monthly migraine days (MMDs), attack intensity and duration, and acute treatment effectiveness assessed by 2-hour pain freedom and pain relief.

Results. CGRP-mAbs produced a rapid and sustained reduction in headache burden that remained stable throughout four consecutive years of treatment. Mean MHDs decreased from 22.6 (SD 7.1) at baseline to 8.7 (SD 7.1) at 6 months and remained consistently low through years 1 (8.3), 2 (6.9), 3 (6.8), and 4 (7.3) (all $p<0.001$ vs baseline). Significant improvements were likewise observed for MMDs, attack intensity, and attack duration from month 6 onward and were maintained throughout follow-up. The proportion of patients achieving 2-hour pain freedom after acute medication increased from 11.5% at baseline to 76.9% after four years of treatment ($p<0.001$). No evidence of progressive loss of treatment effectiveness was observed over time.

Conclusions. Continuous treatment with CGRP-mAbs provides durable clinical benefits for up to four years in patients with HFEM and CM, with sustained reductions in headache burden and persistent improvement in acute treatment response. These findings support the long-term maintenance of CGRP-targeted therapies without evidence of waning effectiveness in routine clinical practice.