

# EVALUATION OF FREMANEZUMAB RESPONSE IN MIGRAINE PROPHYLAXIS

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## Background

Fremanezumab is a humanised monoclonal antibody (IgG2) that binds to the calcitonin gene-related peptide (CGRP). CGRP is a neuropeptide that, in addition to modulating nociceptive signals, is a vasodilator that is associated with migraine. CGRP levels have been found to increase significantly during migraine and normalise with headache relief.

## Purpose

To study the effectiveness and security of fremanezumab in migraine prophylaxis after 3 months of treatment.

## Material and methods

Retrospective observational study. All patients with more than 3 months of fremanezumab treatment in our hospital were included.

Data collected: sex, age, previous biological therapy, dosage regimen, moderate-severe migraine days per month and score on the Headache Impact Test-6 (HIT-6), Migraine Disability Assessment Scale (MIDAS) and any adverse event.

## Results

Forty-five patients were included with a median age of 43 years (23-70) of whom 39 (86.7%) were women. Effectiveness data could be extracted for 35 of them.

No patient had any other previous biological treatment for migraine. 32% of patients were treated with Fremanezumab 675 mg once every 3 months and the rest with 225 mg monthly.

Patients presented pre-baseline vs. after three months (mean  $\pm$  standard deviation): 17.7  $\pm$  7.2 vs. 10.9  $\pm$  9.4 migraine days / month ( $p < 0.001$ ); MIDAS scale: 94.8  $\pm$  80.4 vs. 82.3  $\pm$  102.7 ( $p > 0.1$ ) and HIT-6 scale: 65.4  $\pm$  9.8 vs. 63.2  $\pm$  11 ( $p > 0.01$ ).

Treatment was effective (reduced by half the number of migraine days per month) in 53% (20 patients). 5.7% of patients ( $n=3$ ) were discontinued due to a response of less than 30%. Of the 3 patients who did not respond, 2 switched to Galcanezumab and 1 to botulinum toxin.

31% patients presented some type of adverse event. Most of them were due to reactions in the area of administration, asthenia and gastrointestinal disorders, and all were of mild-moderate intensity.

## Conclusion

Fremanezumab has demonstrated consistent efficacy in some patients by achieving a fast reduction in the number of migraine days per month, although the reduction in pain and disability was not shown to be statistically significant.