

SWITCHING BETWEEN CALCITONIN GENE RELATED PEPTIDE MONOCLONAL ANTIBODIES IN THE PROPHYLAXIS OF MIGRAINE



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BACKGROUND AND IMPORTANCE

Therapeutic options for migraine prevention in non-responders patients to monoclonal antibodies (mAbs) targeting Calcitonin Gene-Related Peptide (CGRP) and its receptor are often limited. **There is no recommendations of switching between mAbs classes.**

AIM AND OBJECTIVE

To assess the **effectiveness and safety** of mAb switching in non-responders migraine patients.



METHODS AND MATERIAL

Retrospective observational study in a tertiary hospital (1-January-2021 to 31-July-2023).



We **included** patients who received a first mAb for ≥ 3 months, were non-responders and switched to another mAb class.

Patients were **excluded** if they switched due to side effects.

Monthly headache days (MHD) were collected to assess the $\geq 50\%$ responder rates and **the absolute reduction of MHD at 3 months**, as well as, **the absolute reduction of monthly acute medication days (AMD)**.



Data were recorded from electronic medical records and patients interviews. The study was approved by the Ethics Committee. Informed consent was obtained.

RESULTS

First mAb

110 patients
galcanezumab
(n=57)
fremanezumab
(n=53)

24 (21,8%)
switched to the
CGRP-receptor
mAb

105 patients
erenumab

30 (28,6%)
switched to a
CGRP-ligand
mAb

	Switched from ligand mAb to receptor mAb (n=23)	Switched from receptor mAb to ligand mAb (n=28)
Female, n(%)	21 (91,3)	27 (96,4)
Age in years, mean(SD)	44,9 (11)	46,5 (12,6)
Disease duration in years, median(IQR)	13 (8,3-18,5)	12 (8-23,3)
Diagnosis, n(%)		
High-frequency episodic migraine	2 (8,7)	10 (35,7)
Chronic migraine	21 (91,3)	18 (64,3)
Aura, n(%)	2 (8,7)	4 (14,3)
Comorbidities, n(%)		
Anxious-depressive syndrome	4 (17,4)	10 (35,7)
Fibromyalgia	2 (8,7)	1 (3,6)
Concomitant prophylaxis, n(%)	8 (34,8)	13 (46,4)
Treatment duration in months, median(IQR)	5 (3,75-7)	9 (5-11)

The $\geq 50\%$ responder rate was **40%** and **61,9%** at **3 months** with erenumab and CGRP-ligand mAb, respectively.

MHD reduction: $17 \pm 7,4$ to $13,8 \pm 8,7$ and $16 \pm 7,7$ to $8,4 \pm 6,1$, respectively.
AMD reduction: $16,1 \pm 9,9$ to $15,4 \pm 10,2$ and $11,7 \pm 9,2$ to $7,6 \pm 7,3$

Seven patients (35%) changed to a third mAb in patients that switched from ligand mAb to receptor mAb, 23,8% in the other group.

CONCLUSIONS AND RELEVANCE

Switching seems to be a **promising treatment option** especially in migraine patients that switched from CGRP-receptor mAb to CGRP-ligand mAb. However, some of them need to switch to a third mAb. More studies are needed to describe which patients will respond to CGRP-mAb switching.