Predictors of response to anti CGRP monoclonal antibodies in real world: Czech Migraine Registry (ReMig)

Bártková A[a], Nežádal T[b], Niedermayerová I[c], Turková B[d], Polidar P[a], Klečka L[e], and the Remig study group

[a]University Hospital Olomouc, Dep. of Neurology, Czech Republic, [b]Military University Hospital Prague, Dep. of Neurology, Institute of Neuropsychiatric Care, 1st Faculty of Medicine, Charles University, Prague, Czech Republic; [c]University Hospital Brno, Dep. of Neurology, Czech Republic, [d]Value Outcomes, Prague, Czech Republic, [e]Municipal Hospital of Ostrava, Dep. of Neurology, Czech Republic

P417

BACKGROUND

Czech national registry of patients with migraine on biological therapy **(ReMig)** is a Phase 4, real-world, non-interventional multicentre prospective longitudinal study of migraine patients treated with all available CGRP monoclonal antibodies at headache centres under the auspices of the Czech Headache Society (CzHS) since 2021.

Registry data are expected to lead to better understanding of patients' characteristics and to more effective treatment of migraine.

OBJECTIVE

To identify predictors of treatment response to anti-CGRP monoclonal antibodies (mAbs) in patients enrolled in the Czech Registry of Migraine Patients on Biological Treatment (ReMig). By understanding which factors are associated with better or worse outcomes, we aimed to support more personalized and effective treatment strategies in clinical practice.

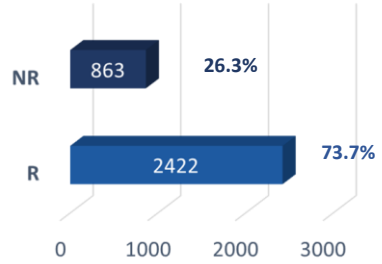
METHODS

This was a prospective, multicenter study utilizing data from the ReMig database, aimed at evaluating the impact of clinical and sociodemographic factors on the efficacy of anti-CGRP mAbs (erenumab, eptinezumab, fremanezumab, galcanezumab). Patients were classified as responders (R) if they experienced a ≥50%, ≥75%, or 100% reduction (Figure 1) in monthly migraine days (MMD), and as non-responders (NR) if the reduction was <50%. Logistic regression analysis was used to assess the influence of selected variables on treatment outcomes. Data collection spanned from January 2021 to July 2024.

RESULTS

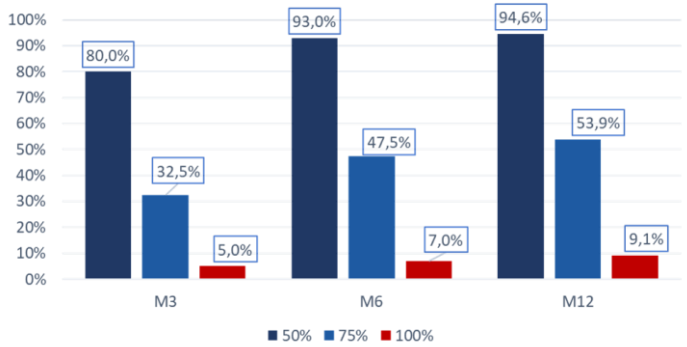
A total of 3,285 patients (87.4% female) were analyzed. Of these, **863 (26.3%) as non-responders** and **2,422 (73.7%) were classified as responders** (Figure 2).

Figure 2. Number od non-responders (NR) and responders (R).



19th European Headache Congress (EHC), 3-6 December 2025, Lisbon, Portugal

Figure 1. Proportion of responders with ≥5 0%, 75% and 100% MMD reduction



No significant differences were observed between groups in terms of **age**, **age at diagnosis**, or **disease duration** before initiation of mAb therapy.

Baseline MMD was slightly lower in responders (mean **11.7**; SD 5.1) than in NR (mean **12.4**; SD 6.2); at three months, R had a mean of **3.4** MMD (SD 2.3), and NR had **7.4** (SD 3.9)

Patients with **chronic migraine (CM)** had a **40.1% higher risk** of non-response compared to those with episodic migraine (EM) (Figure 3).

Figure 3. Proportion of responders versus non-responders in CM a EM

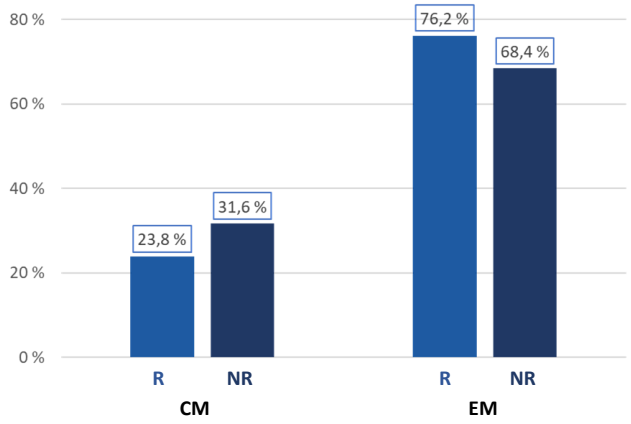


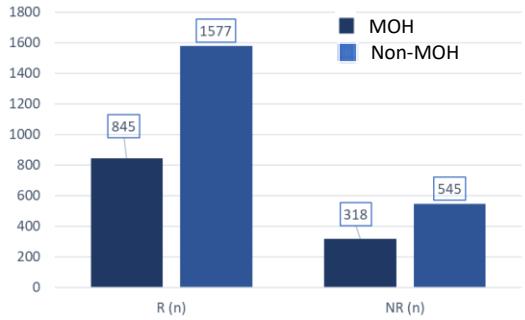
Table 1. Number of failed prophylactic treatments

No of failed prophylaxies (0-11)	N	Mean	SD	P
Responders	2 422	2,2	1,0	0,277
Non-responders	863	2,2	1,1	

The number of previously **failed prophylactic treatments did not differ** significantly between groups (mean 2.2; median 2.0) (Table 1).

Medication overuse headache (MOH) **had no significant impact** treatment outcomes (NR: 36.8%; R: 34.9%; p=0.423) (Figure 4).

Figure 4. Medication overuse headeche



Response to triptans was associated with a **27% lower risk** of treatment failure.

Migraine **co-morbidities**, including for example depression (p=0.693), **had not** significantly **influenced** treatment outcomes (Table 2).

However, each unit increase in **body mass index (BMI)** was associated with a **1.9% increase** in the risk of treatment failure.

Table 2. Migraine co-morbities (all and selected)

Parameter	Y/N	N	OR	95% CI	P
Co-morbidity	Yes	1 826	0,991	0,832-1,181	0,921
	No	1 459	1,000	(ref)	-
Depression	Yes	314	1,057	0,798-1,392	0,693
	No	2 971	1,000	(ref)	-
Vertebrogenic pain	Yes	236	1,321	0,977-1,774	0,067
	No	3 049	1,000	(ref)	-

Female patients had a **29% lower likelihood of treatment failure** compared to males.

Higher education was significantly more prevalent among **responders** (p=0.004). **Part-time employment or disability pension** status was associated with a 54.6% and 51.5% **risk of non-response**, respectively.

CONCLUSION

Chronic migraine, poor response to triptans, higher BMI, lower educational attainment, and male sex may be associated with reduced efficacy of anti-CGRP mAb therapy.

In contrast, disease duration, previous prophylactic treatment failures, MOH, and psychiatric comorbidities did not significantly influence treatment response in this cohort. These findings may help with patient selection and expectation management in the use of anti-CGRP mAbs for migraine prevention.

The ReMig registry is supported by Hedalga foundation

Value Outcomes an IQVIA business