# When to switch?
# CGRP(-receptor) antibodies
## (and gepants)

6th Nordic Migraine Symposium
22 November 2024

Dr. Bianca Raffaelli
Headache Center – Charité Universitätsmedizin Berlin, Germany

Headache Center
Charité – Universitätsmedizin Berlin
Department of Neurology

# Conflicts of interest

| | |
|---|---|
| **AbbVie/Allergan** | Personal fees for lecturing and/or consulting |
| **Eli Lilly** | Personal fees for lecturing and/or consulting |
| **Lundbeck** | Personal fees for lecturing and/or consulting<br>Research support |
| **Novartis Pharma** | Personal fees for lecturing and/or consulting<br>Research support |
| **Organon** | Personal fees for lecturing and/or consulting |
| **Perfood** | Personal fees for lecturing and/or consulting |
| **Teva Pharmaceutical Industries** | Personal fees for lecturing and/or consulting |
| | |
| **Else Kröner-Fresenius-Stiftung** | Research support |
| **German Research Foundation (DFG)** | Research support |
| **German Migraine and Headache Society (DMKG)** | Research support |

# Different countries, different regulations

Switch between mAbs possible

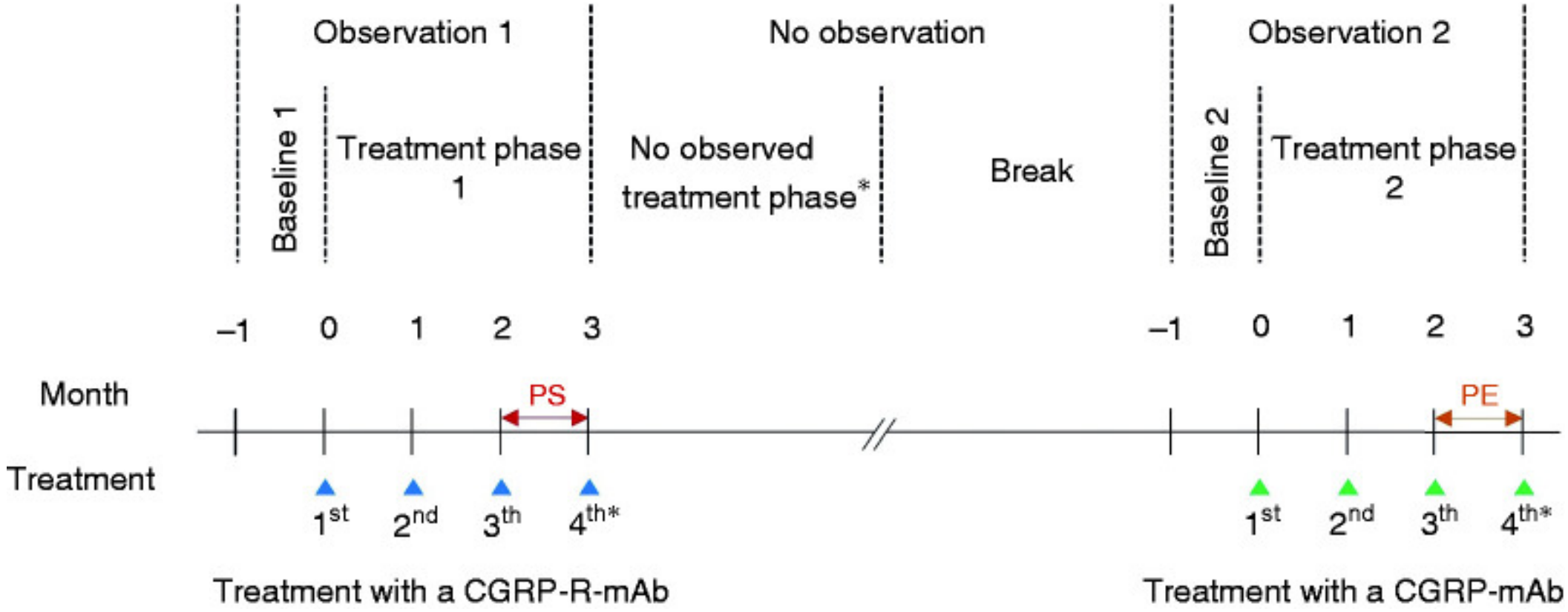
German Guidelines:
Consider switch „*in case of ineffectiveness, especially when this is a change in the drug class*“, i.e. receptor – ligand or ligand – receptor.

Gepants not available on the market yet.


https://european-union.europa.eu/easy-read_en

Diener HC, Förderreuther S, Kropp P et al., Therapie der Migräneattacke und Prophylaxe der Migräne, S1-Leitlinie, 2022, DGN und DMKG, in: Deutsche Gesellschaft für Neurologie (Hrsg.), Leitlinien für Diagnostik und Therapie in der Neurologie. Online: www.dgn.org/leitlinien (abgerufen am 16.09.2024)

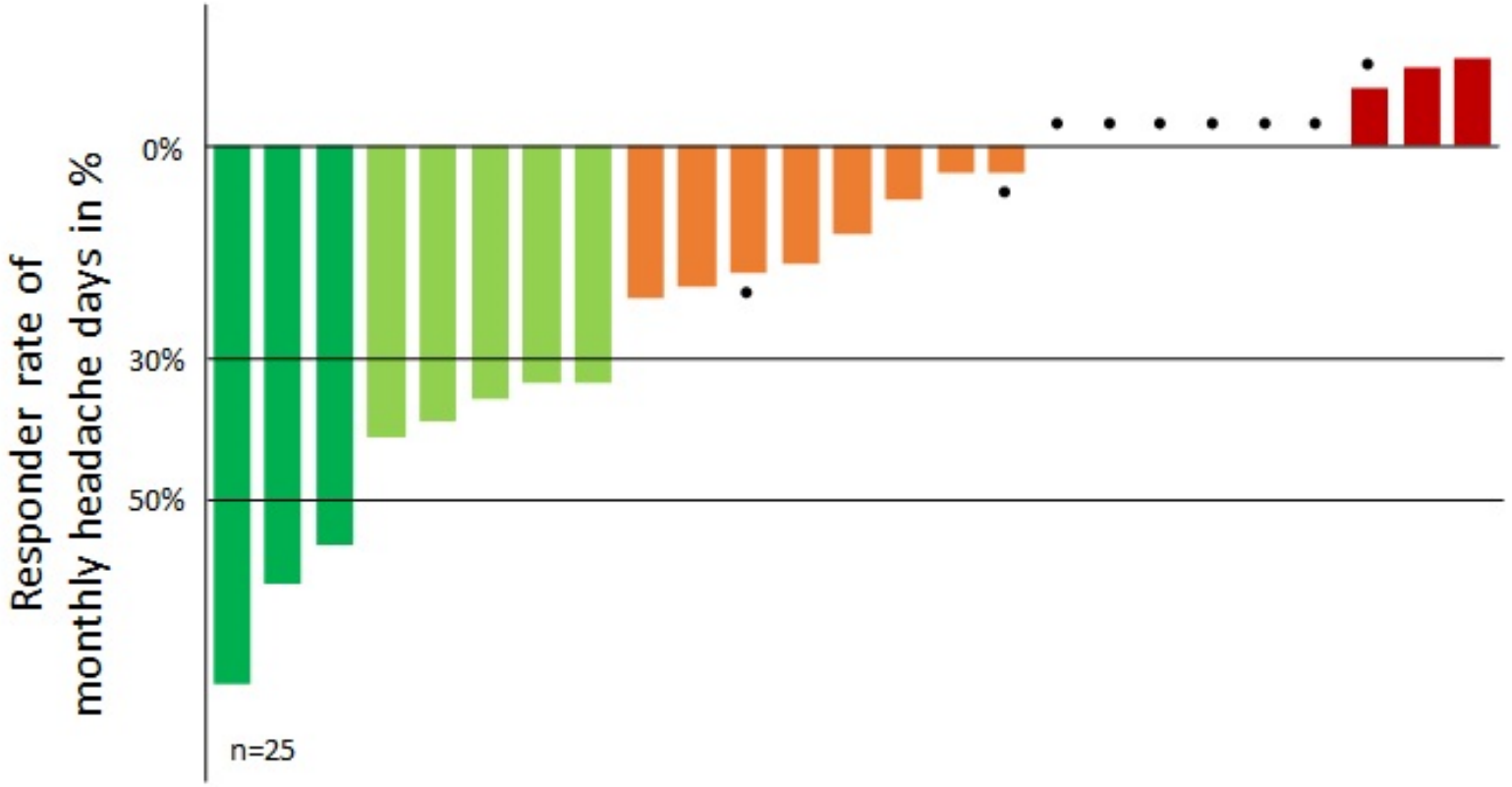
# Switch from receptor mAb (erenumab) to ligand mAb (fremanezumab/galcanezumab)






Overeem LH et al. Effect of antibody switch in non-responders to a CGRP receptor antibody treatment in migraine: A multi-center retrospective cohort study. Cephalalgia 2022 Apr;42(4-5):291-301. doi: 10.1177/03331024211048765. Epub 2021 Oct 13.

# Switch from receptor mAb (erenumab) to ligand mAb (fremanezumab/galcanezumab)

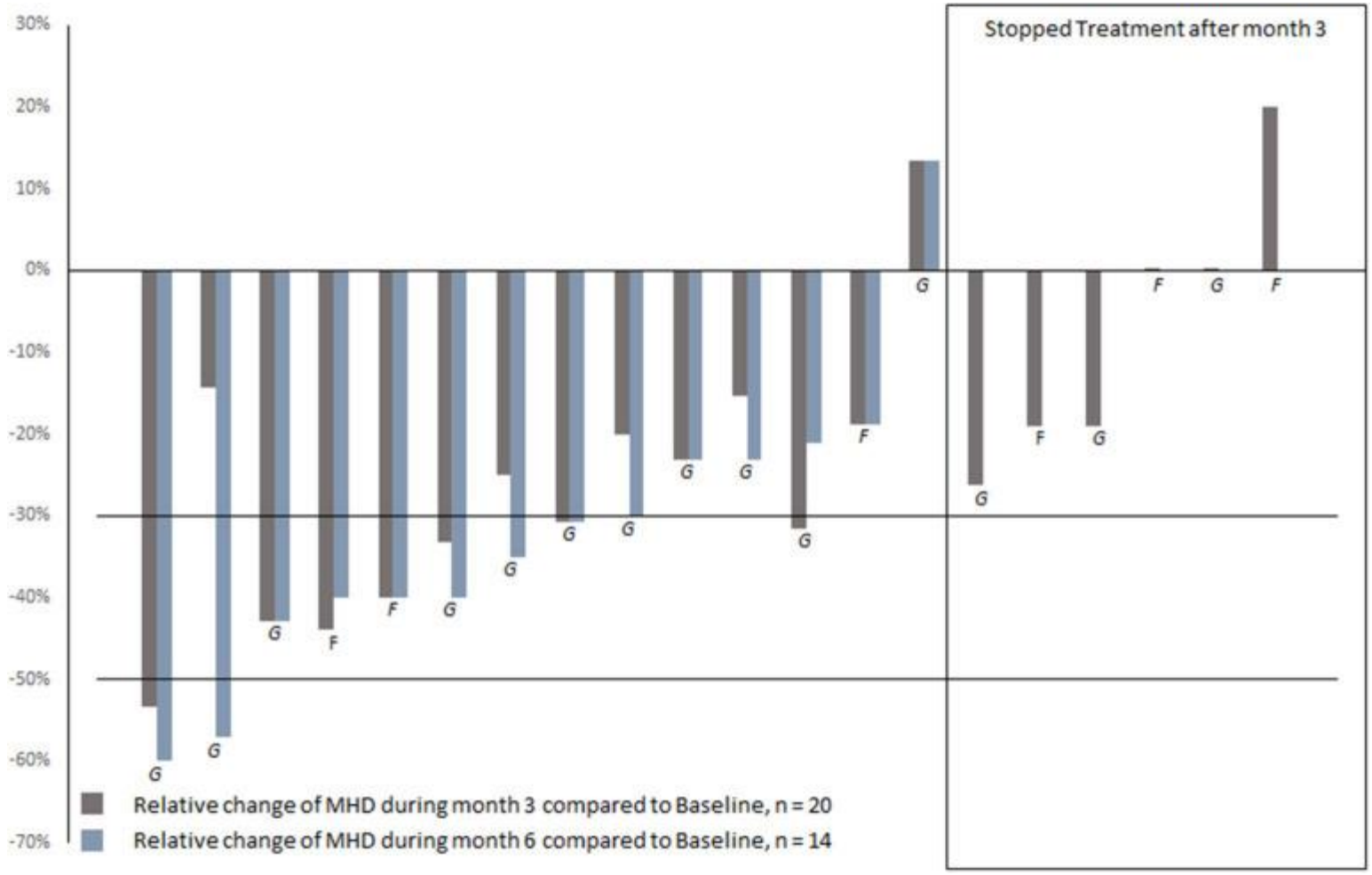



● Represents a patient suffering from daily headache.



Overeem LH et al. Effect of antibody switch in non-responders to a CGRP receptor antibody treatment in migraine: A multi-center retrospective cohort study. Cephalalgia 2022 Apr;42(4-5):291-301. doi: 10.1177/03331024211048765. Epub 2021 Oct 13.

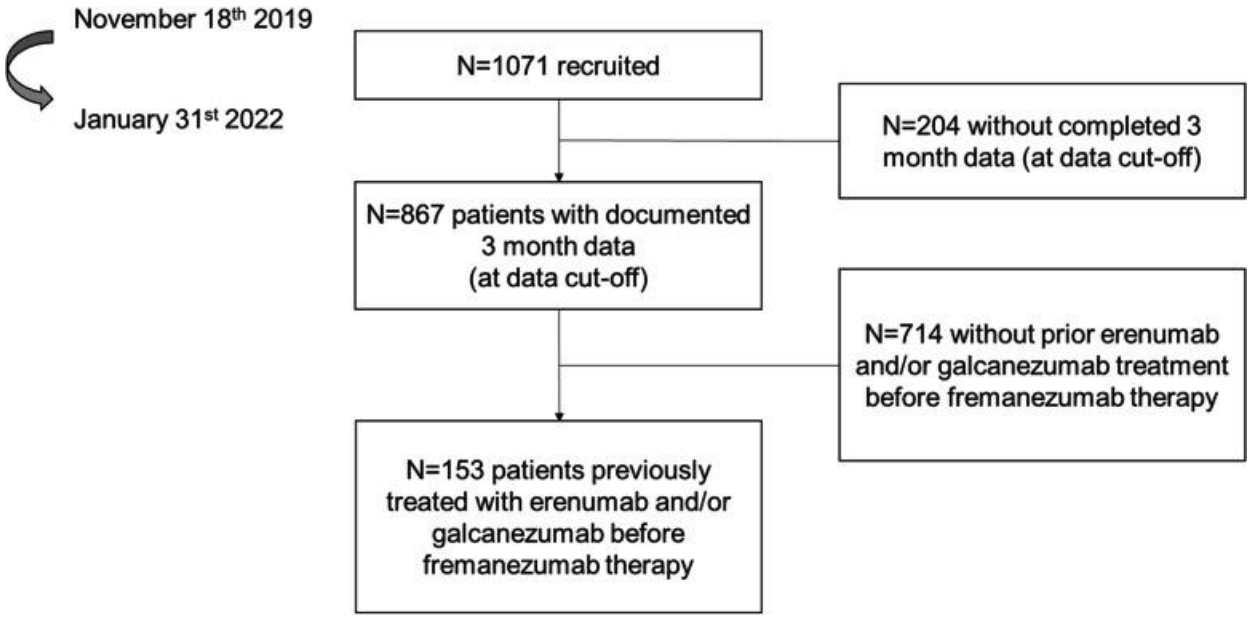
# Switch from ligand mAb (fremanezumab/galcanezumab) to receptor mAb (erenumab)

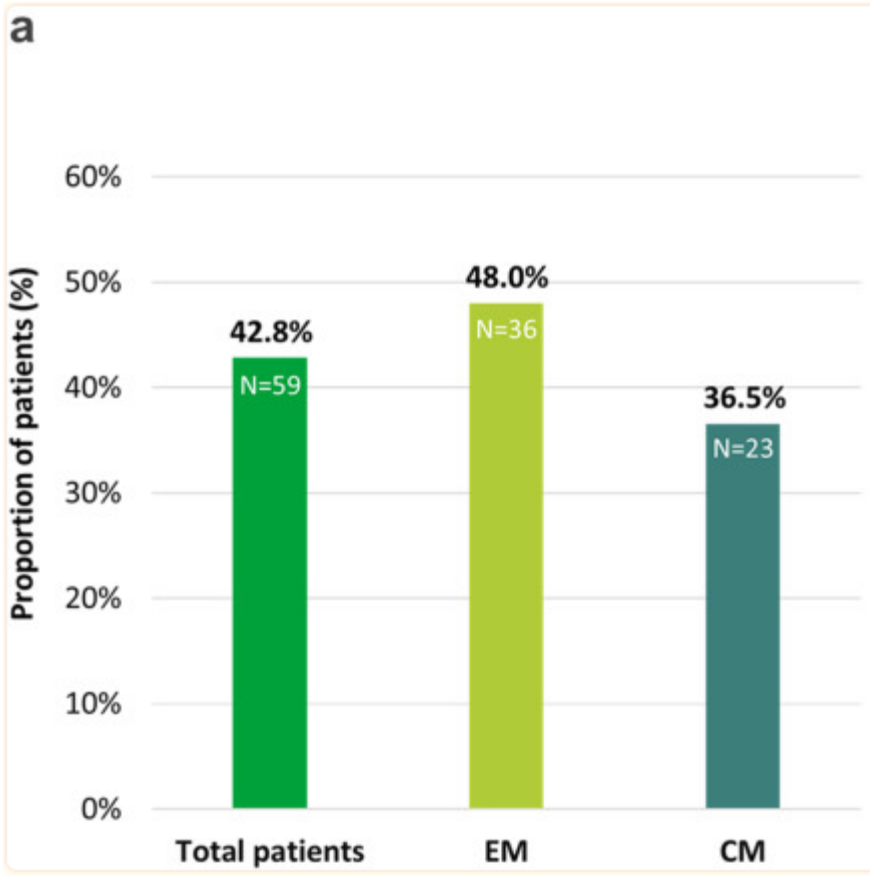





Overeem LH et al. Effect of switching to erenumab in non-responders to a CGRP ligand antibody treatment in migraine: A real-world cohort study. Front Neurol 2023 Mar 22:14:1154420. doi: 10.3389/fneur.2023.1154420. eCollection 2023.

# FINESSE study: Switch from erenumab/galcanezumab to fremanezumab



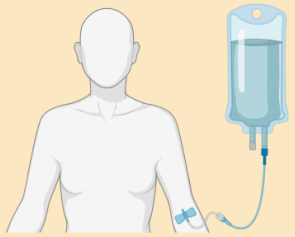

Proportion of Patients with ≥ 50% Reduction in MMD over 3 months versus baseline



Straube A et al. Real-world effectiveness of fremanezumab in patients with migraine switching from another mAb targeting the CGRP pathway: a subgroup analysis of the Finesse Study. J Headache Pain 2023 May 23;24(1):59. doi: 10.1186/s10194-023-01593-2.

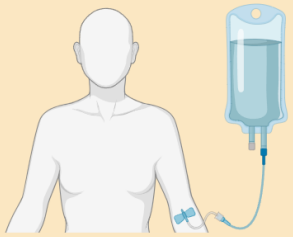
# Switch from subcutaneous mAbs to intravenous mAb (eptinezumab)

**WEEKS 1-12**



- n = 41 patients
- Eptinezumab 100 mg

**WEEKS 13-24**



- n = 38 patients
- Eptinezumab 100 or 300 mg

**RETROSPECTIVE CHART REVIEW**

- headache diaries
- HIT-6
- MIDAS
- DASS-21
- global impression

Previous treatment failure with erenumab and at least one CGRP (ligand) mAb, i.e. galcanezumab and/or fremanezumab



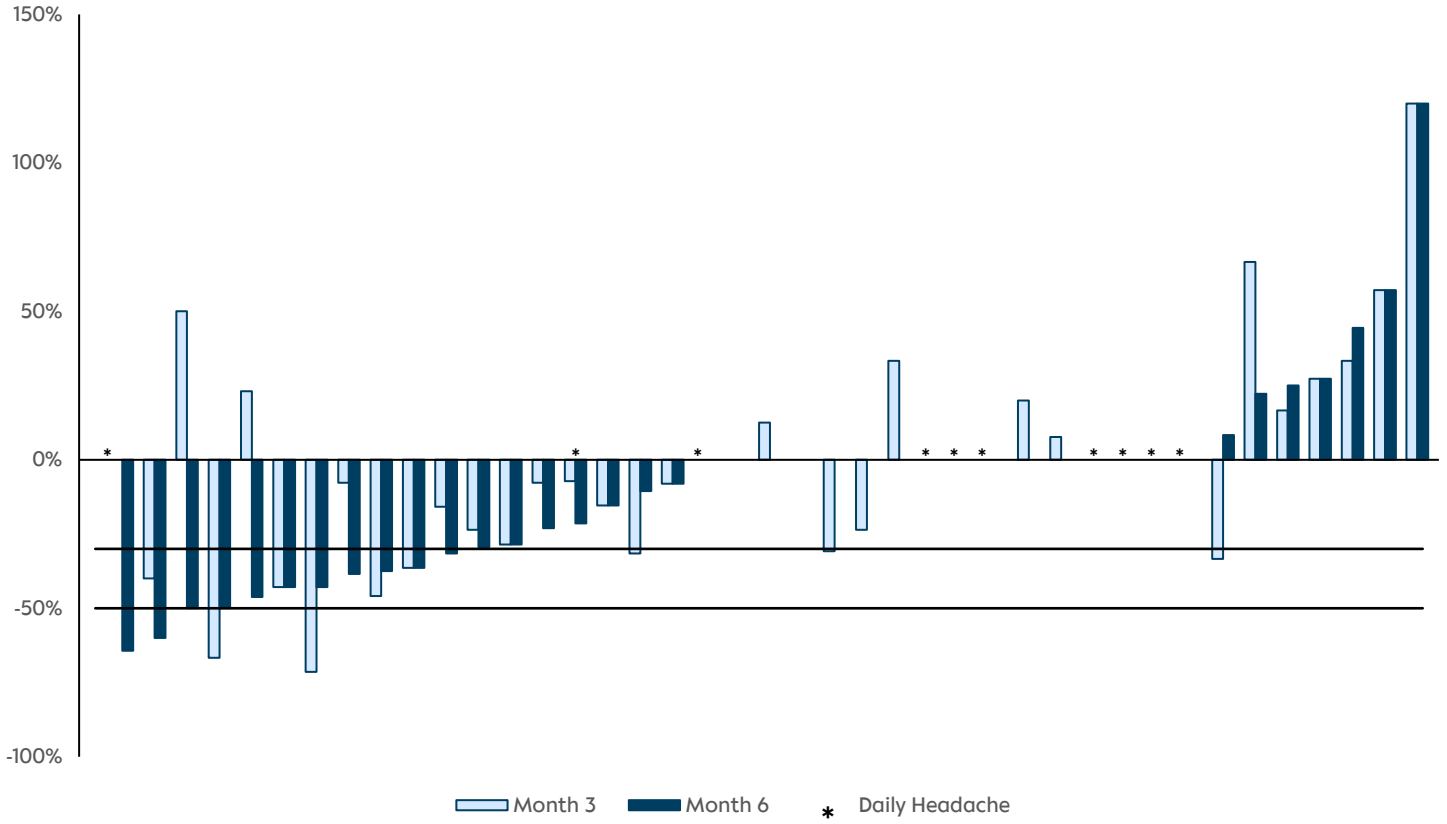
Triller et al. Efficacy of eptinezumab in non-responders to subcutaneous monoclonal antibodies against CGRP and the CGRP receptor: A retrospective cohort study. Cephalalgia 2024 Oct;44(10):3331024241288875. doi: 10.1177/03331024241288875.

| | Treated with preventatives, n (%) |
|---|---|
| **Number of prior preventive treatments (mean, SD)** | 9.0 (2.2) |
| **Erenumab** | 41 (100.0) |
| **Galcanezumab** | 37 (90.2) |
| **Fremanezumab** | 35 (85.3) |
| **Topiramate** | 37 (90.2) |
| **Valproate** | 12 (29.3) |
| **Gabapentine** | 1 (2.4) |
| **OnabotulinumtoxinA** | 38 (92.7) |
| **Beta-Blocker** | 38 (92.7) |
| **Candesartan** | 9 (22.0) |
| **Lisinopril** | 1 (2.4) |
| **Ramipril** | 1 (2.4) |
| **Perindopril** | 1 (2.4) |
| **Flunarizine** | 23 (56.1) |
| **Amitriptyline** | 36 (87.8) |
| **Mirtazapine** | 7 (17.1) |
| **Trimipramine** | 4 (9.8) |
| **Opipramol** | 5 (12.2) |
| **Doxepine** | 2 (4.9) |
| **Venlafaxine** | 13 (31.7) |
| **Citalopram** | 4 (9.8) |
| **Escitalopram** | 3 (7.3) |
| **Duloxetine** | 7 (17.1) |
| **Fluoxetine** | 6 (14.6) |



Triller et al. Efficacy of eptinezumab in non-responders to subcutaneous monoclonal antibodies against CGRP and the CGRP receptor: A retrospective cohort study. Cephalalgia 2024 Oct;44(10):3331024241288875. doi: 10.1177/03331024241288875.

# Switch from subcutaneous mAbs to intravenous mAb (eptinezumab)

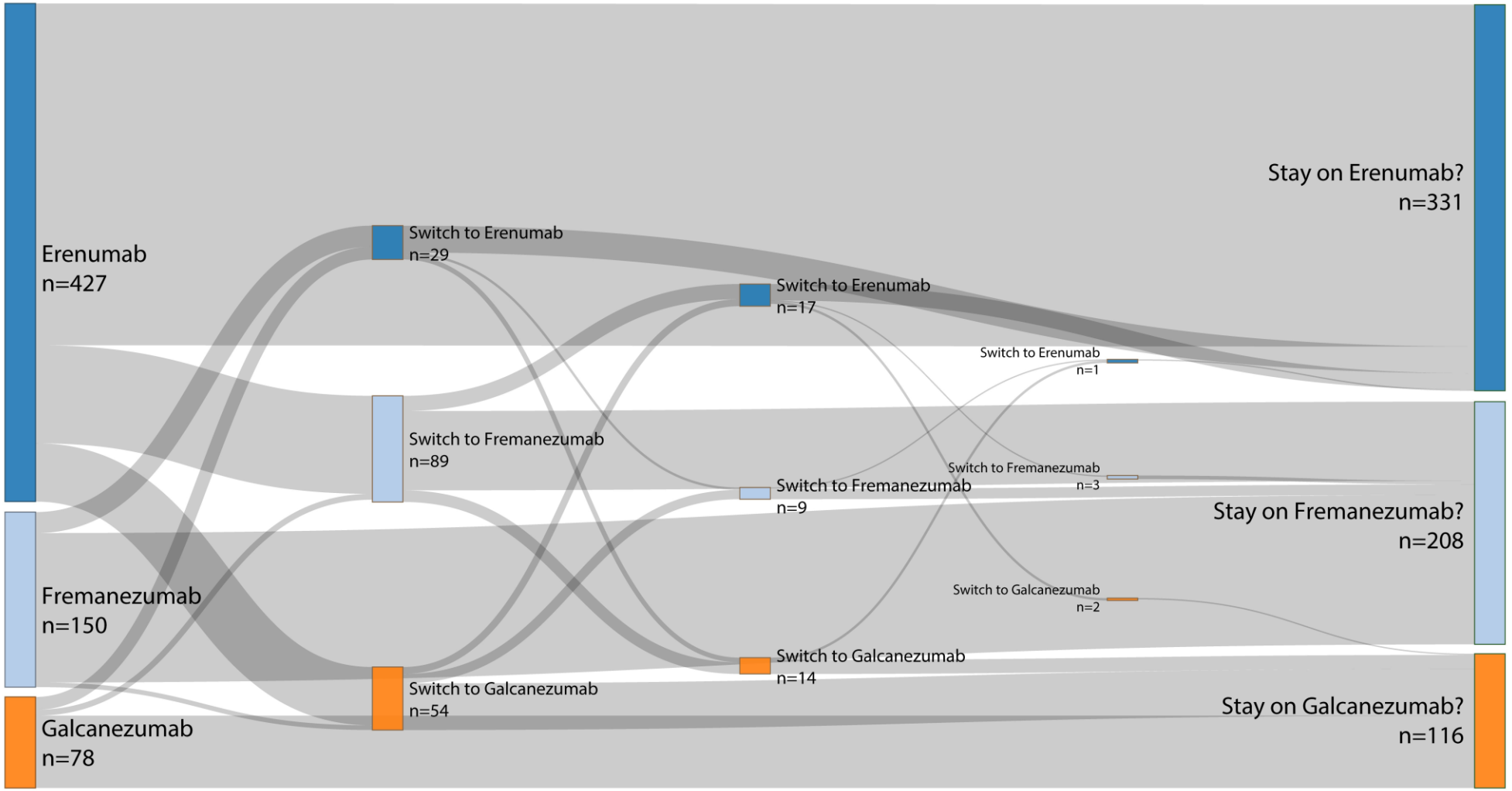



| | Month 3 | | Month 6 | |
|---|---|---|---|---|
| | All Patients (n=39) | No-Daily (n=30) | All Patients (n=37) | No-Daily (n=28) |
| **MMD** | 9 (23.1%) | 9 (30%) | **11 (29.7%)** | **10 (35.7%)** |
| **MHD** | 6 (15.4%) | 6 (20%) | 6 (16.2%) | 6 (21.4%) |



Triller et al. Efficacy of eptinezumab in non-responders to subcutaneous monoclonal antibodies against CGRP and the CGRP receptor: A retrospective cohort study. Cephalalgia 2024 Oct;44(10):3331024241288875. doi: 10.1177/03331024241288875.

# HOWEVER 1: Response rates are lower in switchers than in non-switchers.

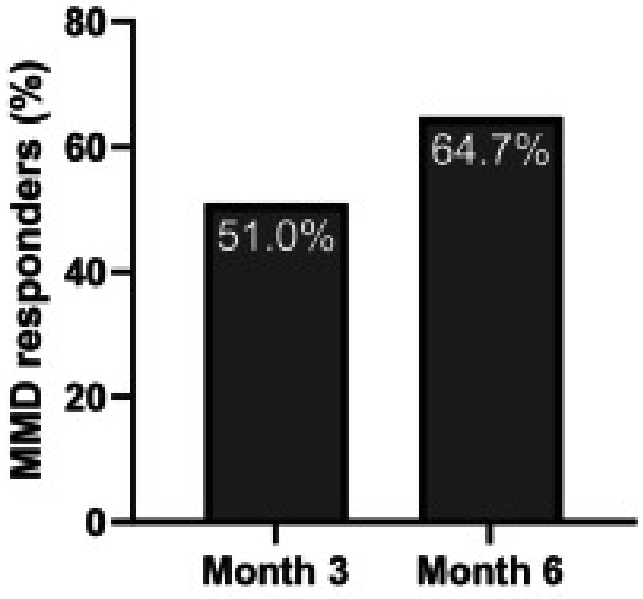




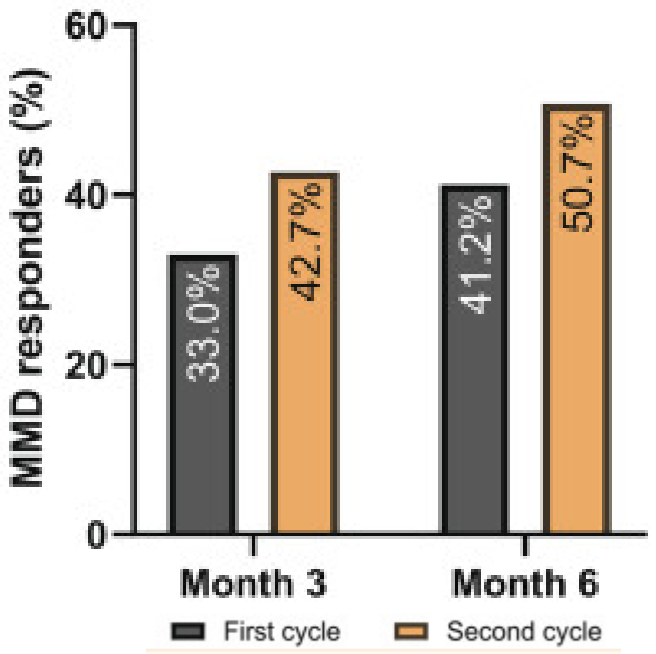

Hong et al. Therapeutic patterns and migraine disease burden in switchers of CGRP-targeted monoclonal antibodies – insights from the German NeuroTransData registry. J Headache Pain 2024 Jun 3;25(1):90. doi: 10.1186/s10194-024-01790-7.

# HOWEVER 1: Response rates are lower in switchers than in non-switchers.

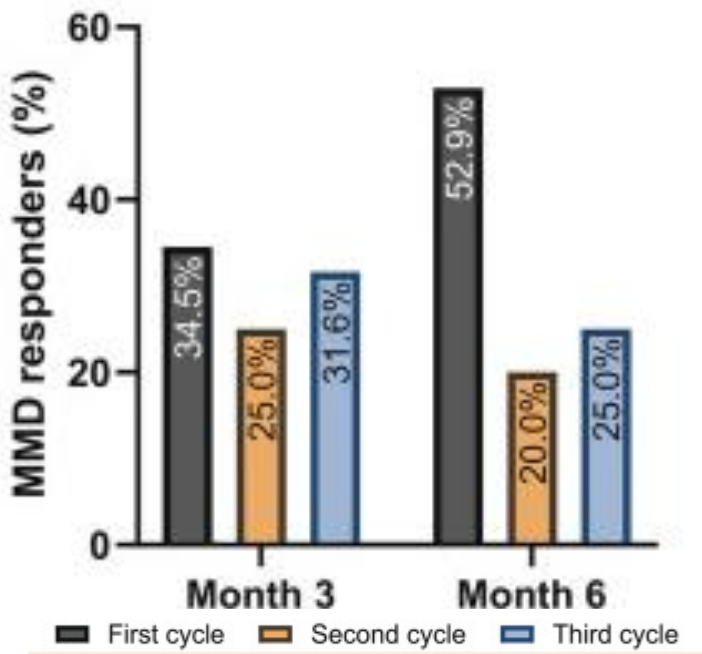
Percentage of patients achieving ≥ 50% reduction in monthly migraine days (MMD) at 3 and 6 months




n = 479 patients who did not switch




n = 135 patients who switched once



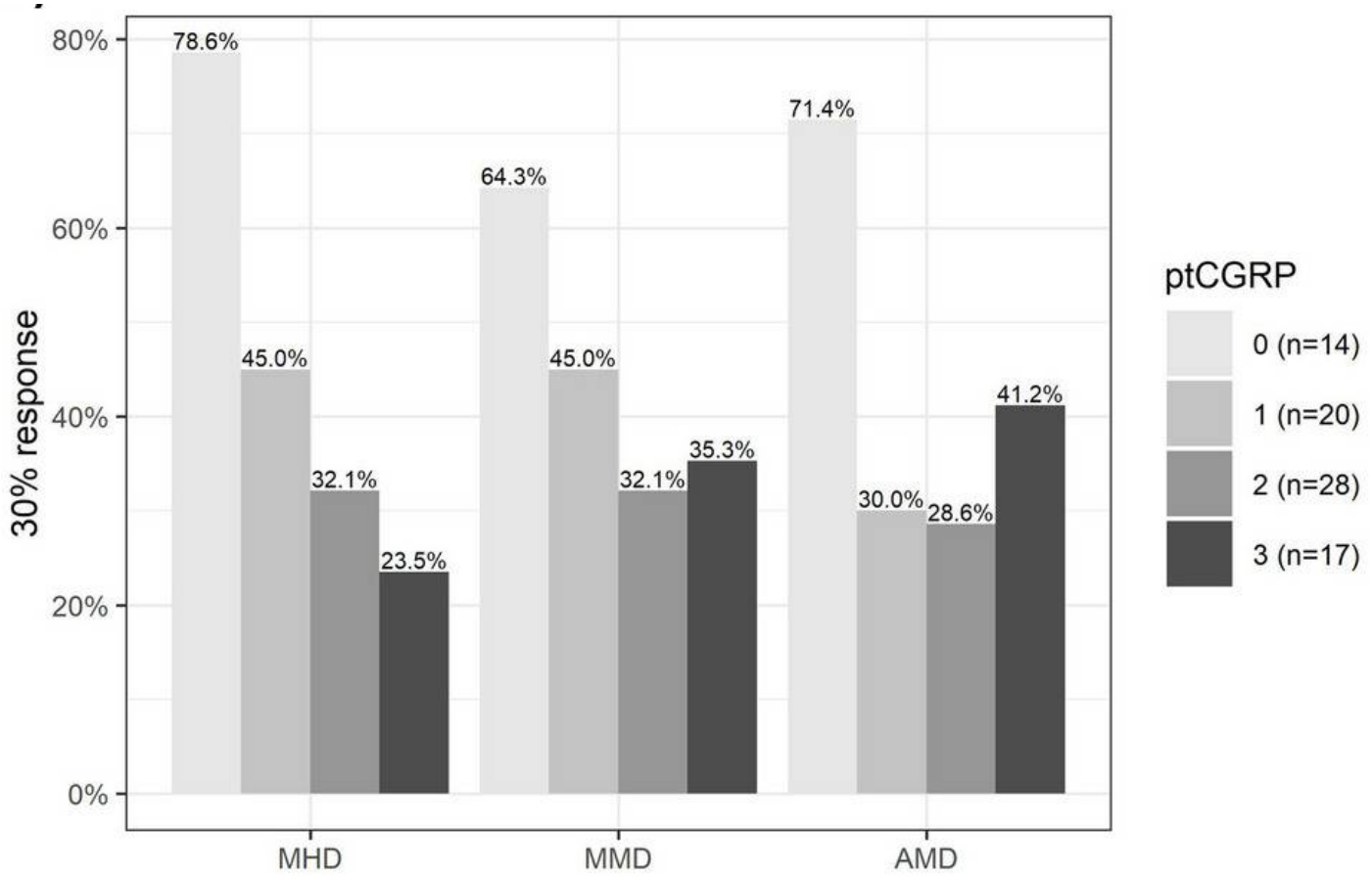

n = 35 patients who switched twice



Hong et al. Therapeutic patterns and migraine disease burden in switchers of CGRP-targeted monoclonal antibodies – insights from the German NeuroTransData registry. J Headache Pain 2024 Jun 3;25(1):90. doi: 10.1186/s10194-024-01790-7.

# HOWEVER 2: Response rates decrease with every switch.

Percentage of patients achieving ≥ 30% reduction in monthly headache days (MHD), monthly migraine days (MMD) and monthly days with acute medication use (AMD) at 3 months after switching to eptinezumab






Scheffler et al. Effectiveness and tolerability of eptinezumab in treating patients with migraine resistant to conventional preventive medications and CGRP (receptor) antibodies: a multicentre retrospective real-world analysis from Germany. J Headache Pain 2024 May 16;25(1):79. doi: 10.1186/s10194-024-01788-1.

# Take-Home Message

- Switching between CGRP(-receptor) mAbs can be a viable option for patients who do not respond to the initial treatment.
- Current data are mostly derived from real-world, uncontrolled studies, with switches typically occurring between receptor and ligand mAbs.
- Response rates for patients who switch tend to be lower compared to those with less prior treatment exposure.
- Always consider country-specific reimbursement and insurance policies when planning treatment changes.

# Thank you!