Reductions in Migraine and Headache Days With Quarterly and Monthly Fremanezumab in Adult Patients With Migraine in a US Real-world Setting

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Conclusion

- In this real-world study, both quarterly and monthly fremanezumab resulted in clinically meaningful, sustained reductions in the monthly average number of migraine days (MMD) and monthly average number of headache days (MHD) that increased over 6 months

Introduction

- Fremanezumab, a fully humanized monoclonal antibody (IgG2Δa) that selectively targets calcitonin gene-related peptide (CGRP),[1] is approved by the US Food and Drug Administration for the preventive treatment of migraine in adults[2]
- Real-world effectiveness data for fremanezumab in reducing MMD and MHD are needed to understand the treatment's full clinical benefit

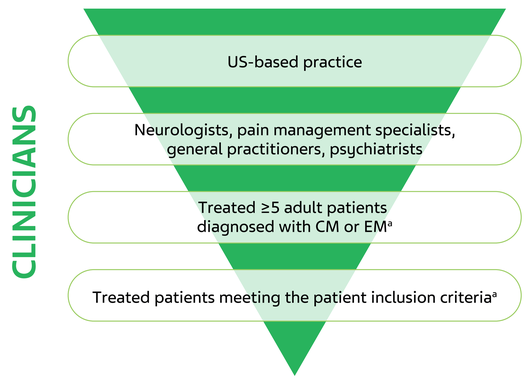
Objective

- To evaluate the real-world effectiveness of quarterly and monthly fremanezumab in reducing MMD and MHD in adult migraine patients over a period of up to 6 months after fremanezumab initiation

Methods

Clinicians

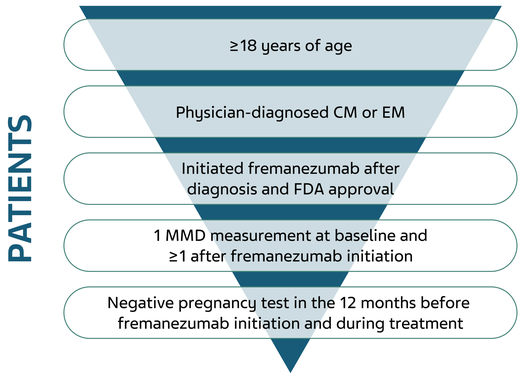
Figure 1. Clinician inclusion criteria.



CM, chronic migraine; EM, episodic migraine.
[a]In the past year.

Patients

Figure 2. Patient inclusion criteria.



CM, chronic migraine; EM, episodic migraine; FDA, US Food and Drug Administration; MMD, monthly average number of migraine days.

- US-based clinicians treated patients who met the study's inclusion criteria (**Figures 1** and **2**)

Study Design

Figure 3. Study design.

CM, chronic migraine; EM, episodic migraine; BL, baseline.

- Institutional review board–approved, noninterventional, retrospective, online clinician panel–based chart review (**Figure 3**)
- Clinicians extracted chart data for eligible patients and entered it into the provided electronic case report form

Study Assessments

- This study evaluated the real-world effectiveness of fremanezumab based on absolute reductions in MMD and MHD in migraine patients treated with quarterly and monthly dosing over 6 months after fremanezumab initiation

Results

Clinicians

Table 1. Clinician Characteristics

Characteristic	All clinicians (n = 421)
Specialist type, n (%)	
Neurologist	240 (57.0)
General practitioner	80 (19.0)
Pain management specialist	36 (8.6)
Psychiatrist	21 (5.0)
PA	21 (5.0)
NP	17 (4.0)
Other headache specialist	6 (1.4)
Time in practice (years), mean (SD)	14.7 (8.7)
Number of migraine patients treated in the last 12 months, mean (SD)	367.0 (457.6)
Number of adult patients with CM or EM treated with fremanezumab, mean (SD)	68.1 (159.2)

PA, physician assistant; NP, nurse practitioner; SD, standard deviation; CM, chronic migraine; EM, episodic migraine.

- Clinician characteristics are summarized in **Table 1**

Patients

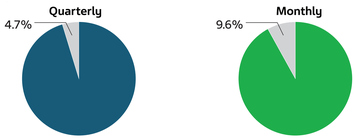
Table 2. Patient Baseline Characteristics

Characteristic	Quarterly (n = 381)	Monthly (n = 622)
Age at index date (years), mean (SD)	39.4 (11.8)	39.8 (12.8)
Female, n (%)	269 (70.6)	491 (78.9)
Time from date of diagnosis to index date (years), mean (SD)	5.4 (7.9)	7.4 (8.8)
BL MMD, mean (SD)	11.9 (6.1)	13.2 (6.5)
BL MHD, mean (SD)	12.9 (7.7)	14.8 (8.0)
Prior preventive treatment failures, n (%)		
<2	72 (18.9)	99 (15.9)
≥2	309 (81.1)	523 (84.1)
Common comorbidities, n (%)[a]		
Insomnia	70 (18.4)	126 (20.3)
Allergies	59 (15.5)	99 (15.9)
Neck pain	58 (15.2)	97 (15.6)
Back pain	38 (10.0)	100 (16.1)

SD, standard deviation; BL, baseline; MMD, monthly average number of migraine days; MHD, monthly average number of headache days.
[a]Incidence ≥15% in the quarterly or monthly dosing groups.

- The baseline characteristics of the patients included in this study are summarized in **Table 2**

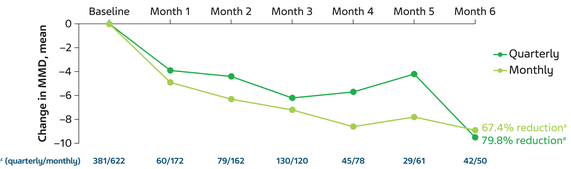
Figure 4. The proportion of patients who discontinued fremanezumab.



- The proportion of patients who discontinued fremanezumab was low (**Figure 4**)

Effectiveness

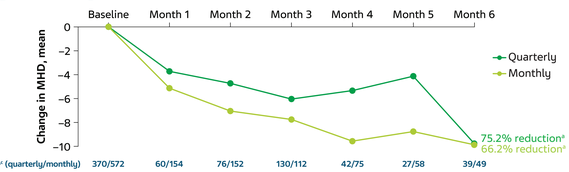
Figure 5. Change in MMD over 6 months.



MMD, monthly average number of migraine days.
[a]Percent reduction from baseline.
[b]The number of patients with an available assessment at each time point.
[c]The decline in MMD responses over time was likely not due to treatment discontinuation but potentially was due to missed follow-up appointments or limited recording of outcomes during telehealth visits.

- Fremanezumab treatment resulted in sustained reductions in MMD in patients with migraine over 6 months (**Figure 5**)

Figure 6. Change in MHD over 6 months.



MHD, monthly average number of headache days.
[a]Percent reduction from baseline.
[b]The number of patients with an available assessment at each time point.
[c]The decline in MHD responses over time was likely not due to treatment discontinuation but was potentially due to missed follow-up appointments or limited recording of outcomes during telehealth visits.

- Fremanezumab treatment resulted in sustained reductions in MHD in patients with migraine over 6 months (**Figure 6**)

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Disclosures: S.F. Thompson, M. Driessen, M. Seminerio, and K. Carr are employees of Teva Pharmaceuticals. J.M. Cohen is a former employee of Teva Pharmaceuticals. R. Ayyagari and E. Yim are employees of Analysis Group, which received funding for these analyses from Teva Pharmaceuticals.

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References: **1.** Walter S, Bigal ME. *Curr Pain Headache Rep*. 2015;19(3):6. **2.** AJOVY® (fremanezumab-vfrm) [prescribing information]. North Wales, PA: Teva Pharmaceuticals USA, Inc.; Revised 2020.