Consistency of effect of rimegepant as an acute treatment for migraine attacks: data from a real-world survey

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INTRODUCTION

- Migraine is a common, often disabling neurological condition, characterized by recurrent attacks of head pain that are typically unilateral, throbbing, and associated with a range of symptoms including nausea and vomiting.[1-2]
- The prevalence of migraine in the United States (US) is estimated to be approximately 18% among adults aged 18-44 years.[3]
- Rimegepant, a next-generation, oral, calcitonin gene-related peptide receptor antagonist, was first approved in the US in February 2020.[4]
- It is the only therapy specifically approved for both acute and preventive treatment of migraine.
- There is currently a lack of awareness regarding treatment outcomes with rimegepant in the real-world treatment setting.
- This study aimed to assess consistency of effect and satisfaction with rimegepant as an acute treatment for migraine attacks in real-world clinical practice.

METHODS

- **Data Source** – Data were drawn from the 2022/23 Adelphi Migraine Disease Specific Programme™, a real-world cross-sectional survey with retrospective data collection, undertaken in the US. Physicians completed record forms for their next 10 consecutively consulting patients with migraine, who were invited to voluntarily complete a self-reported questionnaire.
- **Study Design** – Participants were recruited into the Migraine DSP between May 2022 and November 2022. The survey was conducted according to relevant guidelines and legislation, and the methodology has been previously published and validated.[5-8]
- **Outcomes**
  - **Patient-reported** – Data were collected on consistency of response, defined as patient-reported pain freedom within 2 hours of taking acute treatment for 4 or 5 of the 5 previous migraine attacks, treatment satisfaction, willingness to continue using rimegepant and treatment optimization as measured by the Migraine Treatment Optimization Questionnaire (MTOQ-6).
  - **Physician-reported** – Data were collected on patient demographics, consistency of response, defined as freedom from pain at 2 hours in more than half of attacks, reasons for prescribing treatment, and treatment satisfaction.
- **Analysis** – All analyses were descriptive. This analysis utilised data collected from physicians and their patients receiving rimegepant as an acute monotherapy. Where treatment duration was known, patients were categorised into those who had received rimegepant ≤365 days and >365 days.

RESULTS

Patient demographics and clinical characteristics

- Ninety-one patients were receiving rimegepant monotherapy as their current acute treatment regimen; mean (standard deviation [SD]) age 39.0 [SD 13.11], 73% female (**Table 1**). Of these patients, 33.3% (n=30) completed the corresponding voluntary self-reported questionnaire.
- Mean physician-reported migraine headache days for this population was 4.4 [SD 3.92]; 38% were reported as having chronic migraine (**Table 1**), with 59% on background prophylaxis (n=91), most commonly anti-calcitonin gene-related peptide monoclonal antibodies (n=22).
- Duration of treatment was known for 76 patients (n=46 ≤365 days vs n=30 >365 days).

Table 1. Physician-reported patient demographics and clinical characteristics

	All rimegepant users	≤365 days on rimegepant	>365 days on rimegepant
Patient age, n	**91**	**46**	**30**
Mean [SD]	39.0 [13.1]	38.6 [11.4]	39.6 [13.4]
Patient sex, n (%)	**91**	**46**	**30**
Female	66 (73)	34 (74)	23 (77)
Male	23 (25)	12 (26)	7 (23)
Intersex	2 (2)	0 (0)	(0)
Patient BMI, n	**91**	**46**	**30**
Mean [SD]	27.4 [6.8]	27.7 [7.7]	26.7 [6.3]
Chronic migraine, n (%)	**91**	**46**	**30**
Yes	35 (38)	12 (26)	15 (50)
No	56 (62)	34 (74)	15 (50)
Migraine related headache days per month over last 3 months, n	**91**	**46**	**30**
Mean [SD]	4.4 [3.9]	3.7 [4.2]	4.8 [3.7]
Current prophylaxis treatment, n (%)	**91**	**46**	**30**
Yes	54 (59)	30 (65)	17 (57)
No	37 (41)	16 (35)	13 (43)
Prophylaxis treatment class, n (%)	**53**	**29**	**17**
Anti-CGRP mAb	22 (42)	9 (31)	11 (65)
Anticonvulsants	8 (15)	5 (17)	1 (6)
Neurotoxin	8 (15)	5 (17)	1 (6)

Abbreviations: SD; standard deviation, BMI; body mass index, Anti-CGRP mAb; anti-calcitonin gene-related peptide monoclonal antibodies. Duration of treatment was known for 76 patients (n=46 ≤365 days vs n=30 >365 days).

Consistency of response

- Patient-reported consistency, as assessed by pain freedom at 2 hours for 4 or 5 out of 5 migraine attacks, was 76% for the overall population (**Figure 1**, **Table 2**).
- Physician-reported consistency, defined as achieving pain freedom at 2 hours on more than half of occasions, was 73% of patients overall. When split by duration, 67% of patients receiving rimegepant for ≤365 days (n=45) and 83% of patients receiving rimegepant for >365 days (n=29) had a consistent response (**Table 2**).

Treatment satisfaction

- All patients receiving rimegepant ≤365 days (n=11) and 92% of patients receiving rimegepant >365 days (n=12) reported being extremely satisfied/satisfied with their acute treatment (**Figure 2**).
- 100% physicians reported being satisfied with patients' current prescribed acute treatment for their migraine (**Figure 2**).
- Patient-reported willingness to continue using rimegepant was high, with all but one patient reporting a desire not to continue (**Table 2**)

Treatment optimization

- 87% of patients were adequately optimised on rimegepant as assessed by the MTOQ-6 (**Table 2**).

Table 2. Physician- and patient-reported treatment outcomes

	All rimegepant users	≤365 days on rimegepant	>365 days on rimegepant
Physician-reported success of rimegepant achieving pain freedom at 2 hours, n (%)	**86**	**45**	**29**
Yes	63 (73)	30 (67)	24 (83)
Patient-reported success on 4 or 5 out of 5 occasions, n (%)	**29**	**11**	**12**
Yes	22 (76)	10 (91)	8 (67)
Patient-reported willingness to continue using rimegepant, n (%)	**29**	**11**	**12**
Willing	28 (97)	11 (100)	11 (92)
Unwilling	1 (3)	0 (0)	1 (8)
Patient-reported treatment optimization (MTOQ-6), n (%)	**30**	**11**	**12**
Adequately optimized on treatment	26 (87)	11 (100)	9 (75)

Abbreviations: MTOQ; Migraine Treatment Optimization Questionnaire

Reasons for prescribing rimegepant

- The most frequent physician-reported reasons for prescribing rimegepant as acute treatment are described in **Table 3**.
- Pain freedom (78%) and pain relief (70%) at 2 hours were the most selected reasons, followed by rapid return to function (67%) and fast onset of action (62%) (**Table 3**).

Figure 1. Patient-reported proportion of attacks achieving pain freedom at 2 hours for the past 5 attacks

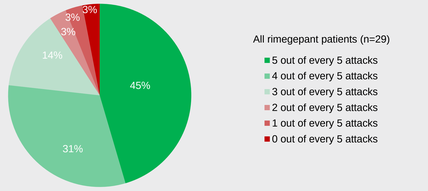

Figure 2. Physician and patient-reported treatment satisfaction with rimegepant

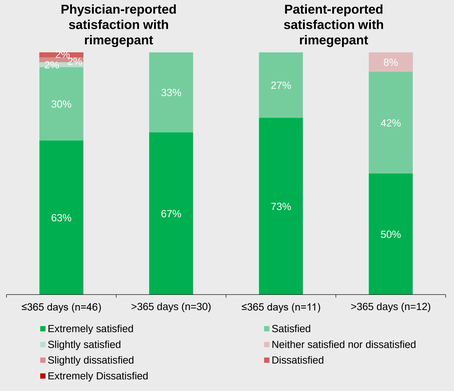

Table 3. Physician-reported reasons for acute treatment choice

	All rimegepant users	≤365 days on rimegepant	>365 days on rimegepant
Reasons for choice, n (%)	**91**	**46**	**30**
Complete pain freedom after 2 hours	71 (78)	32 (70)	25 (83)
Pain relief after 2 hours	64 (70)	33 (72)	20 (67)
Allows rapid return to function	61 (67)	33 (72)	16 (53)
Fast onset of action	56 (62)	29 (63)	18 (60)
Approved for migraine	54 (59)	29 (63)	15 (50)
Relieves most bothersome symptoms	50 (55)	27 (59)	13 (43)
Efficacious in patients who have failed prior acute treatment	46 (51)	26 (57)	11 (37)
Available as a melt	42 (46)	23 (50)	10 (33)
Prolonged pain relief	40 (44)	24 (52)	9 (30)
Lower risk of medication overuse headache	40 (44)	27 (59)	8 (27)

Limitations

- Physicians were asked to recruit consecutively consulting patients to mitigate against selection bias, with the survey completed on the day of the visit and with reference to historical clinical records to mitigate against recall bias. However, some selection bias remains as more frequently consulting patients and those with more severe disease activity were more likely to be captured
- Despite this, the approach used is likely to be consistent, and therefore representative of real-world clinical practice.

CONCLUSIONS

- Consistency of rimegepant treatment effect across multiple attacks was reported by both physicians and patients in a real-world clinical setting.
- Physicians reported high levels of treatment satisfaction with rimegepant and indicated 2 hour pain freedom and relief and rapid return to function as the most common reasons for choosing to acutely prescribe rimegepant.
- Patients were well optimised on rimegepant as an acute treatment and reported high levels of satisfaction and a willingness to continue its use.

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CONFLICTS OF INTEREST

LA, JB, KHB, FD: employed by and holds stock/options in Pfizer. JJ, WW, LH: employees of Adelphi Real World, Bollington UK.

ACKNOWLEDGEMENTS

Data collection was undertaken by Adelphi Real World (Bollington, UK) as part of an independent survey, entitled the Adelphi Migraine Disease Specific Programme (DSP)™. All data are the intellectual property of Adelphi Real World. Pfizer Inc. subscribed to this survey and did not influence the original survey through either contribution to the design of questionnaires or data collection. Medical writing and editorial support was provided by Gary Sidgwick, PhD and Charlotte Ensor, MRes (Adelphi Real World, Bollington, UK), on behalf of Adelphi Real World and under the guidance of authors.

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Presented at the American Headache Society (AHS) 66th Annual Scientific Meeting, June 13–15, 2024, San Diego, California, USA

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