

Changes in acute treatment effectiveness in migraine patients switching from standard of care to rimegepant: findings from a real-world study

Ye Ran M.D. Ph.D.^{1,2}, Qian Zhao³, Hui Su M.D., Ph.D.^{1,2}, Shuhua Zhang M.D.^{1,2}, Zizi He M.D.^{1,2}, Yu Liu⁴, Zhao Dong M.D., Ph.D.^{1,2}, Shengyuan Yu M.D., Ph.D.^{1,2}, on behalf of the ARISE Investigators

¹Department of Neurology, Chinese PLA General Hospital, Beijing, China; ²International Headache Centre, Chinese PLA General Hospital, Beijing, China; ³Pfizer Inc, Chengdu, China; ⁴Pfizer Inc, Beijing, China

INTRODUCTION

- Despite the availability of many existing therapies for migraine in China, there remain unmet medical needs in clinical practice¹.
- Since rimegepant, a calcitonin gene-related peptide receptor antagonist, obtained approval for the acute treatment of migraine in January 2024, some patients have switched from their previous standard of care (SOC) to rimegepant.

OBJECTIVE

- This analysis aimed to explore acute treatment effectiveness changes in rimegepant-naïve migraine patients switching from SOC to rimegepant.

METHODS

STUDY DESIGN

- A single-arm, multicenter, prospective, observational registry (NCT06439628) aimed to recruit 3,000 adults prescribed rimegepant for acute migraine treatment at 70 Chinese sites.
- Baseline data included treatment history, specifically analgesics and effectiveness for the most recent migraine attack before enrollment.
- Patient-reported outcomes, including 1. Worst pain after rimegepant, 2. Time to meaningful pain relief (MPR), 3. Time to meaningful relief from associated symptoms (MRA), and 4. Satisfaction with pain relief and return to normal function (RNF), were collected via a digital platform (encouraged within 48 hours of treatment).
- Follow-up is for 12 months. This report compares effectiveness between SOC-treated recent migraine attacks and first recorded rimegepant-treated attacks at 3 months.

STATISTICAL ANALYSES

- Outcomes were compared within individuals for migraine attacks treated with either SOC or rimegepant.

- Wilcoxon signed-rank test was used to compare continuous variables like MPR onset time.
- McNemar's test was used to compare categorical variables like satisfaction rate.

RESULTS

- Of the 1,696 participants included, most (81.4%) were female, with a mean (SD) age of 38.8 (10.8) years, and the mean (SD) monthly migraine days in the past three months was 7.5 (7.8) (**Table 1**).
- SOC included non-steroidal anti-inflammatory drugs (34.8%), combination analgesics (21.9%), triptans (22.7%), acetaminophen (16.5%) and others (4.1%).
- The most severe pain level after taking rimegepant was lower than that of SOC-treated recent migraine attacks ($p<0.0001$) (**Table 2**).
- Onset time of MPR and MRA after taking rimegepant were shorter than those of SOC-treated recent migraine attacks ($p<0.0001$) (**Table 2**).
- Additionally, significantly more patients reported satisfaction (extremely/very/somewhat) with pain relief and RNF after taking rimegepant than those with SOC-treated recent migraine attacks ($p<0.0001$) (**Table 2**).

CONCLUSION

- In this real-world study, migraineurs switching from SOC to rimegepant reported more effective pain relief, more rapid relief of pain and associated symptoms, and greater patient satisfaction with pain relief and RNF.

DISCLOSURES

- All the authors declare no competing interests.

ACKNOWLEDGEMENTS

- This study was sponsored by Chinese Research Hospital Association, which received funding from Pfizer to support this study as well as this publication.

Table 1. Demographic and baseline characteristics (n = 1,696)

Demographic	Value
Age, mean (SD), y	38.8 (10.8)
Female, n (%)	1,380 (81.4)
BMI, mean (SD), kg/m ²	22.7(3.5)
Migraine history, n(%)*	
Migraine without aura	1,310 (77.2)
Migraine with aura	189 (11.1)
Chronic migraine	248 (14.6)
Migraine with MOH	128 (7.6)
Probable migraine	50 (3.0)
*MMDs, mean (SD), d	7.5 (7.8)

Abbreviations: n, number; SD, standard deviation; y, years; BMI, body mass index; MMDs, monthly migraine days; d, days
 a The average MMDs in the past three months
 * Categories are not mutually exclusive; sum exceeds 100%

Table 2. Comparison of treatment outcomes between recent migraine attacks treated with SOC and attacks treated with rimegepant (N=1,696)

Outcomes	SOC	Rimegepant	p value
VAS score of the most severe pain after taking medicine, median (Q1, Q3)	6.0 (4.0, 8.0)	4.0 (2.0, 5.0)	< 0.0001
Time to onset time of MPR, median (Q1, Q3), mins	120.0 (60.0, 180.0)	60.0 (30.0, 120.0)	< 0.0001
Time to onset for MRA, median (Q1, Q3), mins	65.5 (30.0, 150.0)	30.0 (0.0, 75.0)	< 0.0001
Satisfaction with pain relief, n (%)	1,051(62.0)	1440(84.9)	< 0.0001
Satisfaction with RNF, n (%)	1,070(63.1)	1449 (85.4)	< 0.0001

Abbreviations: n, number; SOC, standard of care; MPR, meaningful pain relief; MRA, meaningful relief from associated symptoms; RNF, return to normal function; min, minutes