

# Acute Treatment With Oral Rimegepant 75 mg Reduces Migraine-Related Disability in Adults With and Without a History of Triptan Treatment Failure: Results From a One-Year, Open-Label Safety Study

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## Introduction

- Migraine-related disability imposes underappreciated burdens on individuals, caregivers, and health systems; its effects are most pronounced among working-age adults, especially women<sup>1</sup>
- For the acute treatment of migraine, triptans have been associated with inadequate response, relapse of symptoms, and adverse events (AEs), as well as cardiovascular contraindications and risk of medication-overuse headache<sup>2</sup>
- Patients with a history of triptan treatment failure may need alternative therapies to treat migraine pain and disability
- Rimegepant is an orally administered, small-molecule calcitonin gene-regulated peptide receptor antagonist that has demonstrated efficacy and safety in the acute and preventive treatment of migraine<sup>3-8</sup>

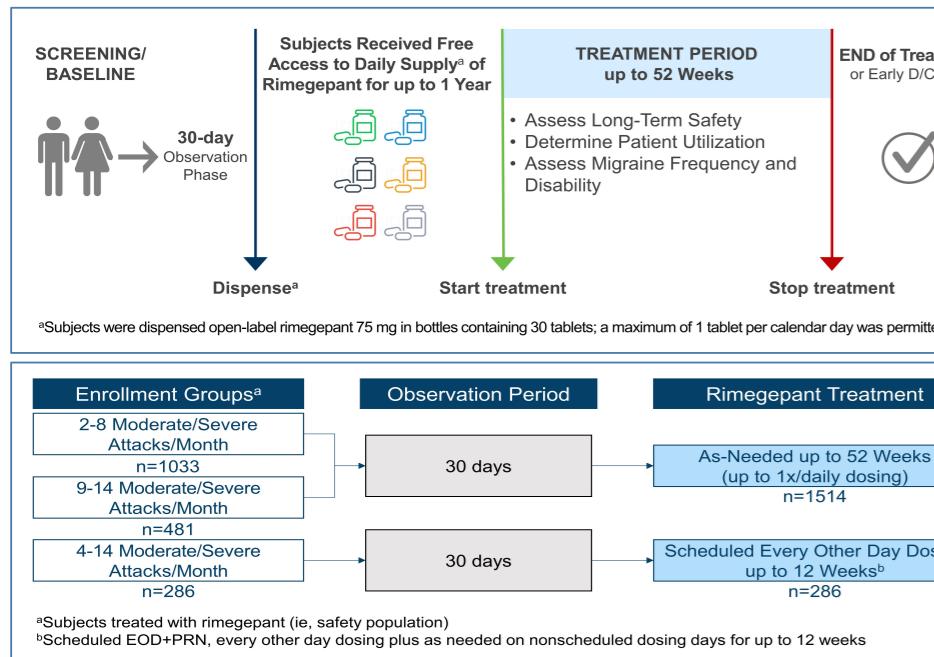
## Objective

- The objective of this analysis from the rimegepant long-term safety study was to assess the effects of rimegepant on migraine-related disability over 52 weeks in adults with and without a history of triptan treatment failure

## Materials/Methods

- This was a multicenter, open-label, long-term safety study (NCT03266588) of rimegepant 75 mg oral tablet dosed up to once daily for up to 1 year (Figure 1)

## Figure 1. Study Design



- Subjects were instructed to self-administer treatment as follows:
  - As needed (PRN) enrollment groups: rimegepant 75 mg up to once daily as needed to treat attacks of any pain intensity for 52 weeks
  - Scheduled dosing group (every other day): rimegepant 75 mg every other day (EOD) with patients allowed to take PRN dosing if needed on nonscheduled dosing days to treat attacks of any pain intensity for 12 weeks

## Subjects

- Aged ≥18 years, with ≥1-year history of migraine with or without aura
- Two to 14 moderate or severe monthly migraine attacks during the 3 months prior to the screening visit
- If using migraine preventive medication, stable dose for ≥3 months
- Subjects with and without a history of discontinuing 1 or ≥2 triptans due to inadequate efficacy or poor tolerability (ie, treatment failure) were analyzed

## Materials/Methods cont.

### Assessments

- Disability was assessed using the Migraine Disability Assessment (MIDAS) questionnaire at baseline and Weeks 12, 24, 36, and 52 and graded as follows:
  - 0-5 = Grade I, minimal or infrequent disability
  - 6-10 = Grade II, mild or infrequent disability
  - 11-20 = Grade III, moderate disability
  - 21-40 = Grade IVA, severe disability
  - ≥41 = Grade IVB, very severe disability
- MIDAS total score changes from baseline over time were assessed in subgroups with no history of triptan failure (including a triptan-naïve subgroup), a history of 1 triptan failure, and a history of ≥2 triptan failures
- Triptan treatment failure was defined as a self-reported history of triptan discontinuation due to inadequate efficacy or tolerability, or both, and included any medication in the triptan class

## Results

### Subjects

- Of the 1800 rimegepant-treated subjects (Table 1):
  - 1008 (56.0%) had no history of triptan failure
  - 546 (30.3%) had a history of treatment failure with 1 triptan
  - 246 (13.7%) had a history of treatment failure with ≥2 triptans
- Most subjects (89.4%) were female, mean age was 41.9, 43.7, and 46.4 years in subjects with 0, 1, and ≥2 triptan failures, respectively

Table 1. Demographics and Baseline Characteristics

	History of Treatment Failure With	0 Triptans (n=1008)	1 Triptan (n=546)	≥2 Triptans (n=246)	Overall (N=1800)
Age, years, mean (SD)	41.9 (12.4)	43.7 (11.4)	46.4 (12.1)	43.1 (12.2)	
Sex, n (%)					
Female	877 (87.0)	509 (93.2)	223 (90.7)	1609 (89.4)	
Male	131 (13.0)	37 (6.8)	23 (9.3)	191 (10.6)	
Weight, kg, mean (SD)	82.3 (22.6)	79.9 (19.8)	77.3 (20.3)	80.9 (21.5)	
BMI, kg/m <sup>2</sup> , mean (SD)	29.8 (7.8)	29.2 (6.9)	28.1 (7.3)	29.4 (7.5)	
Moderate-severe attacks/month, <sup>a</sup> mean (SD)	6.6 (3.1)	6.7 (3.1)	7.3 (3.4)	6.7 (3.1)	
Duration of untreated attacks, <sup>a</sup> hours, mean (SD)	31.0 (21.3)	37.8 (22.9)	36.9 (22.8)	33.9 (22.3)	
Primary migraine type, <sup>a</sup> n (%)					
Without aura	680 (67.5)	356 (65.2)	164 (66.7)	1200 (66.7)	
With aura	328 (32.5)	190 (34.8)	82 (33.3)	600 (33.3)	

SD=standard deviation; <sup>a</sup>Historical.

### Migraine-related Disability

- At baseline, as measured by mean (SD) MIDAS total scores, subjects in all 3 subgroups were severely disabled: 0 triptan failures, 32.8 (33.1); 1 triptan failure, 34.5 (31.8); and ≥2 triptan failures, 36.9 (32.0)
- Mean changes from baseline in MIDAS total scores exceeded the clinically important difference threshold (-5) at all time points for all 3 subgroups (Figure 2)
- Reductions from baseline in absenteeism (Figure 3) and presenteeism (Figure 4) were also observed with long-term rimegepant treatment in all 3 triptan subgroups

## Results cont.

Figure 2. Mean Change in MIDAS Total Score in Subjects With a History of Treatment Failure With 0, 1, or ≥2 Triptans

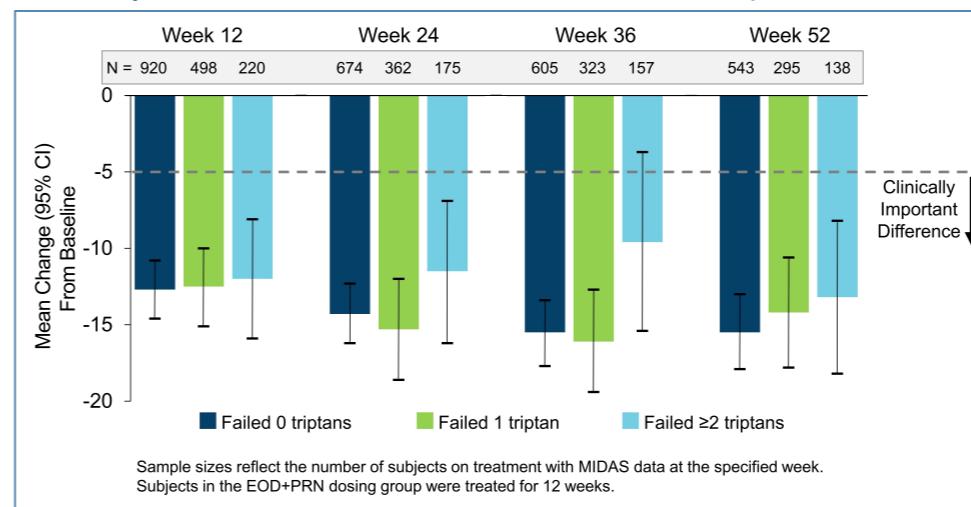


Figure 3. Mean Change in MIDAS Absenteeism<sup>a</sup> Score in Subjects With a History of Treatment Failure With 0, 1, or ≥2 Triptans

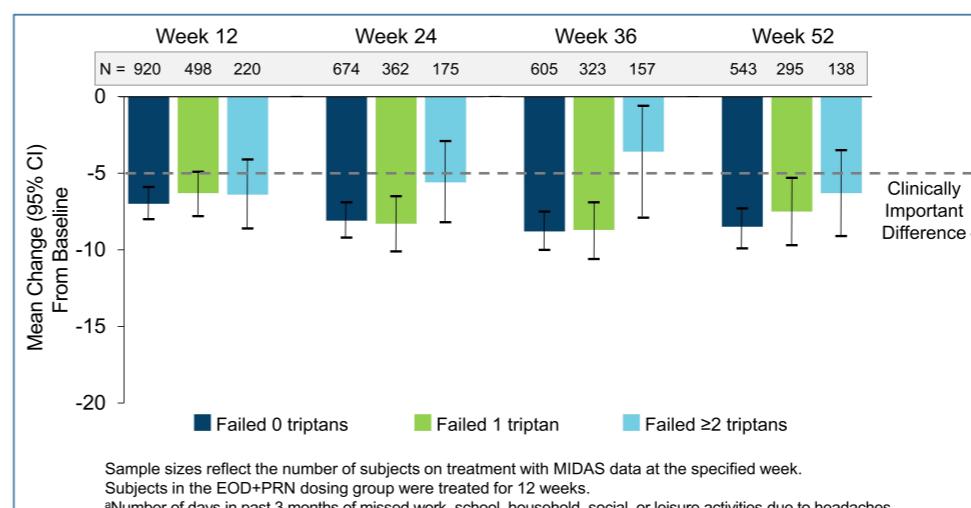
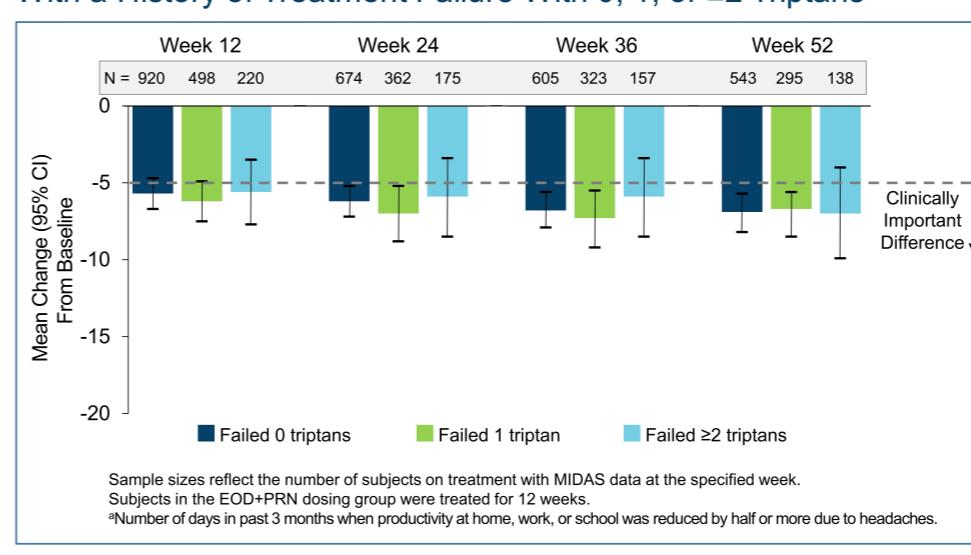


Figure 4. Mean Change in MIDAS Presenteeism<sup>a</sup> Score in Subjects With a History of Treatment Failure With 0, 1, or ≥2 Triptans



## Results cont.

### Safety

- As shown in Table 2, the most common AEs (regardless of relationship to treatment) were upper respiratory tract infection (8.8%), nasopharyngitis (6.8%), and sinusitis (5.1%)
- Overall, 2.7% of subjects discontinued due to an AE during the ≤1-year time period
- The majority of AEs were mild or moderate in intensity in both subgroups and were considered by the investigator to be unrelated to rimegepant
- There were no clinically meaningful differences or trends in AEs across subgroups

Table 2. Summary of AEs During Long-term Treatment With Rimegepant 75 mg up to 1 Year

History of Treatment Failure With	History of Treatment Failure With			
	0 Triptans (n=1008) n (%)	1 Triptan (n=546) n (%)	≥2 Triptans (n=246) n (%)	Overall (N=1800) n (%)
AE leading to study drug discontinuation	34 (3.4)	9 (1.6)	5 (2.0)	48 (2.7)
AEs reported in >5% in any subgroup				
Upper respiratory tract infection	84 (8.3)	52 (9.5)	22 (8.9)	158 (8.8)
Nasopharyngitis	59 (5.9)	43 (7.9)	20 (8.1)	122 (6.8)
Sinusitis	47 (4.7)	25 (4.6)	20 (8.1)	92 (5.1)
Urinary tract infection	37 (3.7)	19 (3.5)	13 (5.3)	69 (3.8)

AEs, adverse events.

## Conclusions

- Treatment with rimegepant 75 mg was associated with clinically meaningful reductions in migraine-related disability through 1 year regardless of the number of triptans previously tried and failed
- Reductions in overall disability, as well as in absenteeism and presenteeism, exceeded the minimum clinically important difference by approximately 2- to 3-fold at all time points
- Among adults with migraine and a history of triptan treatment failure, rimegepant may reduce lost time due to migraine
- Rimegepant 75 mg administered in multiple doses for up to 1 year was well tolerated, with a favorable safety profile consistent with previous clinical trial results

