Real World Treatment Continuity, Healthcare Resource Use, and Costs Among Patients With Migraine Receiving Acute, Preventive and Combination Treatment

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Background and Objective

- Migraine is a chronic neurological condition with substantial burden, commonly treated with acute and preventive therapies. Real-world evidence describing treatment continuity, healthcare utilization, and costs across therapies remains limited.[1]
- The aim of this retrospective database analysis was to assess real-world treatment continuity, healthcare resource utilization (HCRU), and costs, and to identify predictors of treatment discontinuity among patients with migraine receiving acute therapies, preventive therapies, or a combination of both.

Methodology

Figure 1. Database and Time Periods

Study Participants:

- Adults ≥18 years with eligible acute or preventive migraine therapy (index date = first observed claim)
- ≥1 migraine diagnosis in 12-month pre-index period
- ≥12 months of continuous medical and pharmacy enrollment pre- and post-index
- No evidence of secondary headache disorders; treatment contraindications including cardiovascular conditions, renal disease, and psychiatric disorders; pregnancy; or clinical trial participation during the study period

Cohorts:

- Acute cohort (Triptans or gepants)
- Preventive cohort (preventive gepants, CGRP monoclonal antibodies, or beta blockers)
- Combination cohort - Both acute and preventive treatments with overlapping fills within 60 days

Study measures: Baseline demographics; clinical characteristics; use of rescue medication including NSAIDs, corticosteroids, and opioids; outcomes included treatment continuity at 6 and 12 months and all cause HCRU and costs

Analysis: Descriptive analysis; Treatment continuity (Yes/No) defined as ≥2 acute fills, ≥2 preventive fills without a gap of 60 days or combination of both during follow-up

CGRP: Calcitonin gene-related peptide; NSAID: Non-Steroidal Anti-Inflammatory Drug

Results

- Among 43,619 study eligible patients, most initiated acute therapy only (80.8%), with fewer receiving preventive (17.4%) or combination therapy (1.9%). Baseline demographics were similar across cohorts; preventive and combination cohorts had slightly higher comorbidity burden (CCI) [Table 1].
- At 12 months, proportion of patients with treatment continuity was highest in the acute cohort (61.0%) and lower in the preventive (46.4%) and combination (50.2%) cohorts (Figure 2).
- Mean total all-cause healthcare costs increased with treatment complexity, from $16,743 (acute) to $29,203 (preventive) and $40,174 (combination). Higher costs in preventive and combination cohorts were primarily driven by pharmacy spending, with similar medical costs across cohorts (Figure 4).

	Acute cohort	Preventive cohort	Combination cohort
Cohort N	35,243 (80.8%)	7,567 (17.3%)	809 (1.9%)
Age, mean (SD)	44.0 (13.3)	45.6 (13.3)	43.7 (13.0)
Females (%)	78.3%	76.6%	78.5%
Race Ethnicity (%)			
White	65.3%	66.0%	65.3%
Black	8.0%	8.2%	9.0%
Asian	4.6%	4.4%	5.1%
Hispanic	10.0%	9.3%	7.9%
CCI, mean (SD)	0.26 (0.68)	0.30 (0.73	0.28 (0.64)

Table 1. Baseline Characteristics

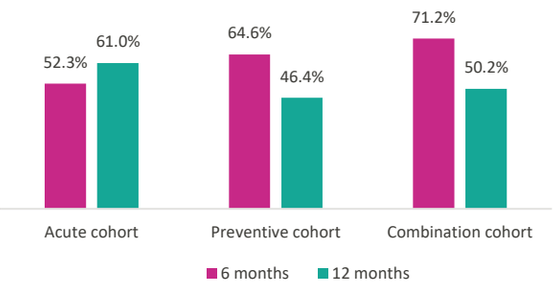

Figure 2. Treatment continuity in follow-up

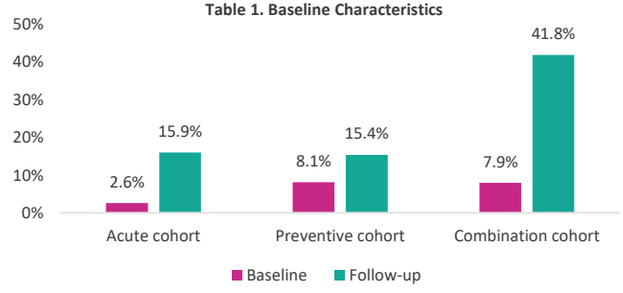

Figure 3. Rescue medication use in baseline and follow-up

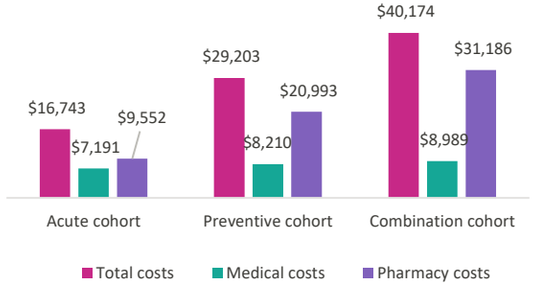

Figure 4. Distribution of Mean Total All-cause costs by Medical and Pharmacy

Conclusions

In this U.S. real-world analysis, most patients with migraine initiated acute therapy, with lower use and poorer long-term continuity of preventive and combination treatments. Healthcare costs increased with treatment complexity and were primarily driven by pharmacy spending. These findings highlight unmet needs in sustaining preventive migraine therapy and managing long-term economic burden.

References: [1]Foster SA, Chen CC, Ding Y, Mason O, McGuiness CB, Morrow P, Ye W, Wade RL, Smith TR, Joshi S. Economic burden and risk factors of migraine disease progression in the US: a retrospective analysis of a commercial payer database. J Med Econ. 2020 Nov;23(11):1356-1364