

# Migraine Rescue and Preventive Therapy Utilization before and after Initiation of CGRP-Targeted Therapies

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## Background

The FDA recently approved three calcitonin gene-related peptide-targeted (CGRP-t) therapies for migraine prophylaxis. These agents were long-awaited treatments for individuals with uncontrolled migraine. This study was designed to analyze the effectiveness of these therapies by quantifying preventive and rescue treatments before and after initiation of a CGRP-t therapy.

## Objective

Describe changes in migraine regimens before and after start of a CGRP-t therapy.

## Methods

Using a Medicaid claims database, recipients were identified for a case control study who initiated erenumab-aooe, fremanezumab-vfrm, or galcanezumab-gnlm from 05/01/2018 to 04/30/2019. Recipients were continuously eligible for six months prior to initiation of CGRP-t therapy and six months post initiation. Level A and B recommendations per treatment guidelines for migraine preventive therapy (antiepileptics, beta-blockers, antidepressants) and rescue therapy (triptans, botulinum toxin, NSAIDs, ergots, opioids, analgesics) were measured based on utilization and costs from pharmacy claims data 180 days before the index date (baseline) and 180 days following the index date (post).

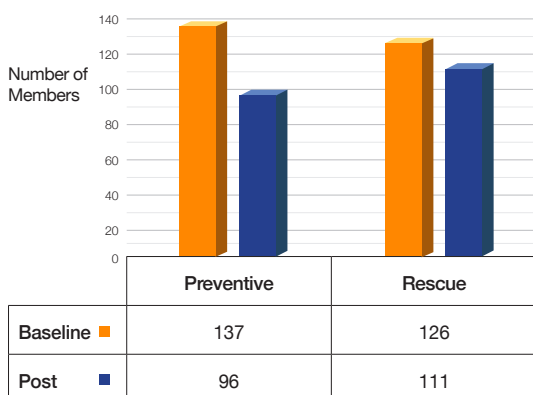
## Results

We identified 203 recipients who initiated CGRP-t therapy. Of those 203 recipients, 86.7% were female and the mean age was 42.1 years. At baseline, there were 137 recipients using preventive therapy and 126 using rescue therapy (60 recipients were on both preventive and rescue therapies). Post-index, there were 96 recipients on preventive therapies (excluding CGRPs) and 111 on rescue therapy (4 recipients were on both). Preventive therapies decreased by 16.8% from 38.8 days to 32.3 days per user per month (PUPM) from baseline (some recipients were on more than one). Rescue therapy prescriptions decreased from 0.46 to 0.35 PUPM, a reduction of 0.11 prescriptions PUPM (23.04%). Costs (amount paid for pharmacy claims) for preventive therapies decreased 11.8% (from \$107 to \$94 PUPM), and costs for rescue therapy decreased 33.8% (from \$39 to \$26 PUPM). Costs for CGRP-t therapy increased pharmacy costs by \$346 PUPM. Overall migraine medication costs increased from \$146 to \$466 PUPM (an increase of \$320 PUPM).

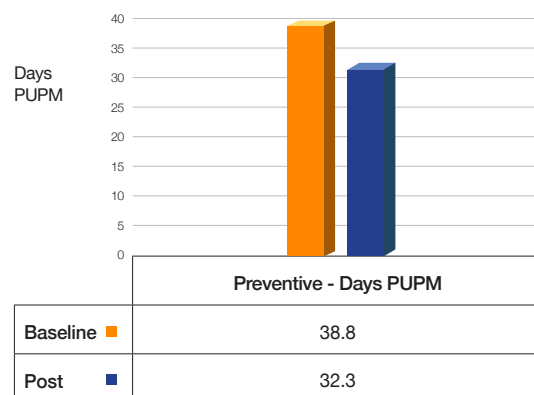
## Conclusion

Decreases in the use of non-CGRP preventive and rescue therapies was associated with initiation of CGRP-t therapy. While CGRP-t therapy increased total migraine medication costs, the decrease in the number of prescriptions for rescue therapy suggests fewer migraines requiring acute treatment post initiation of therapy.

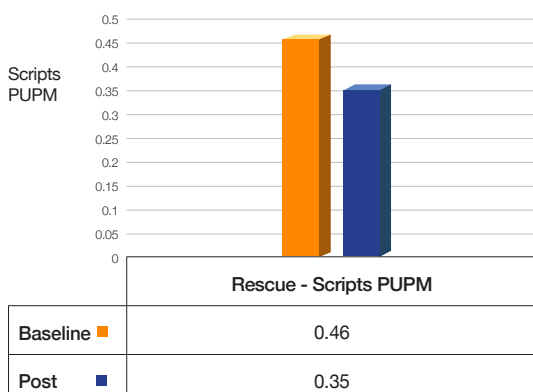
**Figure 1: Members Using Preventive and Rescue Therapy – Baseline and Post**



**Figure 2: Preventive Therapies – Change from Baseline to Post**



**Figure 3: Rescue Therapies – Change from Baseline to Post**



**Figure 4: Total Migraine Rx Costs – Per User Per Month**

