Three-year efficacy and safety of erenumab in patients with episodic migraine and 2–4 prior preventive treatment failures: Results from the LIBERTY study

**BACKGROUND**
- Erenumab and its companion drug, glecaprevir-pivodone (GEP), are two novel, oral, small-molecule drugs that target the G protein-coupled receptor 53 (GPR53) expressed on human sensory C-fiber neurons, which are the sensory input to the trigeminal nociceptive system, whose activation is a critical component in the pathogenesis of migraine.
- The efficacy and safety of erenumab for the prevention of episodic migraine have been demonstrated in multiple, placebo-controlled, randomized clinical trials in adults with episodic migraine, including in patients with a history of prior preventive treatment failures.

**METHODS**
- Study design: LIBERTY was a 3-year, randomized, double-blind, placebo-controlled, parallel-group study. Patients were treated for 1 year in an open-label extension phase (OLEP) followed by 6 months in a post-treatment access phase (PTA).
- Study outcome measures: The primary outcome measure was the percentage of patients who had ≥50% reduction in monthly migraine days (MMD) from baseline to Week 168 in the OLEP phase. Secondary outcome measures included changes from baseline in other key efficacy and safety endpoints, such as mean change from baseline in headache impact test (HIT-6) scores and the proportion of patients who achieved ≥30% and ≥75% reduction in MMD from DBTP baseline.

**RESULTS**
- **Efficacy**: The proportion of patients who had ≥50% reduction in MMD from baseline to Week 168 in the OLEP phase was 89.6% (95% CI: 85.3%–93.8%). This improvement was sustained in all treatment groups in the OLEP phase.
- **Safety**: The most common treatment-emergent adverse events (TEAEs) were headache (10.8%), injection site reaction (8.5%), nasopharyngitis (7.1%), constipation (6.7%), and nasopharyngitis (5.5%). TEAEs remained low during the open-label extension phase.

**CONCLUSIONS**
- The LIBERTY study demonstrates the long-term efficacy and tolerability of erenumab in patients with episodic migraine who have failed prior preventive treatments.
- Results from the LIBERTY study support the use of erenumab as a long-term treatment option for patients with episodic migraine who have failed prior preventive treatments.

**REFERENCES**
- Headache Impact Test (HIT-6) scores were assessed at baseline and at 164 weeks in the OLEP phase.

**ACKNOWLEDGMENTS**
- The authors thank the patients and their families for their participation in the study.

**DISCLOSURES**
- **Funding**: The study was supported by Amgen, Inc. and Novartis Pharmaceuticals Corporation.
- **Conflicts of Interest**: The authors declare no conflicts of interest.

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**Acknowledgment**
- The authors thank the patients and their families for their participation in the study.

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