Research Update | December 2024



Atogepant Works Quickly To Help Prevent Migraines

Two-thirds of all Chiari patients report suffering from migraines. Atogepant is a medication that was approved in the US for the prevention of episodic migraines in 2021 and chronic migraines in 2023. The clinical trials that supported this approval were conducted over 12 weeks and compared Atogepant at 3 different dose levels to a placebo (an inactive substance that is used as a control in a clinical trial) in reducing the mean monthly migraine days after 12 weeks.

Recently, the data collected during these trials was re-analyzed to assess how quickly Atogepant works in preventing migraines. Specifically, the researchers looked at the percentage of participants who had a migraine on the first day of observation; the reduction in average weekly migraine days for each of the first four weeks of use; and the reduction in monthly mean migraine days at the end of four weeks. They also assessed the impact on quality of life through two patient reported scales, the Activity Improvement in Migraine Diary (AIM-D) and the European Quality of Life 5 Dimension (EQ-5L).

The trials included hundreds of adults who were randomly assigned to take either Atogepant or a placebo daily. Nearly 90% of the participants were female and the majority were white. Participants who took the migraine medication were 37-61% less likely to have a migraine on Day One of observation. In addition, the Atogepant groups had around a one-day greater reduction in weekly migraine days compared to the placebo groups. This translated to roughly a 20-50% reduction in migraine days each week for the first four weeks of use.

In terms of monthly migraine days, before the trials started the participants reported a range of 7.5 - 19 migraine days per month. After four weeks, those in the medication group reported a 2-3 day greater reduction in migraine days than the placebo group. The medication group also showed significant improvements in both quality of life measures compared to the placebo group.

Interestingly, a second recent report looked at the effect that Atogepant can have on weight loss using pooled data from 5 clinical trials. Migraines and BMI are linked, with obesity increasing the chances of suffering from migraines by more than 25%. This analysis found that nearly one fourth of people who took Atogepant long-term (40 weeks or more) lost 7% or more of their initial body weight (the researchers had predetermined this amount of weight loss as being clinically significant). More research is needed to fully understand these results and the relationship between weight and migraines.

Although these results are promising, they need to be evaluated in context. Specifically, both publications were funded by the pharmaceutical company that makes Atogepant, which participated in the study designs and analyses. In addition, many of the authors of both studies have received money from the same pharmaceutical company. Research into financial conflicts of interest such as these have shown that they can have a significant impact on how results are reported which tend to overstate the effectiveness of the drug in question and understate its potential risks and side effects. However, in both cases the company has agreed to share the study data with other researchers upon request.

Sources:

Early Improvements With Atogepant for the Preventive Treatment of Migraine: Results From 3 Randomized Phase 3 Trials. Lipton RB, Gandhi P, Tassorelli C, Reuter U, Harriott AM, Holle-Lee D, Gottschalk CH, Neel B, Liu Y, Guo H, Stokes J, Nagy K, Dabruzzo B, Smith JH. Neurology. 2025 Jan 28;104(2):e210212. doi: 10.1212/WNL.0000000000210212. Epub 2024 Dec 23. PMID: 39715475

Weight loss with atogepant during the preventive treatment of migraine: A pooled analysis. Peterlin BL, Bond DS, Ailani J, Dodick DW, Liu Y, De Abreu Ferreira R, Smith JH, Dabruzzo B, Goadsby PJ, Trugman JM. Cephalalgia. 2024 Dec;44(12):3331024241299753. doi: 10.1177/03331024241299753. PMID: 39648629



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Conquer Chiari is a 501(c)(3) public charity dedicated to improving the experiences and outcomes of Chiari patients through education, awareness and research.