Efficacy and Safety of LY2951742 in a Phase IIb, randomized, double-blind, placebo-controlled, dose-ranging study.

Skljarevski V, Zhang Q, Ferguson MB, Oakes TM, Martinez JM, Johnson KW, Schacht AL, Due MR, Dodick DW

Objectives

The aim of Study I5Q-MC-CGAB (CGAB) was to confirm the efficacy and safety of LY2951742, a humanized monoclonal antibody to calcitonin gene-related peptide in the prevention of episodic migraine headache, and to inform LY2951742 dose selection for Phase 3 development.

Methods

We conducted a phase IIb, randomized, double-blind, placebo-controlled, dose-ranging study at 40 centers in the USA. Patients aged 18–65 years with 4 to 14 migraine headache days and at least 2 migraine attacks per month were randomly assigned (2:1:1:1:1) to placebo or 1 of 4 LY2951742 dose groups. Subcutaneous injections of LY2951742 doses of 5 mg, 50 mg, 120 mg, 300 mg or placebo were given once every 28 days for 12 weeks. The primary objective was to assess whether at least one dose of LY2951742 was superior to placebo in the prevention of migraine headache. Superiority was defined as a ≥95% posterior probability of greater improvement for any LY2951742 dose compared with placebo, as measured by the mean change from baseline in the number of migraine headache days in the last 28-day period of the 12-week treatment phase. Safety analysis included treatment-emergent adverse events during the 12-week treatment period. Analyses were conducted on an intent-to-treat population (all patients who were randomized and received at least one injection). This study is registered with ClinicalTrials.gov, NCT02163993.

Results

Between August 2014 and February 2015, 410 patients were randomly assigned to LY2951742 (n=273) or placebo (n=137). All 4 dose arms were numerically superior to placebo on primary outcome measure at all time points. One dose arm (120 mg) of LY2951742 met the primary objective (posterior probability 99.6%) with a significantly greater reduction compared to placebo in the number of migraine headache days ($p = 0.004$) in the last 28 day period of the 12 week treatment phase. The results will be presented. Treatment emergent adverse events that occurred in ≥ 5% of patients in any LY2951742 arm and greater than placebo included injection site pain, upper respiratory tract infection, nasopharyngitis, dysmenorrhea (in females), and nausea.

Conclusion

These results provide evidence that monthly subcutaneous injections of 120 mg of LY2951742 are safe, tolerable and efficacious in the prevention of episodic migraine, and support previous proof-of concept study findings.