

Long-term Safety, Tolerability, and Efficacy of Efgartigimod in Patients With Generalized Myasthenia Gravis: Interim Results of the ADAPT+ Study

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Objective:

Evaluate the safety, tolerability, and efficacy of efgartigimod in patients with generalized myasthenia gravis (MG) enrolled in the ADAPT+ long-term extension study.

Background:

Treatment with efgartigimod, a human IgG1 antibody Fc-fragment that blocks neonatal Fc receptor, resulted in clinically meaningful improvement (CMI) in MG-specific outcome measures in the ADAPT study. All patients who completed ADAPT were eligible to enroll in its ongoing open-label, 3-year extension study, ADAPT+.

Design/Methods:

Efgartigimod (EFG), 10 mg/kg, was administered intravenously in cycles of once-weekly infusions for 4 weeks, with subsequent cycles initiated based on predefined criteria. Efficacy was assessed during each cycle utilizing Myasthenia Gravis Activities of Daily Living (MG-ADL) and Quantitative Myasthenia Gravis (QMG) scales.

Results:

Ninety-one percent of ADAPT patients (151/167) entered ADAPT+. As of February 2021, 106 AChR-Ab+ and 33 AChR-Ab- had received at least 1 dose of open-label efgartigimod (including 66 ADAPT placebo [PBO] patients). The mean(SD) study duration was 363(114) days, resulting in 138 patient-years of observation. Similar rates of the most common adverse events (AEs) were seen in the EFG-EFG and PBO-EFG arms: headache (15.1%/30.3%), nasopharyngitis (8.2%/13.6%), and diarrhea (6.8%/10.6%). Five deaths (acute myocardial infarction, COVID-19 pneumonia/septic shock, bacterial pneumonia/MG crisis, malignant lung neoplasm, and unknown [multiple cardiovascular risk factors identified on autopsy]) occurred; none were considered related to efgartigimod by the investigator. AEs were predominantly mild or moderate. CMI was observed in AChR-Ab+ patients during each cycle (up to 10 cycles) at magnitudes comparable to improvements observed at week 3 of cycle 1 (mean[SE] improvements: MG-ADL, -5.1[0.34]; QMG, -4.7[0.41]). Clinical improvements mirrored maximal reductions in total IgG and AChR-Abs across all cycles. Similar results were observed in AChR-Ab- patients.

Conclusions:

This analysis suggests long-term treatment with efgartigimod was well-tolerated and efficacious, regardless of antibody status. Despite being conducted during the COVID-19 pandemic, before vaccine availability, no new safety signals were identified.