Poster #134

Efgartigimod Demonstrates Consistent Improvements in Generalized Myasthenia Gravis Across Patient Subgroups, Including Early in Diagnosis



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(Open-L ension)

ADA

8/27

No NSIST

11/37

Placebo

Placebo

Any NSIST

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INTRODUCTION

Efgartigimod Mechanism of Action: Blocking FcRn



SUMMARY



These data suggest that efgartigimod is an effective treatment in a broad patient population, including early in disease, and early in the treatment journey of patients with gMG



Efgartigimod was well tolerated, with most adverse events being mild or moderate in severity

METHODS

ADAPT was a 26-week, global, multicenter, randomized, double-blind, placebo-controlled, phase 3 trial evaluating the safety and efficacy of efgartigimod in patients with gMG⁴

• A post hoc analysis of data collected from AChR-Ab+ patients in ADAPT was performed in subgroups based on baseline disease factors and

- FcRn recycles IgG, extending its half-life and maintaining serum concentration¹
- Efgartigimod is a human IgG1 Fc fragment, a natural ligand of FcRn, engineered for increased affinity to FcRn^{2,3}
- Efgartigimod was designed to outcompete endogenous IgG, preventing recycling and promoting IgG lysosomal degradation without directly impacting its production²⁻⁶
- Targeted reduction of all IgG subtypes
- No impact on IgM or IgA
- No reduction in albumin levels
- No increase in cholesterol

RESULTS

ADAPT adapt Patients randomized 1:1 to receive cycles of 4 infusions at weekly intervals of 10 mg/kg IV efgartigimod or placebo⁴ **Efgartigimod n=84 Primary Endpoint: Entry criteria** • Percentage of AChR-Ab+ patients who were MG-ADL responders after • MGFA class II, III, IV cycle 1, **defined by a ≥2-point reduction from cycle 1 baseline score** AChR-Ab positive or negative Placebo n=83 **for ≥4 consecutive weeks**, with the first decrease occurring ≤1 week N=151 • MG-ADL score \geq 5 (>50% nonocular) after last study drug infusion 26 weeks (≤3 cycles^b) \succ • On ≥1 stable gMG treatment^a **Key Secondary Endpoint Initiation of new treatment cycle:** • Percentage of AChR-Ab+ patients who were **QMG responders** after • IgG ≥6 g/L cycle 1, **defined by a ≥3-point reduction from cycle 1 baseline score** • ≥5 weeks between cycles for \geq 4 consecutive weeks, with the first decrease occurring \leq 1 week • MG-ADL score $\geq 5^{\circ}$ after last study drug infusion • MG-ADL score within 2 points of baseline

Note: Beige rectangles within arrow indicates day of efgartigimod infusion. AChR-Ab, acetylcholine receptor antibody; gMG, generalized myasthenia gravis; IgG, immunoglobulin G; IV, intravenous; gMG, generalized myasthenia gravis; MG-ADL, Myasthenia Gravis Activities of Daily Living; MGFA, Myasthenia Gravis Foundation of America; QMG, Quantitative Myasthenia Gravis. ^aAcetylcholinesterase inhibitor, steroid +/or nonsteroidal immunosuppressive therapy. Patients could not change concomitant therapies in ADAPT. ^b <3 cycles dosed at ≥8 weeks after initial cycle. ^cWith >50% from nonocular items.

Table 1. Baseline Characteristics AChR-Ab+ Patients

	Efgartigimod (n=65)	Placebo (n=64)
Age, mean, y (SD)	44.7 (15.0)	49.2 (15.5)
Sex, female, n (%)	46 (70.8)	40 (62.5)
Time since diagnosis, mean, y (SD)	9.68 (8.3)	8.93 (8.2)
MG-ADL score, mean (SD)	9.0 (2.5)	8.6 (2.1)
QMG score, mean (SD)	16.0 (5.1)	15.2 (4.4)
MGFA class at screening, n (%)		
Class II	28 (43.1)	25 (39.1)
Class III	35 (53.8)	36 (56.3)
Class IV	2 (3.1)	3 (4.7)
Prior treatment with NSIST , n (%)	47 (72.3)	43 (67.2)
MG therapies at baseline, n (%)		
Any NSIST	40 (61.5)	37 (57.8)
Any steroid	46 (70.8)	51 (79.7)
Steroid and NSIST	34 (52.3)	31 (48.4)
AChEI only	13 (20.0)	6 (9.4)

Figure 1. Proportion of MG-ADL and QMG Responders by Disease Duration AChR-Ab+ Patients, Cycle 1



Figure 2. Proportion of MG-ADL and QMG Responders by Concomitant Therapies AChR-Ab+ Patients, Cycle 1



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Efgartigimod

No steroid

concomitant gMG therapies

Table 2. Safety Data, Overall Population



Figure 3. Proportion of MG-ADL and QMG Responders by Prior Therapies AChR-Ab+ Patients, Cycle 1





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Any steroid

QMG responders

AChEl only

Figure 4. Proportion of MG-ADL and QMG Responders Among Patients Without Prior Treatment Failures^a AChR-Ab+, Cycles 1 and 2



	Efgartigimod (n=84)	Placebo (n=83)
AEs, ^a n (%)	65 (77.4)	70 (84.3)
SAEs, n (%)	4 (4.8)	7 (8.4)
Discontinued due to AEs, ^b n (%)	3 (3.6)	3 (3.6)

^aMost AEs were mild to moderate in severity. ^bPatients treated with efgartigimod: gMG worsening, rectal adenocarcinoma, thrombocytosis (determined to be unlikely related to efgartigimod by the investigator); patients treated with placebo: myocardial ischemia, atrial fibrillation, spinal ligament ossification.





^aPrior exposure to ≤2 immunosuppressive therapies, and not requiring PLEX or IVIg multiple times in the preceding year.

ABBREVIATIONS

AChEI, acetylcholinesterase inhibitor; AChR-Ab+, acetylcholine receptor antibody seropositive; AE, adverse event; FcRn, neonatal Fc receptor; Ig, immunoglobulin; IVIg, intravenous immunoglobulin; MG-ADL, Myasthenia Gravis Activities of Daily Living; NSIST, nonsteroidal immunosuppressive therapy; PLEX, plasma exchange; QMG, Quantitative Myasthenia Gravis; SAE, serious adverse event.

REFERENCES

1. Sesarman A, et al. Cell Mol Life Sci. 2010;67(15):2533-2550. 2. Ulrichts P, et al. J Clin Invest. 2018;128(10):1283-1288. 4. Howard JF Jr, et al. Lancet Neurol. 2021;20(7):526-536. 5. Nixon AE, et al. Front Immunol. 2015;6:176. 6. Ward ES, et al. Front Immunol. 2022;13:892534.

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