

Fixed Cycle and Every-Other-Week Dosing of Intravenous Efgartigimod for Generalized Myasthenia Gravis: Part A of ADAPT NXT

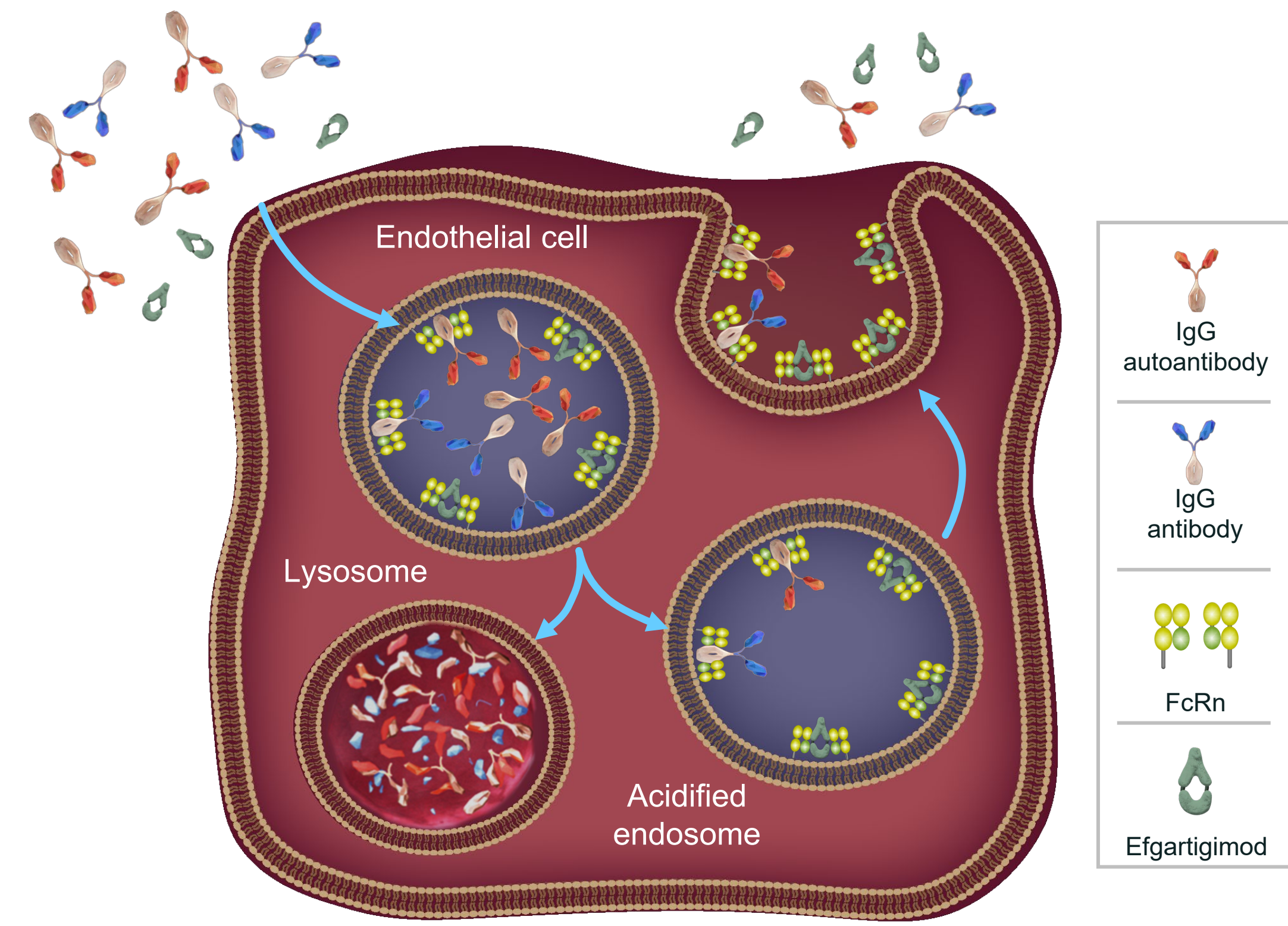
Kelly Gwathmey,¹ Ali A. Habib,² Kristl G. Claeys,^{3,4} Vera Brill,^{5,6} Yessar Hussain,⁷ Gregory Sahagian,⁸ Elena Cortés-Vicente,^{9,10} Edward Brauer,¹¹ Deborah Gelinis,¹¹ Anne Sumbul,¹¹ Rosa H. Jimenez,¹¹ Daniela Hristova,¹¹ Delphine Masschaele,¹¹ Renato Mantegazza,¹² Andreas Meisel,¹³ Shahram Attarian¹⁴ and the ADAPT NXT Study Group

¹Department of Neurology, Virginia Commonwealth University, Richmond, Virginia, USA; ²Department of Neurology, University of California, Irvine, Irvine, California, USA; ³Department of Neurology, University Hospitals Leuven, Leuven, Belgium; ⁴Laboratory for Muscle Diseases and Neuropathies, KU Leuven, Leuven, Belgium; ⁵Ellen & Martin Prosserman Centre for Neuromuscular Diseases, University Health Network, Toronto, Ontario, Canada; ⁶University of Toronto, Toronto, Ontario, Canada; ⁷Austin Neuromuscular Center, Austin, Texas, USA; ⁸The Neurology Center of Southern California, Carlsbad, California, USA; ⁹Neuromuscular Diseases Unit, Department of Neurology, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain; ¹⁰Biomedical Research Institute Sant Pau, Barcelona, Spain; ¹¹argenx, Ghent, Belgium; ¹²Department of Neuroimmunology and Neuromuscular Diseases, Fondazione IRCCS Istituto Neurologico Carlo Besta, Milan, Italy; ¹³Department of Neurology and Neuroscience Clinical Research Center, Charité – Universitätsmedizin Berlin, Berlin, Germany; ¹⁴Reference Center for Neuromuscular Disorders and ALS, Timone Hospital University, Marseille, France



INTRODUCTION

Efgartigimod Mechanism of Action: Blocking FcRn



- FcRn recycles IgG antibodies and albumin. This recycling and salvage from lysosomal degradation results in IgG antibodies having the longest half-life and being the most abundant of all immunoglobulins¹⁻³
- Blocking FcRn to selectively reduce IgG levels is therefore a rational therapeutic approach in patients with IgG-mediated autoimmune diseases^{1,2}
- Efgartigimod is an IgG1 antibody Fc fragment that has been engineered for increased affinity to FcRn, and is uniquely composed of the only part of the IgG antibody that normally binds FcRn¹
- Efgartigimod selectively reduces IgG by blocking FcRn-mediated IgG recycling without impacting antibody production, albumin levels, or other parts of the immune system^{1,4,5}
- Efgartigimod prevents IgG recycling by blocking IgG antibodies from binding to FcRn, with unbound IgG antibodies being degraded^{1,4}

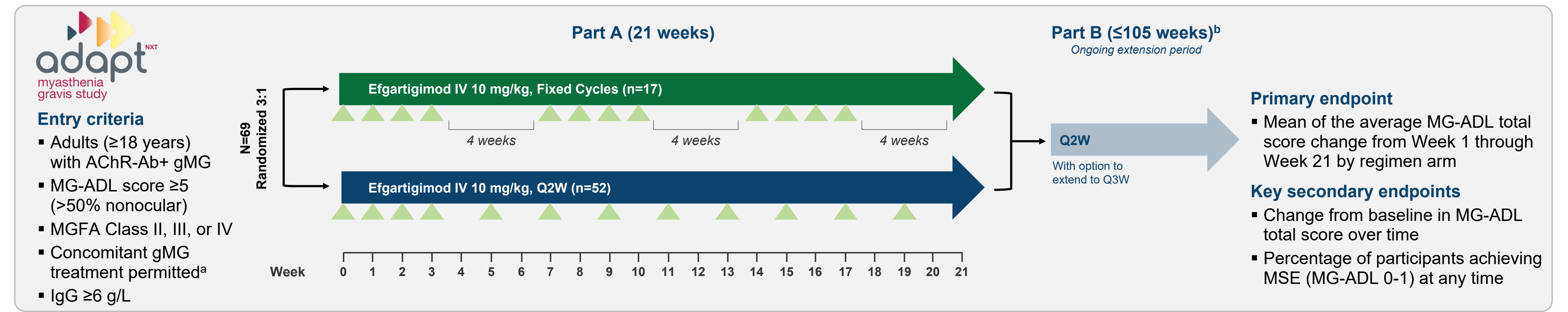
SUMMARY

- Both Fixed Cycles and Q2W dosing resulted in similar clinically meaningful improvements in MG-ADL scores that were maintained through 21 weeks
- Clinical improvements were observed as early as Week 1 in both groups
- MSE was achieved in 47.1% and 44.2% of patients receiving Fixed Cycles and Q2W dosing, respectively
- Efgartigimod was well tolerated across both dosing regimens
- ADAPT-NXT provides data on further options to individualize efgartigimod treatment for the treatment of gMG

METHODS

ADAPT NXT is a phase 3B, randomized, open-label, parallel-group study designed to evaluate 2 dosing regimens of efgartigimod IV to maximize and maintain clinical benefit in participants with gMG

- Both study arms initially receive 1 cycle of 4 once-weekly infusions. Subsequently, the Fixed Cycles arm receives 3 cycles of 4 once-weekly infusions (with 4 weeks between cycles), and the Q2W arm receives infusions once every other week



Note: Green triangles indicate efgartigimod infusion. *Including NSISTS, corticosteroids, and/or AChEIs. If receiving corticosteroids and/or NSISTS, must be on a stable dose for ≥1 month prior to screening. ⁵All participants entering Part B will be transitioned to Q2W with the option to extend to Q3W dosing; patients in Fixed Cycle arm will receive another cycle before transitioning to Q2W dosing.

RESULTS

Table 1. ADAPT NXT Baseline Demographics and Clinical Characteristics Safety Analysis Set

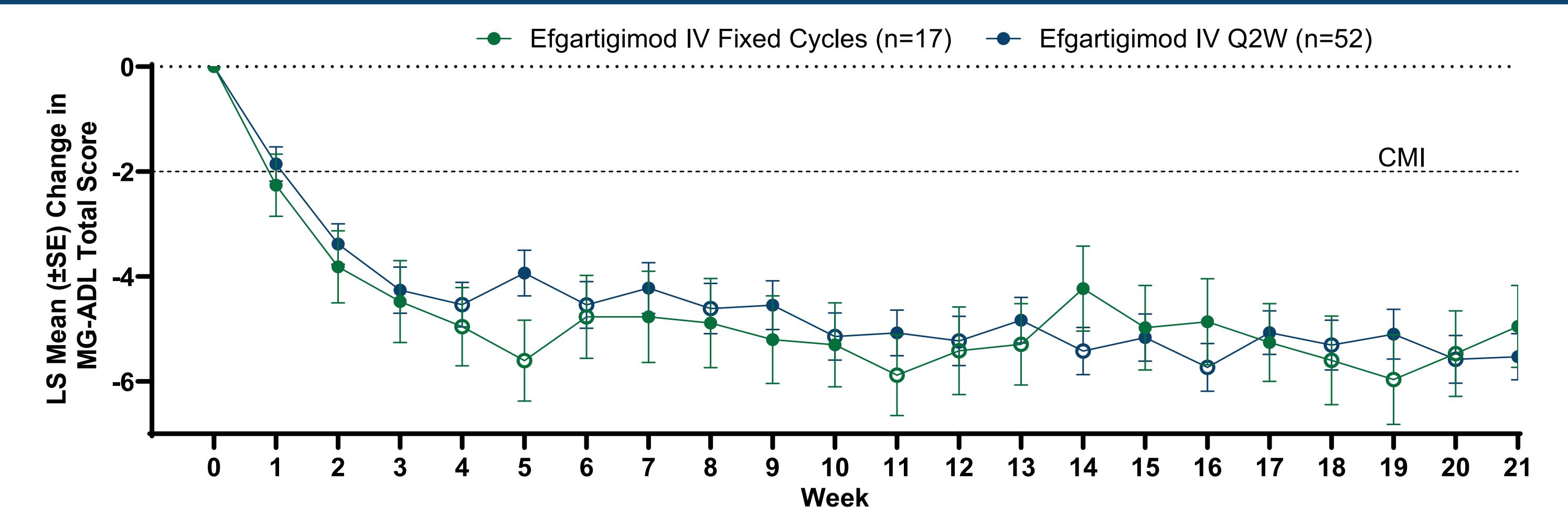
	Efgartigimod IV Fixed Cycles (n=17)	Efgartigimod IV Q2W (n=52)
Age, years, mean (SD)	52.4 (16.1)	57.1 (16.5)
Age ≥65 years, n (%)	5 (29.4)	20 (38.5)
Sex, female, n (%)	9 (52.9)	34 (65.4)
Time since diagnosis, y, mean (SD)	7.4 (6.6)	6.9 (7.3)
MGFA classification at screening, n (%)		
Class II	6 (35.3)	17 (32.7)
Class III	11 (64.7)	33 (63.5)
Class IV	0	2 (3.8)
Total MG-ADL score, mean (SD)	8.1 (2.2)	9.8 (3.3)
Total MG-ADL categorization, n (%)		
5-12	17 (100.0)	39 (75.0)
>12	0	13 (25.0)
Total MG-QoL15r score, mean (SD)	14.3 (5.6)	17.7 (6.1)
Baseline MG therapy, n (%)		
Any steroid	10 (58.8)	30 (57.7)
Any NSIST	8 (47.1)	19 (36.5)
Any AChEI	12 (70.6)	49 (94.2)
AChEI only	0 (0)	17 (32.7)

Table 2. ANCOVA^a Analysis of Primary Endpoint: Mean of the Average MG-ADL Total Score Change From Baseline During Weeks 1-21

	Efgartigimod IV Fixed Cycles		Efgartigimod IV Q2W		Efgartigimod IV Fixed Cycles vs Q2W
	n	LS mean (95% CI)	n	LS mean (95% CI)	LS estimate (95% CI)
mITT analysis set	17	-5.13 (-6.499; -3.767)	52	-4.61 (-5.383; -3.845)	-0.52 (-2.104; 1.067)

^aThe ANCOVA model includes the treatment arm as a factor and the baseline MG-ADL total score as a covariate.

Figure 1. LS Mean Changes From Baseline in MG-ADL Total Score (Week 1-21)^{a,b}



^aSolid data points indicate weeks in which efgartigimod was administered and open data points indicate weeks in which efgartigimod was not administered in each respective dosing regimen. ^bMixed model for repeated measurements with treatment, visit and treatment by visit interaction as fixed effects, and baseline total MG-ADL score as covariate.

Table 3. Summary of TEAEs Safety Analysis Set

	Efgartigimod IV Fixed Cycles (n=17, PYFU=6.9)			Efgartigimod IV Q2W (n=52, PYFU=20.9)			Efgartigimod IV Total population (N=69, PYFU=27.8)		
	n	%	ER ^b	n	%	ER ^b	n	%	ER ^b
TEAE	16	94.1	12.0	43	82.7	10.1	59	85.5	10.6
Serious TEAE	1	5.9	0.4	7	13.5	0.3	8	11.6	0.4
Grade ≥3 TEAE	3	17.6	1.3	7	13.5	0.4	10	14.5	0.6
Fatal TEAE	0	-	-	0	-	-	0	-	-
Discontinued due to TEAEs	0	-	-	1	1.9	<0.1	1	1.4	<0.1
Most frequent TEAEs ^a									
COVID-19	2	11.8	0.3	11	21.2	0.5	13	18.8	0.5
Headache	5	29.4	1.2	8	15.4	0.6	13	18.8	0.8
Upper respiratory tract infection	2	11.8	0.4	5	9.6	0.4	7	10.1	0.4

^aReported by ≥10% of total participants. ^bER was calculated as number of events/PYFU.

Figure 2. Proportion of Participants With Increasing MG-ADL Thresholds (Week 1-21)

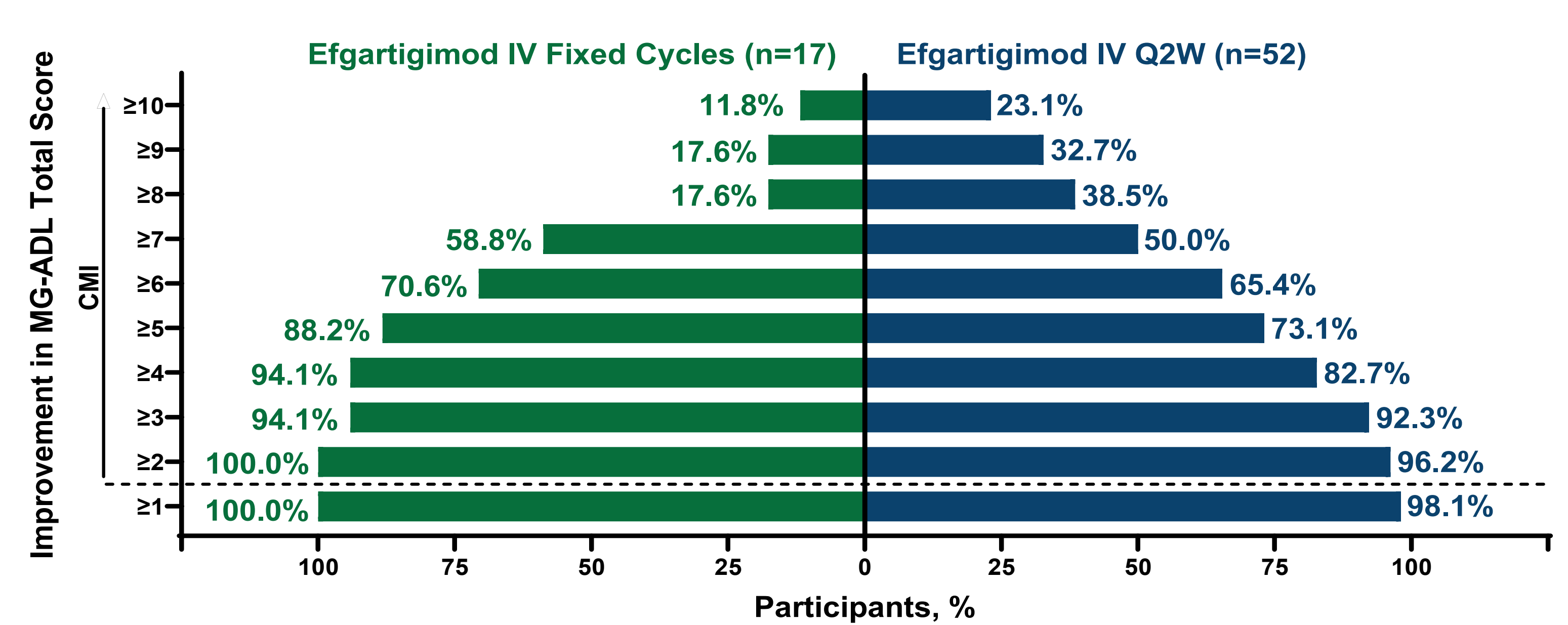


Figure 3. Percentage of Participants Achieving MSE (MG-ADL 0-1; Week 1-21)

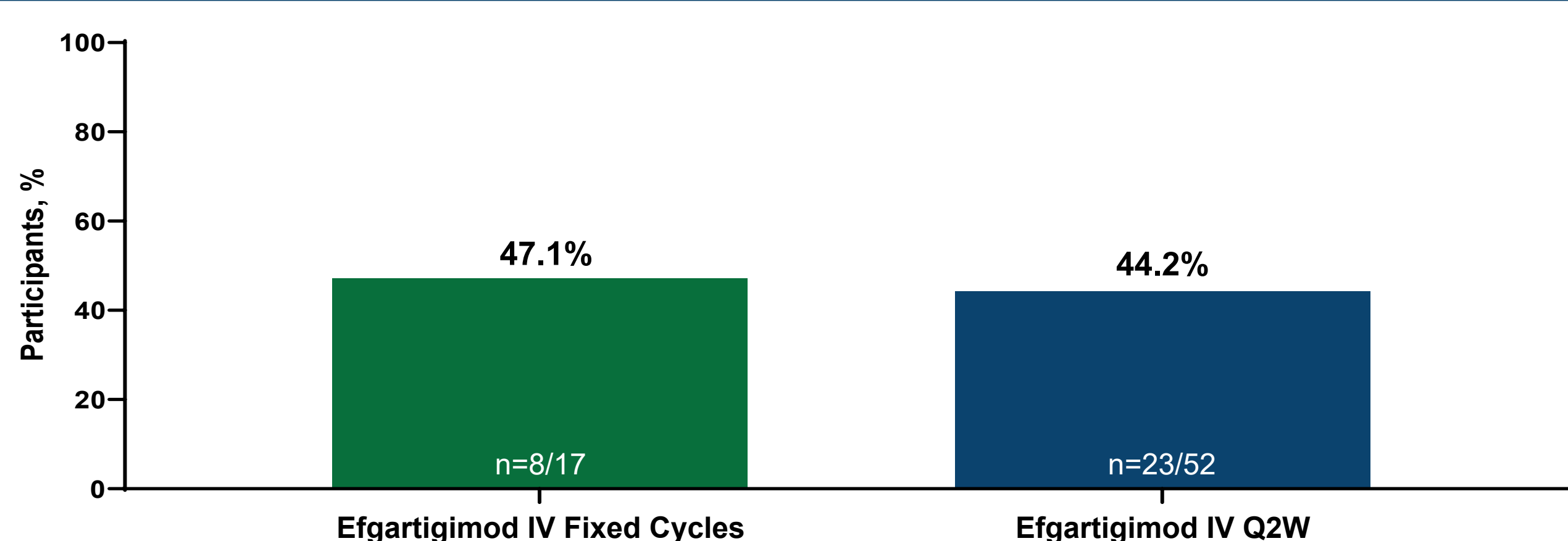


Table 4. Percentage of Participants Achieving MSE (MG-ADL 0-1) by Study Interval^a

Interval	Efgartigimod IV Fixed Cycles		Efgartigimod IV Q2W	
	n	MSE, n (%)	n	MSE, n (%)
Week 1 – Week 7	17	8 (47.1)	52	14 (26.9)
Week 8 – Week 14	16	7 (43.8)	52	18 (34.6)
Week 15 – Week 21	16	5 (31.3)	49	19 (38.8)
Week 8 – Week 21	16	7 (43.8)	52	22 (42.3)
Week 1 – Week 21	17	8 (47.1)	52	23 (44.2)

^aA participant is reported as achieving MSE if an MG-ADL score of 0 or 1 was observed at least once during the interval.

ABBREVIATIONS: AChEi, acetylcholinesterase inhibitor; AChR-Ab+, acetylcholine receptor antibody positive; ANCOVA, analysis of covariance; CMI, clinically meaningful improvement; ER, event rate; Fc, fragment crystallizable region; FcRn, neonatal Fc receptor; gMG, generalized myasthenia gravis; Ig, immunoglobulin; IV, intravenous; LS, least squares; MG, myasthenia gravis; MG-ADL, Myasthenia Gravis Activities of Daily Living; MGFA, Myasthenia Gravis Foundation of America; MG-QoL15r, Myasthenia Gravis Quality of Life 15-Item Questionnaire, Revised; mITT, modified intent-to-treat; MSE, minimal symptom expression; NSIST, nonsteroidal immunosuppressive therapy; PYFU, participant years of follow-up; Q2W, every other week; Q3W, every third week; TEAE, treatment-emergent adverse event.

REFERENCES: 1. Ulrichs P, et al. *J Clin Invest*. 2018;128:4372-4386. 2. Ward ES, Ober RJ. *Trends Pharmacol Sci*. 2018;39:892-904. 3. Vidarsson G, et al. *Front Immunol*. 2014;5:520. 4. Howard JF Jr, et al. *Lancet Neurol*. 2021;20:526-536. 5. Gupta JT, et al. *Autoimmunity*. 2022;55:620-631.

ACKNOWLEDGMENTS AND DISCLOSURES: The authors gratefully acknowledge the ADAPT NXT trial participants and investigators. KS: Alexion, argenx, Strongbridge, and UCB. AAH: argenx, Alexion, Viallabio, UCB, Genentech, Regeneron, and Sanofi. KGC: Alnylam, Amicus, Biogen, CSL Behring, Ipsen, Janssen, Lupin, Pfizer, Roche, Sanofi-Genzyme, and UCB. VB: AZ-Alexion, Grifols, CSL, UCB, argenx, Takeda, Octapharma, Akcea, Momenta (J&J), Immunovant, Ionis, and Vial. YH: no disclosures. GS: Alexion, argenx, UCB, Immunovant, and Biogen. EG-V: argenx, UCB, Alexion, and Janssen. EB, DG, AS, RH, DH, and DM: argenx. RM: Alexion, argenx, Ra, BioMarin, Catalist, UCB, Teva, Merck, Roche, and Biogen. AM: Alexion, argenx, Grifols, SA, Hormosan Pharma, UCB, Janssen, Merck, Octapharma, and the German Myasthenia Gravis Society. SA: Alexion, argenx, Sanofi, LFB, UCB, Janssen, Pfizer, and Biogen. The ADAPT NXT trial was funded by argenx. Medical writing and editorial support for this presentation was provided by Precision AQ and funded by argenx.

