

Safety and Tolerability of a Modified Ublituximab Dosing Regimen: Updates from the ENHANCE Study

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Background

- Ublituximab is a novel monoclonal antibody that targets a unique epitope of CD20 and is glycoengineered for enhanced antibody-dependent cellular cytotoxicity (ADCC)¹ and enhanced Fcγ-receptor (FcγR) binding relative to all other currently approved anti-CD20 therapies in multiple sclerosis (MS).^{1,2,3}
- Ublituximab is approved for adults with relapsing forms of multiple sclerosis (RMS) with an administration schedule of 150 mg dose on Day 1 followed by 450 mg doses on Day 15, Week 24, and subsequently every 24 weeks.⁴
- It has been previously shown that consolidating Day 1 (150 mg) and Day 15 (450 mg) infusions into a single 600 mg dose was well-tolerated.⁵
- 600 mg infusions resulted in high levels of patient satisfaction on the dimensions of convenience and ease of use.⁵

1. Steinman L, et al. N Engl J Med. 2022;387(8):704-714

2. Cree BAC, et al. Presented at 2024 ECTRIMS Meeting, September 18-20, 2024, Copenhagen, DK P324

3. Babiker HM, et al. Expert Opin Investig Drugs. 2018;27(4):407-412.

4. BRIUMVI® (ublituximab-xiiy) Prescribing Information. TG Therapeutics, Inc. 2026.

5. Singer B, et al. Presented at 2025 ECTRIMS Meeting, September 24-26, 2025, Barcelona, Spain



Methods

- ENHANCE is a multi-center, open-label, 48-week study in participants with RMS evaluating modified dosing regimens for ublituximab.
- Participants received a consolidated 600 mg ublituximab infusion on Day 1, followed by a 450 mg infusion on Week 24. Recommended premedications included a non-drowsy antihistamine, corticosteroid, and antipyretic at each infusion.
- The Treatment Satisfaction Questionnaire for Medication (TSQM)-9 was administered at Weeks 24 and 48.
- The study is ongoing, now actively enrolling participants with RMS who are transitioning from other anti-CD20 therapies due to a suboptimal experience.
- Data is provided herein on all participants who transitioned from ocrelizumab and received an initial ublituximab infusion of 600 mg (N=106).



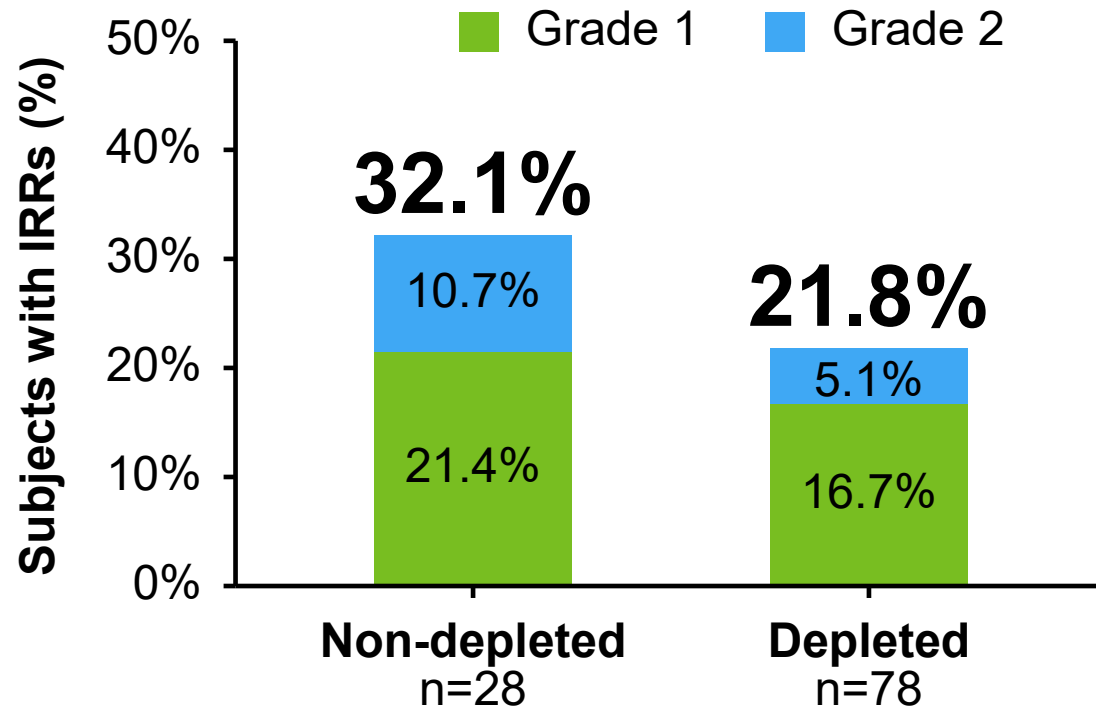
Table 1. Participants Who Switched from Ocrelizumab

B-cell Depletion Status	Non-depleted (≥10 cells/μL) n = 28	Depleted (<10 cells/μL) n = 78	Overall N = 106
B-cell Count, median (IQR)	68 (27, 166)	1 (0, 1)	1 (0, 13)
BMI (kg/m ²), median (IQR)	34 (31, 41)	29 (25, 35)	32 (25, 36)
Race, n (%)			
White	18 (64%)	67 (86%)	85 (80%)
Black or African American	8 (29%)	8 (10%)	16 (15%)
Other	1 (3.6%)	2 (2.6%)	3 (2.8%)
American Indian or Alaska Native	1 (3.6%)	1 (1.3%)	2 (1.9%)
Age, years, median (IQR)	43 (33, 53)	47 (40, 55)	45 (39, 55)
Relapses in prior 2 years, median (IQR)	0 (0, 0)	0 (0, 0)	0 (0, 0)
# of prior anti-CD20 infusions, median (IQR)	6 (4, 9)	9 (6, 13)	9 (5, 12)
Years of prior anti-CD20 treatment, median (IQR)	2.0 (1.3, 3.6)	4.5 (2.7, 6.2)	3.8 (2.1, 5.9)
Months since last anti-CD20 dose, median (IQR)	9 (6, 12)	6 (6, 7)	6 (6, 7)
Duration of last anti-CD20 infusion (minutes), median (IQR)	150 (122, 210)	132 (120, 240)	135 (120, 228)
Experienced wearing-off on prior anti-CD20, n (%)	8 (29%)	52 (67%)	60 (57%)

- A greater proportion of participants with B cells ≥10 cells/μL at baseline were Black or African American, had a higher body mass index (BMI), and were younger compared to those who were B-cell depleted (<10 cells/μL) at baseline.



Figure 1. IRRs Associated with Initial 600 mg Ublituximab Doses Among Ocrelizumab Switches



- IRR Symptoms Reported in >1 Participant
 - Throat Irritation 8.5%
 - Headache 4.7%
 - Fatigue 2.8%
 - Nausea 1.9%
- 92% of infusions were completed without interruption or slowing.
- IRRs were generally self-limiting; 10% received supportive medication for IRRs, primarily diphenhydramine.
- All IRRs resolved completely.



Figure 2. B-Cell Distribution in Ocrelizumab Participants Who Were Not Depleted Upon Initiating Ublituximab

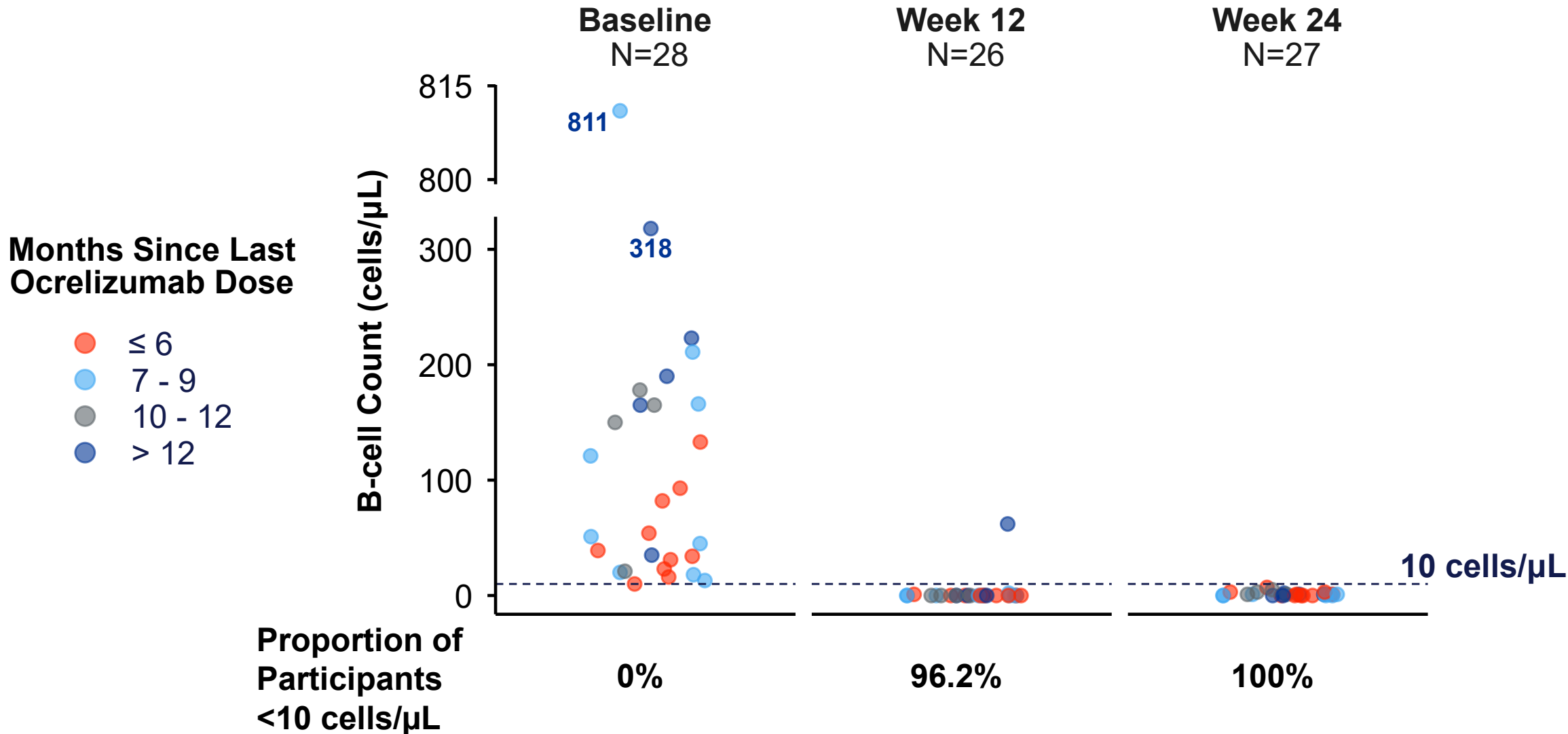


Figure 3. TSQM-9 Evaluation of Convenience Among Ocrelizumab-Switches at Week 24

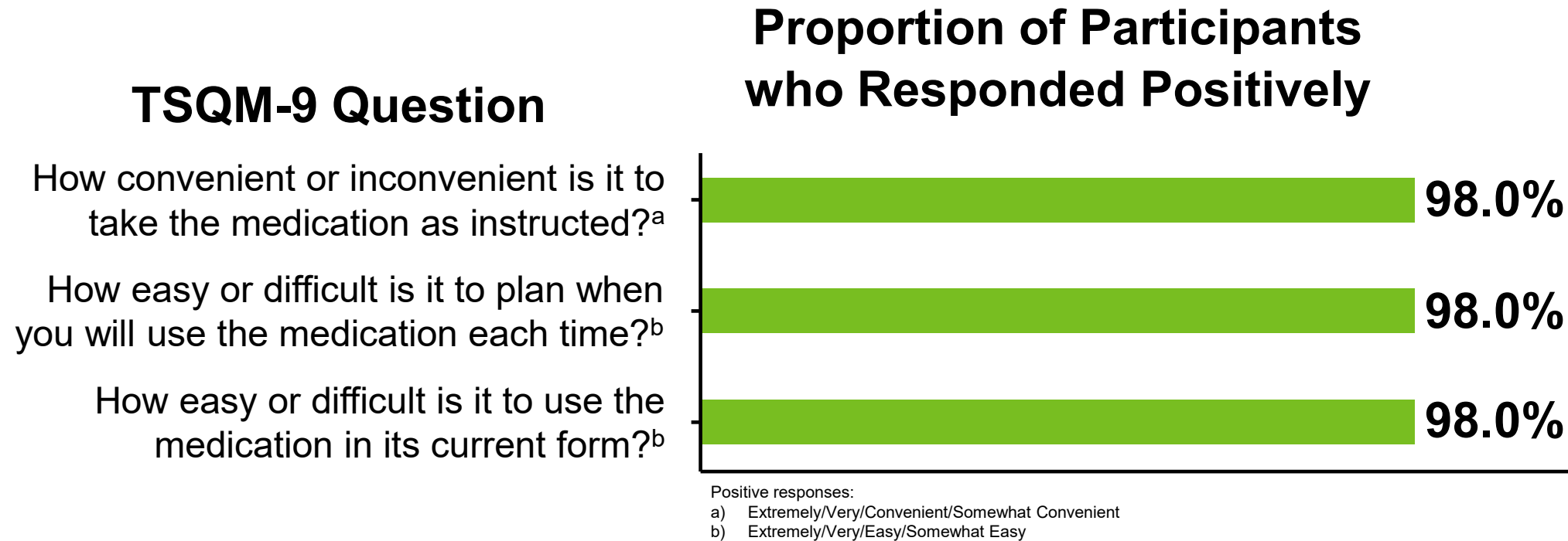
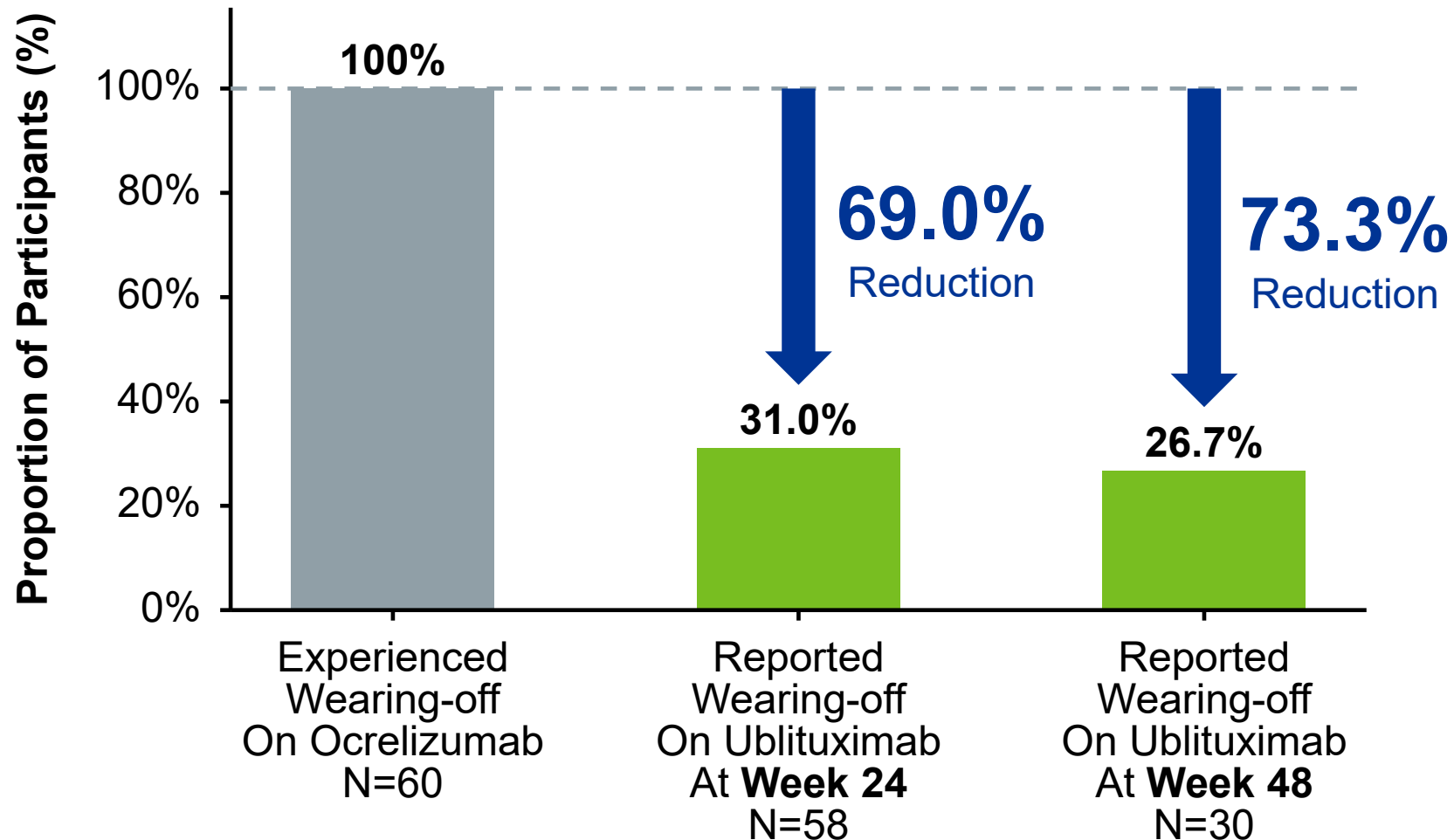


Figure 4. Ublituximab Reduces Wearing-Off Effect Among Participants Who Previously Complained of Wearing-Off



Week 24 and Week 48 data reflect participants for whom wearing-off data was available as of data cutoff



Conclusions

- Switching from ocrelizumab to ublituximab with a single 600 mg dose was well-tolerated regardless of B-cell depletion status at the time of switch.
- 600 mg infusions resulted in high levels of patient satisfaction on the dimensions of convenience and ease of use among ocrelizumab switches.
- Ublituximab demonstrated improved B-cell depletion among participants who transitioned from ocrelizumab in a non-depleted state.
- Ublituximab reduced wearing-off effect after a single infusion and maintained reduction in wearing-off after a full year.
- A randomized, double-blind comparison of 600 mg infusions versus approved regimen is fully enrolled.



References

1. Steinman L, et al. N Engl J Med. 2022;387(8):704-714
2. Cree BAC, et al. Presented at 2024 ECTRIMS Meeting, September 18-20, 2024, Copenhagen, DK P324
3. Babiker HM, et al. Expert Opin Investig Drugs. 2018;27(4):407-412
4. BRIUMVI® (ublituximab-xiyy) Prescribing Information. TG Therapeutics, Inc. 2026
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