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The patient impact of 10 years of ocrelizumab treatment in multiple sclerosis: long-term data from the Phase III OPERA and ORATORIO studies

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Introduction:

Preserving patient function by optimally slowing disease progression is the key treatment goal across the multiple sclerosis (MS) continuum. Understanding the long-term impact on patients of ocrelizumab (OCR), the only high-efficacy anti-CD20 monoclonal antibody therapy approved for the treatment of relapsing and primary-progressive MS (RMS/PPMS), is now possible in the context of a decade of OCR experience.

Objectives/Aims:

To assess the long-term impact of** OCR on disability accumulation in patients with (pw) RMS and PPMS.

Methods:

Patients randomised to receive OCR or comparator (interferon [IFN] β-1a in OPERA I/II [NCT01247324/NCT01412333]; placebo [PBO] in ORATORIO [NCT01194570]) either continued OCR (OCR–OCR) or switched from comparator to OCR (IFN–OCR; PBO–OCR) on entering the open-label extension (OLE) studies, and into the combined OLE roll-over study (OLERO; NCT05269004). Disability accumulation (time to 48-week confirmed disability progression [48W-CDP] on Expanded Disability Status Scale [EDSS] and composite CDP [cCDP: 48W-CDP–EDSS, or ≥20% increases in Timed 25-Foot Walk or Nine-Hole Peg Test), repeated-EDSS-progression event rates and reaching key disability milestones (requiring a walking aid [EDSS ≥6] or wheelchair [EDSS ≥7]) were analysed up to Week 528.

Results:

After 10 years, three-quarters (76.6%; 95% CI: 73.2–79.9) of pwRMS on OCR-OCR were free from 48W-CDP–EDSS events, and 92% (91.9%; 95% CI: 89.7–94.1) did not need a walking aid; the risk of reaching either was significantly lower in pwRMS initiating OCR earlier vs delayed treatment (HR, CI: 0.77, 0.61–0.96; p=0.0183; 0.58, 0.41–0.84; p=0.003). In pwPPMS on OCR–OCR, after 10 years, 36.4% (95% CI: 31.5–41.3) and 18.6% (95% CI: 14.8–22.4) were free from 48W-CDP–EDSS and 48W-cCDP events respectively, while most (80.4%; 95% CI: 76.1–84.7) did not need a wheelchair; the risk of reaching each was lower in pwPPMS initiating OCR earlier vs delayed treatment (HR, CI: 0.74, 0.61–0.91; p=0.0041; 0.78, 0.65–0.93; p=0.0064; 0.70, 0.48–1.03; p=0.0708). The annualised, repeated 48W-CDP–EDSS event rate, averaged over 10 years in pwRMS (events/year: OCR–OCR 0.029; IFN–OCR 0.040), infers patients who had an event would, on average, be expected to be progression free for the next 34.5 and 25.0 years respectively; in pwPPMS this was 8.3 years (events/year: OCR–OCR 0.12).

Conclusion:

The notable impact of a decade of OCR treatment in reducing disability accumulation reinforces the role of early treatment in preserving patient function across the MS spectrum.

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