

PR1082

## Comparative Clinical Efficacy of Alemtuzumab and Ocrelizumab in Patients With Relapsing-Remitting Multiple Sclerosis: Number Needed to Treat Analyses

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Abstract

### Background and aims:

In absence of head-to-head trials, number needed to treat (NNT) can be used to indirectly assess comparative efficacy.

### Methods:

Post hoc NNT analyses compared alemtuzumab 12 mg/day (baseline: 5 days; 12 months later: 3 days) and ocrelizumab (600 mg every 6 months). Alemtuzumab: CAMMS223/CARE-MS I pooled (NCT00050778/NCT00530348, N=786; treatment-naive patients) and CARE-MS II (NCT00548405, N=628; patients with inadequate response to prior therapy). Ocrelizumab: OPERA I and II (NCT01247324, N=821; NCT01412333, N=835). NNT was based on inverse of absolute risk differences versus SC IFNB-1a 44 µg 3x/wk (common comparator) for annualised relapse rate (ARR) and clinical disease activity (CDA; proportion with relapses or 6-month confirmed disability worsening [CDW]), and the Altman method for CDW. Lower NNT reflects greater efficacy.

### Results:

Baseline mean EDSS scores (CAMMS223/CARE-MS I: 2.0; CARE-MS II: 2.7; OPERA I: 2.9; OPERA II: 2.8) and MS duration (CAMMS223/CARE-MS I: 1.9 years; CARE-MS II: 4.5 years; OPERA I and II: 6.7 years each) varied. Alemtuzumab and ocrelizumab significantly reduced ARR and CDW versus SC IFNB-1a. NNTs versus SC IFNB-1a were lower with alemtuzumab than ocrelizumab to prevent 1 relapse (CAMMS223/CARE-MS I: 5; CARE-MS II: 4; OPERA I/II: 8 each), CDW in 1 patient (CAMMS223/CARE-MS I: 15; CARE-MS II: 13; OPERA I: 23; OPERA II: 21), and CDA in 1 patient (CAMMS223/CARE-MS I: 5; CARE-MS II: 6; OPERA I/II: 8 each).

### Conclusion:

Two-year analyses show fewer patients required treatment with alemtuzumab than ocrelizumab to prevent clinical events in SC IFNB-1a comparator studies. Further clinical experience will help confirm these findings.

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