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IN THE NEWS

OCRELIZUMAB EXCITES ECTRIMS

Ocrelizumab, a humanized monoclonal antibody that depletes $CD20^+$ B cells, looks set to transform treatment of both relapsing–remitting and progressive multiple sclerosis (MS), following success in three phase III trials that were presented at the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS) congress in October.

The efficacy of ocrelizumab in relapsing–remitting MS was tested in the identical OPERA I and II trials, in which ocrelizumab was compared with IFN-β1a. Treatment was administered in 24-week cycles to 1,656 patients with active disease and gadolinium-enhancing lesions. Over 2 years, the relapse rate was ~47% lower in patients treated with ocrelizumab than in patients treated with IFN-β1a. Ocrelizumab also reduced the risk of confirmed disability progression by 40% after 12 and 24 weeks of treatment. Furthermore, patients treated with ocrelizumab had 95% fewer gadolinium-enhancing lesions than did patients treated with IFN-β1a.

The late-breaking ORATORIO phase III trial assessed the efficacy and safety of ocrelizumab in the treatment of progressive MS in 732 patients. The therapy was compared with a placebo, and the efficacy was assessed with the primary end point of confirmed disability progression after 12 weeks of treatment. Secondary end points included confirmed disability progression after 24 weeks of treatment, a timed walk, T2-weighted lesion volume, and total brain volume.

Patients who were treated with ocrelizumab had a 24% lower risk of confirmed disability progression after 12 weeks, and a 25% lower risk after 24 weeks than did patients who were treated with the placebo. Ocrelizumab treatment also resulted in a 29% reduction in walking time. At 120 weeks, T2-weighted lesion volumes in patients who received ocrelizumab were 3.4% lower than at baseline, and brain volume loss in these patients was 17.5% lower than in patients who received the placebo.

All three trials demonstrate the safety of ocrelizumab, with similar rates of serious adverse events in treatment and control groups. Subgroup analysis will provide further insight when the ORATORIO trial results are published, but the initial announcement indicates that ocrelizumab will offer a new benchmark for the treatment of progressive disease, as well as relapsing–remitting disease.

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