

## **ALEMTUZUMAB (CAMPATH) IN EARLY MS**

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Alemtuzumab (CAMPATH®; MABCAMPATH) is a humanized monoclonal antibody targeting the CD52 antigen on lymphocytes and monocytes. CAMMS223 Study is a Phase 2, open-label, rater-blinded, randomized multicentric study in which treatment-naive patients with early, active relapsing-remitting multiple sclerosis (RRMS) were included. The trial compared safety and efficacy of alemtuzumab to interferon beta-1a (IFNβ-1a; Rebif).

The Referral Center for Demyelinating Diseases of the Central Nervous System at the University Hospital Centre Zagreb included 17 patients with early active RRMS who strictly met all inclusion criteria. The inclusion of patients started in 2003. 11 patients (7F, 4M) were randomised to alemtuzumab, among them 6 to high dose and 5 to low dose alemtuzumab, and 6 (4F, 2M) to IFNβ-1a. Comparing average EDSS at the pre-treatment baseline and after 3 years we found that patients treated with alemtuzumab achieved reduction in disability, which was statistically significant in the group taking high dose. IFNβ-1a - treated patients showed slight increase in disability, but the difference was not statistically significant. In the 3-year period patients treated with IFNβ-1a experienced 11 relapses, compared to relapse-free subjects in the alemtuzumab group. Treatment with alemtuzumab was well tolerated. Except two cases of hyperthyroidism, adverse events were generally limited to infusion reactions that were readily manageable.

Key words: relapsing-remitting multiple sclerosis, alemtuzumab, lymphocytes, depletion, interferon beta-1a.