

n=85). CGI-I scores improved in 78%, remained stable in 14%, and worsened in 8% of patients (n=172) at Month 6, compared with 14%, 63% and 24% of patients off treatment (n=80), respectively. The most common AEs were insomnia (n=68 [7%]), headache (n=38 [4%]), and vertigo (n=30 [3%]).

Conclusions: PR-fampridine was well tolerated and associated with improvements in QoL over 6-months in French clinical practice.

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Efficacy and Safety of Alemtuzumab in Treatment-Naive Patients with Relapsing-Remitting MS: Four-Year Follow-up of the CARE-MS I Study

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Background: In the phase 3 CARE-MS I study (NCT00530348), alemtuzumab significantly reduced relapse rate over subcutaneous interferon beta-1a (SC IFNB-1a), with manageable safety over 2 years.

Objectives: Examine 4-year efficacy/safety of alemtuzumab in patients treated with alemtuzumab during CARE-MS I, and 2-year efficacy/safety in patients switched to alemtuzumab in the extension study (crossover cohort; NCT00930553).

Methods: In CARE-MS I, treatment-naive patients with active RRMS received 2 courses of alemtuzumab (12 mg/day intravenously on 5 consecutive days and on 3 consecutive days 12 months later) or SC IFNB-1a (44 µg 3 times/week). In the extension study, patients could receive as-needed alemtuzumab retreatment ≥1 year apart or approved disease-modifying therapy (DMT). Crossover patients received 2 alemtuzumab courses (5 days, then 3 days), 12 months apart.

Results: The extension enrolled 349 (95%) alemtuzumab-treated patients from the core study. Through 4 years, 73% received only 2 annual courses, while 21% and 5% received 1 or 2 additional courses, respectively; <5% of patients received another DMT during extension. Nine patients (3%) discontinued from the study, none due to adverse events (AEs). Among SC IFNB-1a-treated patients, 144 (83%) entered the extension and 132 (92%) received 2 courses of alemtuzumab. There were 8 withdrawals (6%) in the crossover group during the 2-year extension period, none due to AEs. Efficacy and safety data will be reported for both treatment cohorts.

Conclusions: Most patients treated with alemtuzumab did not require additional courses or other DMT during the 2-year extension; study discontinuation rates were low after alemtuzumab treatment.

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Autologous Stem Cell Transplantation in Multiple Sclerosis: Results from A Single Centre

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Background: In the last 2 decades, intensive immunosuppression followed by autologous stem cell transplantation (ASCT) has been proposed as a possible strategy for treatment of severe immune-mediated disorders, including multiple sclerosis (MS).

Objective: To review the outcome of ASCT for MS in Western Australia.

Methods: Eligibility criteria for ASCT were (1) progression of sustained disability with expanded disability status scale (EDSS) score increase of more than 1/10 over a 12 month period, (2) advanced MS with threatened loss of ambulation and (3) rapidly progressive disease not adequately assessed by EDSS. Stem cell mobilization was with cyclophosphamide (CY) 2g/m² and granulocyte-colony stimulating factor 5ug/kg bd. conditioning chemotherapy was with CY 50mg/kg and rabbit antithymocyte globulin 1mg/kg days -5 to -2. Patients were assessed at 3, 6, 12 and 24 months post-transplant.

Results: Fourteen patients underwent ASCT. Median age was 47 years; median time from diagnosis to transplant was 12 years. Diagnosis at transplant was secondary progressive MS (12), primary progressive MS (1) and neuromyelitis optica (1). About half the cohorts were neurologically stable at 24 months while the remainder had clinically relevant neurological deterioration. Two patients had meaningful improvement in bladder function. Follow-up MRI showed no Gd-enhancing lesions, but two patients developed new cerebral lesions on T2 weighted imaging.

Conclusion: In this group of patients with advanced MS, neurological function 24 months post-ASCT was essentially stable in half the cohort while the remainder experienced clinical progression. It is not possible to conclude whether ASCT altered the natural history of the disease.

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CD30 Ligand is a New Therapeutic Target for Central Nervous System Autoimmunity

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Background: The CD30 ligand (CD30L)/CD30 axis plays a critical role in Th1 and Th17 cell differentiation. However the role of