

**25-070****CAMPATH 1-H (ANTI-CD52) FOR REFRACTORY VASCULITIS: RETROSPECTIVE CAMBRIDGE EXPERIENCE 1989-1999**

Jayne DRW. Addenbrooke's Hospital, Cambridge, UK.

CAMPATH 1-H is a humanized anti-CD52 monoclonal antibody designed to deplete lymphocytes. Its compassionate use in the treatment of refractory or relapsing multisystem autoimmune disease in Cambridge between 1989 and 1999 is reviewed. This aimed to induce sustained treatment-free remission and minimize cumulative immunosuppressive and steroid exposure. One hundred twenty-one patients received CAMPATH 1-H. Diagnoses were Wegener's granulomatosis 63, Behcet's disease 18, polyarteritis nodosa 8, Sjogren's syndrome 7, microscopic polyangiitis 5, Churg-Strauss angiitis 2, other 29. Mean age was 47 years, disease duration 5 years, 60% were female and mean follow-up was 36 months. Prior to treatment, immunosuppressives were withdrawn and prednisolone reduced to 10 mg/day. Patients received CAMPATH 1-H 135 mg over five days and prophylactic antiviral, antibacterial and antifungal therapy. Treatment was repeated for persisting or

relapsing disease.

At one year, 22 patients had died (18%) and data was incomplete on 9. Of the remaining 90 patients, 75 (83%) were in remission with prednisolone less than 10 mg/day and no immunosuppressive, and 15 (17%) had persisting disease activity. The number of courses of CAMPATH 1-H required to achieve remission was one in 41 patients (55%), two in 26 (35%) and three in four (5%) (not known in four). Adverse events were: infusion reactions 50 (41%), infection 39 (32%), and new autoimmune disease 20 (17%). At follow-up 37 had died (31%); causes of death were sepsis 18, uncontrolled disease 11, malignancy 5, cardiovascular event 8, and other 2. The association of death with CAMPATH treatment was considered probable in 9, possible in 14, unrelated in 13 and not known in 1. Age and creatinine > 150  $\mu\text{mol/l}$  were independently associated with death (both  $p < 0.001$ ). Relapse occurred in 32 (43%), with a mean time to relapse of 23 months from initial treatment. CD4 counts were 145, 167 and  $285 \times 10^6$  at 3, 12 and 48 months' follow-up, respectively.

Lymphocyte depletion with CAMPATH 1-H can achieve remission in refractory vasculitis. Its use is associated with infusion reactions, infections and autoimmune events and may contribute to mortality in high-risk subgroups.