

Early treatment intensification with R-ICE and 90Y-ibritumomab tiuxetan (Zevalin)-BEAM stem cell transplantation in patients with high-risk diffuse large B-cell lymphoma patients and positive interim PET after 4 cycles of R-CHOP-14

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Supplemental Text

R-CHOP-14 Regimen

The R-CHOP-14 regimen consisted of rituximab 375 mg/m², cyclophosphamide 750 mg/m², doxorubicin 50 mg/m², vincristine 1.4 mg/m², and prednisone 100 mg for 5 days) with pegfilgrastim 6 mg sc day 4.

R-ICE Regimen

The R-ICE salvage regimen consisted of rituximab 375mg/m², ifosfamide 5 000 mg/m², carboplatin AUC = 5 [maximum 800 mg], etoposide 100 mg/m² daily for 3 days and pegfilgrastim 6mg sc day 5.

Labelling of Ibritumomab tiuxetan with ⁹⁰Yttrium (Zevalin)

At a central site Ibritumomab tiuxetan was labelled to ⁹⁰Yttrium as part of the Z-BEAM regimen as previously published²⁵. Ibritumomab tiuxetan was provided as part of the radio-labelling kit (Zevalin) in the form of a 3 ml glass vial containing 2 ml (3.2 mg) of antibody at a concentration of 1.6 mg/ml in low metal normal saline. ⁹⁰Yttrium was shipped weekly from France, labelled to antibody in Sydney, and then dispatched to the treating site for patient administration within 2 days. An unlabelled pre-dose of rituximab (250 mg/m²) was infused 1-4 hours prior to the Zevalin in order to clear the blood of B cells and further enable targeting of the radiolabelled isotope to the tumor cells. Zevalin was administered as an intravenous infusion over 10 minutes at a dose of 14.8 MBq (0.4 mCi) ⁹⁰Y/kg or a maximum dose of 1,184 MBq (32 mCi) on day -14 followed by BEAM (BCNU 300 mg/m² d-6, Etoposide 100 mg/m² q12 hours d-5 to d-2, cytarabine 200 mg/m² q12 hours d-5 to d-2, melphalan 140 mg/m² d-1) and PBSC infusion.

Supplemental Figures 1A and 1B

