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

Mark Hertzberg,1 Maher K. Gandhi,2,3 Judith Trotman,4 Belinda Butcher,5 John Taper,6 Amanda Johnston,7 Devinder Gill,3 Shir-Jing Ho,8 Gavin Cull,9 Keith Fay,10 Geoff Chong,11 Andrew Grigg,12 Ian D. Lewis,13 Sam Milliken,14 William Renwick,15 Uwe Hahn,16 Robin Filshie,17 George Kannourakis,18 Anne-Marie Watson,19 Pauline Warburton,20 Andrew Wirth,21 John F. Seymour,22 Michael S. Hofman23 and Rodney J. Hicks;23 on behalf of the Australasian Leukaemia Lymphoma Group (ALLG)

1Department of Haematology, Prince of Wales Hospital and University of NSW, Randwick, NSW; 2The University of Queensland Diamantina Institute Woolloongabba, Brisbane, QLD and 3Department of Haematology, Princess Alexandra Hospital Brisbane, QLD; 4Department of Haematology, Repatriation General Hospital Concord and University of Sydney, NSW; 5WriteSource Medical Pty Ltd., Lane Cove, NSW; 6Nepean Cancer Care Centre, Nepean Hospital Nepean, NSW; 7Department of Haematology, Westmead Hospital, NSW; 8Department of Haematology, St George Hospital Kogarah, NSW; 9Department of Haematology, Sir Charles Gairdner Hospital Perth, WA; 10Department of Haematology, Royal North Shore Hospital, St Leonard's, NSW; 11Olivia Newton John Cancer & Wellness Centre, Austin Hospital, Heidelberg, VIC; 12Department of Haematology, Austin Hospital, Heidelberg, VIC; 13Department of Haematology, Royal Adelaide Hospital Adelaide, SA; 14Department of Haematology, St Vincent's Hospital Darlinghurst, NSW; 15Department of Haematology, Royal Melbourne Hospital Parkville, VIC; 16Department of Haematology, The Queen Elizabeth Hospital, SA; 17Department of Haematology, St Vincent's Hospital Melbourne, VIC; 18Ballarat Oncology and Haematology Service and Fiona Elsey Cancer Research Institute, Ballarat, VIC; 19Department of Haematology, Liverpool Hospital, Liverpool, NSW; 20Department of Haematology, Wollongong Hospital, Wollongong, NSW; 21Department of Radiation Oncology, Peter MacCallum Cancer Centre East Melbourne, VIC; 22Department of Haematology, Peter MacCallum Cancer Centre East Melbourne and University of Melbourne, Parkville, VIC and 23Department of Cancer Imaging, Peter MacCallum Cancer Centre East Melbourne, VIC, Australia

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Correspondence: mhtertzberg10@gmail.com
Supplemental Text

**R-CHOP-14 Regimen**

The R-CHOP-14 regimen consisted of rituximab 375 mg/m$^2$, cyclophosphamide 750 mg/m$^2$, doxorubicin 50 mg/m$^2$, vincristine 1.4 mg/m$^2$, 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/m$^2$, ifosfamide 5 000 mg/m$^2$, carboplatin AUC = 5 [maximum 800 mg], etoposide 100 mg/m$^2$ daily for 3 days and pegfilgrastim 6mg sc day 5.

**Labelling of Ibritumomab tiuxetan with $^{90}$Yttrium (Zevalin)**

At a central site Ibritumomab tiuxetan was labelled to $^{90}$Yttrium as part of the Z-BEAM regimen as previously published$^{25}$. 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. $^{90}$Yttrium 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/m$^2$) 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) $^{90}$Y/kg or a maximum dose of 1,184 MBq (32 mCi) on day -14 followed by BEAM (BCNU 300 mg/m$^2$ d-6, Etoposide 100 mg/m$^2$ q12 hours d-5 to d-2, cytarabine 200 mg/m$^2$ q12 hours d-5 to d-2, melphalan 140 mg/m$^2$ d-1) and PBSC infusion.
Supplemental Figures 1A and 1B