

# Is upfront Autologous stem cell transplant required in Mantle Cell Lymphoma?

J. Tan<sup>1</sup>, D. Routledge<sup>1,3,4</sup>, P. Campbell<sup>1,2</sup>, H. Rose<sup>1,2</sup>, S. Ratnasingham<sup>1,2</sup>, S. Htet<sup>1</sup>, J. Hempton<sup>1</sup>, D. Kipp<sup>1,2</sup>

1. Department of Haematology, University Hospital Geelong, Barwon Health, Victoria, Australia

2. Deakin University School of Medicine, Waurn Ponds, Victoria, Australia

3. Clinical Haematology, Royal Melbourne Hospital and Peter MacCallum Cancer Centre, Victoria, Australia

4. Sir Peter MacCallum Department of Oncology, University of Melbourne, Victoria, Australia



## BACKGROUND

Mantle cell lymphoma (MCL) has a variable disease course. It is most commonly treated with intensive immunochemotherapy, such as R-hyper-CVAD (fractionated cyclophosphamide, vincristine, doxorubicin, dexamethasone and rituximab alternating with high-dose methotrexate and cytarabine) and the Nordic protocol. Uncertainty surrounds the question of consolidative autologous stem cell transplant (ASCT).<sup>1</sup>

Our standard institutional practice is to use minimal residual disease (MRD) guided therapy with R-hyper-CVAD and to omit ASCT in MRD negative patients. MRD is assessed using PET/CT and bone marrow examination. We have previously published data suggesting excellent long-term outcome in patients treated with this approach.<sup>2</sup> We aim to compare the outcomes of our cohort of patients with a similar cohort treated with consolidative ASCT at a second institution.

## METHODS

We performed a retrospective analysis of MCL patients treated at two institutions with intensive immunochemotherapy with and without consolidative ASCT.

We compared the overall (OS) and progression-free survival (PFS) of two cohorts: those at our institution who achieved MRD negativity and did not receive ASCT (group 1) and those at a second institution who underwent consolidative ASCT in first complete remission (group 2).

## RESULTS

31 patients were analysed: 15 patients in group 1 and 16 patients in group 2. Patients in group 2 received ASCT conditioning with either BEAM or BuMel.

There was no significant difference in OS or PFS between the two groups. Importantly, patients in group 1 had an excellent long-term outcome, with 5-year OS and PFS of 100% and 90% respectively, compared with 68% and 48% for patients in group 2. There was no treatment related mortality for patients in group 1.

## CONCLUSION

These results in a small patient cohort suggest that MCL patients achieving MRD negativity following intensive immunochemotherapy have excellent long-term outcomes and may reasonably avoid consolidative ASCT. The results also highlight the benefit of MRD assessment to guide treatment decisions in MCL.

## REFERENCES

1. LaCasce AS, Vandergrift JL, Rodriguez MA, Abel GA, Crosby AL, Friedberg JW et al. Comparative outcome of initial therapy for younger patients with mantle cell lymphoma: an analysis from the NCCN NHL database. *Blood* 2012; 119: 2093.
2. Htet S, Lane S, Kipp D, Rose H, Campbell P. PET-CT confirmed complete remission and MRD negativity in mantle cell lymphoma patients treated with R-hyper-CVAD results in excellent outcome in the absence of autologous stem cell transplantation: a single-centre case for a transplant-free approach. *Internal Medicine Journal* 2016 Sept; 46(9):1113-1114

