

**Rituximab (MabThera®) after autologous stem-cell transplantation (ASCT)
in mantle cell lymphoma (MCL)
Rothschedl E**

Rituximab is a monoclonal antibody targeting the CD20 antigen which is located on normal pre-B and mature B lymphocytes. CD20 is found on both normal and malignant B cells and is expressed on >95% of all B-cell non-Hodgkin's lymphomas (NHL). On B lymphocytes, the binding of rituximab to CD20 antigen induces cell death due to apoptosis. To date, rituximab as maintenance therapy in patients with MCL after ASCT is not yet approved either in Europe or in the US.

The LyMa trial, a randomised, prospective, phase III trial was conducted to assess the role of rituximab maintenance therapy in patients with MCL who had undergone ASCT. From a total of 299 enrolled patients who were younger than 66 years, 240 patients were randomised to the rituximab maintenance group (375 mg/m² of body-surface area administered every two months for three years after transplantation) or to the observation group. After a median follow-up from randomisation after transplantation of 50.2 months, the rate of event-free survival was 79% in the rituximab maintenance group versus 61% in the observation group. The 4-year rates of progression-free survival (PFS) and overall survival (OS) were significantly higher in patients receiving rituximab; PFS at four years was 83% in the rituximab maintenance group compared to 64% in the observation group; OS was 89% (rituximab maintenance group) and 80% (observation group). Median OS, PFS and EFS had not been reached. No data regarding the quality of life (QoL) was available. The most frequent adverse event (AE) of grade ≥3 in both groups within the first six months of treatment was neutropenia, occurring more often in the rituximab maintenance group (41.1%) than in the observation group (26.3%).

Although rituximab maintenance therapy provides essential benefits for patients with MCL after ASCT, relevant issues, including schedules of rituximab administration, the applicability of study results in older patients or patients with worse performance status, types of previously administered chemotherapeutical regimens, the role of minimal residual disease and, not least the impact of rituximab maintenance therapy on QoL need to be clarified. Due to the small number of MCL-affected patients, gathering significant evidence might prove difficult. However, more data is warranted to confirm the results of the LyMa trial.

**The full English version is available
under**

http://eprints.hta.lbg.ac.at/1155/1/DSD_HSO_Nr.79.pdf