

Section: CLINICAL

Abstract: CLI-08

Does the timing of rituximab introduction in the treatment of diffuse large B-cell non-Hodgkin lymphoma affect progression-free survival?

Miguel Roxo Veloso Franciosi, Davimar Miranda Maciel Borducchi, Vitor

Augusto Q Mauad

Centro Universitário FMABC, Santo André, Brazil

miguelfranciosi02@gmail.com

INTRODUCTION: Diffuse large B-cell lymphoma (DLBCL) is the most prevalent subtype of non-Hodgkin lymphoma. It behaves aggressively, and standard treatment is based on the R-CHOP regimen. Adding rituximab to the protocol has demonstrated clinical benefit, but the impact of the timing of its introduction remains unclear. **METHODOLOGY:** This retrospective observational study included 105 patients diagnosed with DLBCL and treated at Hospital Estadual Mário Covas. Clinical and prognostic variables and the timing of rituximab initiation were analyzed. Statistical analysis included Kaplan–Meier curves to estimate progression-free survival (PFS) and overall survival (OS), with the log-rank test used to compare groups. **RESULTS:** In the initial analysis, patients who started rituximab during the first cycle had better PFS and OS, although the differences were not statistically significant (PFS: $p=0.434$; OS: $p=0.637$). In the second analysis, which included only patients who received rituximab and divided them into two groups (first-cycle initiation versus delayed initiation), early initiation was statistically significant (PFS: $p=0.0018$; OS: $p=0.0188$). Five-year OS was 90.9% in the group that received the complete rituximab regimen versus 70% among those with delays. The number needed to treat (NNT) was 4.8. **DISCUSSION:** The findings suggest that starting rituximab in the first cycle has a positive and statistically significant effect on clinical outcomes, especially PFS. Differences in the Kaplan–Meier curves reinforce the importance of administering the monoclonal antibody early, even when the delay is only one cycle. In addition to the survival benefit, no relevant increase in hematologic toxicity was observed among patients who received the complete rituximab regimen, indicating that the strategy was well tolerated. **CONCLUSION:** Starting rituximab during the first chemotherapy cycle may significantly improve clinical outcomes in patients with DLBCL. Full adherence to the treatment regimen should be prioritized. Prospective studies with stronger methodological control are needed to validate and expand these findings.

KEYWORDS: Diffuse large B-cell lymphoma; Rituximab; Progression-free survival.