

LYMPHOMAS

REAL-LIFE EXPERIENCE WITH THE POLA-R-CHP REGIMEN IN DIFFUSE LARGE B-CELL LYMPHOMA (DLBCL): A RETROSPECTIVE ANALYSIS

L. Scalise¹, L. Pezzullo², D. Pastore³, F. Merchionne³, G. R Mansueto⁴, G. Pietrantuono⁴, E. Martino⁵, M. Gentile⁵, M. Rossi¹

¹Azienda Osp. Univ. Renato Dulbecco Ematologia; ²AOU San Giovanni Di Dio UOC Ematologia; ³UOC di Ematologia Osp. A. Perrino; ⁴IRCCS C.R.O. B Ematologia; ⁵UOC Ematologia Azienda Ospedaliera Cosenza, Italy

Historically, R-CHOP regimen has been the standard first line treatment for diffuse large B-cell lymphoma (DLBCL). The introduction of polatuzumab vedotin in combination with rituximab, cyclophosphamide, doxorubicin, and prednisone (POLA-R-CHP) has shown a progression-free survival benefit in the POLARIX trial, particularly among patients with high IPI score. However, real-world data on efficacy and toxicity profile of this combination regimen remain limited.

Methods: A retrospective analysis was conducted on 36 patients diagnosed with DLBCL and treated with the POLA-R-CHP regimen at four Hematology Centers between January 2024 and September 2025. For each patient, demographic, clinical-biological, and therapeutic data were collected, including age, sex, ECOG performance status, stage, IPI, histologic subtype, metabolic response (interim and end of treatment PET CT scan), toxicity (\geq grade III hematologic and non-hematologic), relapse events, and vital status at last follow-up.

Results: The median age at diagnosis was 67 years (range 26-84); 28 patients (77%) were male. Advanced stages (II-

I-IV) were predominant (71%), with a mean IPI of 3. The most frequent subtype was ABC (activated B-cell-like). At the end of treatment, 26 patients (72%) achieved complete response (CR), 6 partial response (PR), and 4 (8%) had progressive disease. Three relapses occurred during the observation period; 2 of these patients received CAR-T therapy as second-line treatment, and 1 developed CNS relapse. There were 4 deaths (8%): one due to thromboembolic toxicity, one to sepsis, and two related to disease progression. The estimated 1-year PFS (28/36) was 74.1% (95% CI 57.5-90.6). The most common \geq grade III toxicity was neutropenia. No grade III/IV neuropathy or other polatuzumab-related severe toxicity was observed.

Conclusions: POLA-R-CHP regimen proved to be effective and well tolerated, even in elderly and comorbid patients. The high complete response rate and 1-year PFS support the robustness of the POLARIX trial results in a real-world setting. The favorable tolerability profile of polatuzumab was confirmed. Longer follow-up and larger cohorts are warranted to assess response durability and to better characterize late-onset toxicities.