



The 65th ASH Annual Meeting Abstracts

POSTER ABSTRACTS

627.AGGRESSIVE LYMPHOMAS: CLINICAL AND EPIDEMIOLOGICAL

Radiotherapy Consolidation Reduces Risk of Relapse in Diffuse Large B-Cell Lymphoma Patients with Bulky Disease in Complete Response after Frontline Immunochemotherapy: Results from a Retrospective Single Center Study

Corrado Benevolo Savelli, MD^{1,2}, Mattia Novo, MD³, Francesco Vassallo, MD⁴, Andrea Evangelista⁵, Matteo Bisio, MD^{2,1}, Luca Legato, MD^{2,1}, Veronica Peri, MD⁶, Michele Clerico⁷, Mario Levis, MD PhD⁸, Sara Bartoncini, MD⁸, Chiara Cavallin, MD⁸, Maura Nicolosi, MD PhD², Carola Boccomini, MD², Lorella Orsucci, MD⁹, Federica Cavallo⁷, Benedetto Bruno, MD PhD¹⁰, Roberto Freilone, MD², Umberto Ricardi, MD⁸, Barbara Botto²

¹ University of Turin, Torino, Italy

² Hematology Division, A.O.U Città della Salute e della Scienza di Torino, Torino, Italy

³ Hematology Division, A.O.U Città della Salute e della Scienza di Torino, Torino, Italy

⁴ Hematology Unit, Santa Croce e Carle Hospital, Cuneo, Italy

⁵ Unit of Cancer Epidemiology, A.O.U Città della Salute e della Scienza di Torino, Torino, Italy

⁶ Division of Hematology, Department of Molecular Biotechnologies and Health Sciences, University of Torino, Torino, Italy

⁷ Division of Hematology, Department of Molecular Biotechnology and Health Sciences, University of Torino, A.O.U., Città della Salute e della Scienza di Torino, Torino, Italy

⁸ Department of Oncology, University of Torino, Torino, Italy

⁹ Hematology Division, A.O.U Città della Salute e della Scienza, Ospedale S. Giovanni Battista Molinette, Torino, Italy

¹⁰ Division of Hematology, Department of Molecular Biotechnologies and Health Sciences, University of Torino, Division of Hematology and Stem cell transplant unit, AOU Città della Salute e della Scienza, Torino, Italy

INTRODUCTION: The role of radiotherapy (RT) consolidation upfront in patients with diffuse large B-cell lymphoma (DLBCL) and bulky disease at diagnosis is controversial, especially in those in complete response (CR) after immunochemotherapy.

METHODS: All patients with DLBCL diagnosed between January 2010 and June 2021 at AOU Città della Salute e della Scienza di Torino and treated frontline with RCHOP-like regimens were retrospectively selected. Patients with primary mediastinal lymphoma were excluded. Clinical and biological features as well as treatment and survival data for the whole population were collected. All patients with bulky disease (defined as ≥ 6 cm) at diagnosis who obtained CR (defined as PET/TC Deauville score ≤ 3) at the end of systemic treatment were further selected. Progression free survival (PFS) and overall survival (OS) were compared between patients receiving consolidative RT on initial bulky mass and those who did not.

RESULTS: A total of 453 patients with DLBCL were identified. Median age was 68 years (IQR 58-77), 56% were males, 74% stage ≥ 3 , 52% IPI ≥ 3 . 140/451 (31%) had bulky disease at diagnosis. Median follow-up was 5 years. 5-year PFS and OS for the whole cohort were 59% and 66%, respectively. Bulky disease correlated with a significantly lower 5-year PFS (bulky 50% vs no bulky 64%, $p = 0.0005$) and OS (bulky 68% vs no bulky 60%, $p = 0.01$). 82 out of 140 patients with bulky disease (68/82 with a bulky ≥ 7 cm) were in CR after immunochemotherapy: 19/82 (23%) received RT (16/19 on bulky ≥ 7 cm), 63/82 (77%) did not (55/63 with a bulky ≥ 7 cm). There were no significant differences between the two groups regarding age, stage, ECOG PS, LDH levels, extranodal involvement and IPI. RT dose was 30 Gy in most patients (17/19); two patients received 36 Gy and 40 Gy. The 5-year PFS was 95% in the RT cohort and 58% in the no-RT cohort ($p = 0.004$); the 5-y OS was 95% in the RT cohort and 69% in the no-RT cohort ($p = 0.038$) (figure 1). A propensity score matching analysis confirmed the benefit of RT on PFS (HR 0.1, 95% CI 0.01-0.68, $p = 0.019$), and showed a non-statistically significant trend of better OS ($p = 0.06$). 14/24 relapses in the no-RT cohort occurred on the site of bulky disease.

CONCLUSIONS: With the limit of a non-randomized retrospective study, our data showed a benefit of RT consolidation on bulky disease in patients with DLBCL in CR after frontline immunochemotherapy, significantly prolonging PFS and with a trend of improved OS in a propensity score matching analysis.

Disclosures Cavallo: Beigene: Research Funding; Astra Zeneca: Research Funding; Takeda: Research Funding; Roche: Honoraria, Speakers Bureau. **Botto:** Takeda: Speakers Bureau.

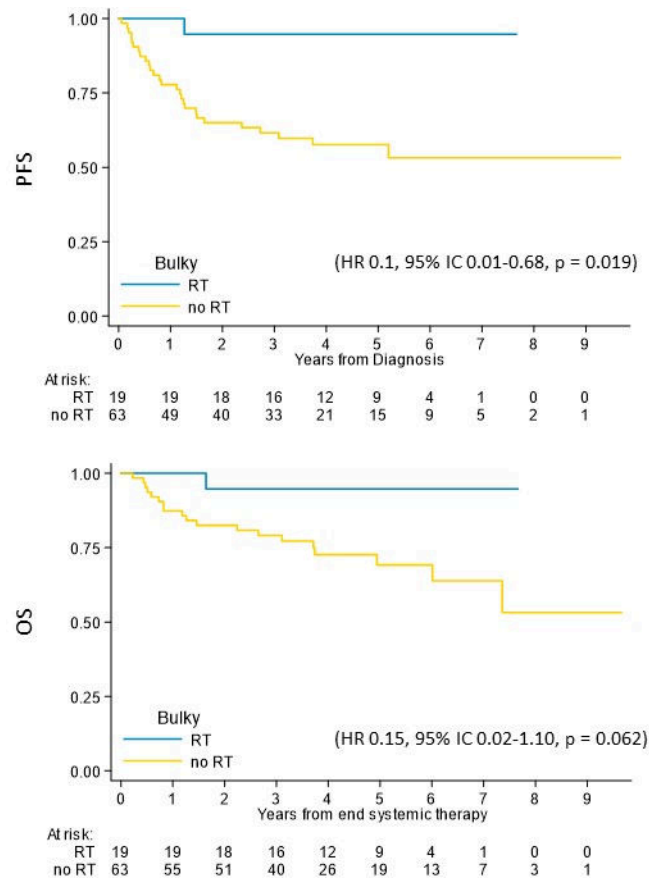


Figure 1

<https://doi.org/10.1182/blood-2023-184510>