Abstract Topic: 20. Lymphoma biology & translational research

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CURRENT USE OF SALVAGE 2ND LINE TREATMENT IN PATIENTS WITH RELAPSED/REFRACTORY AGGRESSIVE B-CELL LYMPHOMA AND KEY DRIVERS FOR SELECTING THERAPY WITH CAR T CELLS. DATA FROM REAL-WORLD STUDY IN EU5

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Background:

Aggressive B-cell lymphomas, especially diffuse large B-cell lymphoma (DLBCL), are genomically heterogenous diseases and most patients present with disseminated disease (1,2). R-CHOP remains the standard of care in all eligible patients but approximately 20%-30% of them fail first-line therapy (3). Management of those patients rely currently on CAR T-cells as new SoC with an improvement in survival data with both axicabtagene ciloleucel (axi-cel, ZUMA-7 trial) and lisocabtagene maraleucel (liso-cel, TRANSFORM trial) (4, 5).

Aims:

Identify treatment patterns and key drivers for selecting CAR T treatment vs. alternative options in 2nd line patients with aggressive B-cell lymphoma in EU5 countries based on real-world patient data.

Methods:

Anonymized patient charts, provided by hematologists treating patients with DLBCL in France (FR), Germany (DE), Spain (ES), Italy (IT), the UK were analyzed. A total of 804 patient charts were included in Q4 2023. The analysis focused on the 2nd line of therapy for different subsets of aggressive B-cell lymphoma (HGBCL, DLBCL and PMBCL) based on the treatment received: CAR T cells (n=122 patients) vs. non-CAR T cells (n=682).

Results:

Median age was 65.5 years in the non-CAR T, 61 years in the CAR T subgroup, with more patients under 65 in the CAR T subgroup (55% vs. 44%).
A slightly higher % of patients had ECOG 2-3 in the non-CAR T group (27% vs. 19%).
No difference was found on the IPI score breakdown between the 2 groups.
Assessment of genetic alterations in the 2 groups did not reveal any significant difference with a slight over-representation of double hit subset in the CAR T group (13% vs. 9%).
In the non-CAR T subgroup, 43% of patients were CAR T ineligible while the other 57% were CAR T eligible and ultimately not treated with CAR T.
The analysis revealed slightly higher % of patients considered eligible and not treated by CAR T in DE (65%), IT (58%) and ES (64%) as compared to FR (45%) and the UK (48%) among the non-CAR T population.

Auto SCT was proposed in 46% of the non-CAR T patients, rather similar across countries ranging from 42% in DE to 51% in ES. Salvage rituximab-based immunochemotherapy was used in 16% of patients and 17% received polatuzumab + rituximab +/- bendamustin regimen.
Regarding regimens used in the non-CAR T group excluding auto SCT, no discrepancy has been identified between the different countries except for polatuzumab vedotin-based treatments less used in FR (7%) and ES (12%) as compared to the UK (24%), IT (22%) and DE (19%).
Axi-cel was the most frequently used in CAR T patients, especially in ES (86%), IT (83%) and FR (78%). Usage was more balanced in DE (50%) and IT (57%).

Summary/Conclusion:
This real-world study highlights that treatment options in 2nd line aggressive B-cell lymphoma rely mainly on CAR T products, salvage chemotherapy followed by auto SCT and other rituximab-based immunochemotherapy.
In this series, all patients receiving CAR T cells were in early relapse or with a refractory disease and eligible to intensive treatment (based on design of ZUMA-7 and TRANSFORM trials). In patients not receiving any CAR T treatment, a mix is observed between patients not eligible and patients eligible but not treated due to delay of relapse or no potential eligibility to SCT.
Few discrepancies are identified between countries regarding CAR T cells eligibility, usage of the 2 available CAR T products and access to polatuzumab vedotin.
Current approval by EMA of axi-cel and liso-cel in early relapse and refractory disease and more extensive real-world data should enhance their use as a new standard of care in aggressive B-cell lymphoma.

Keywords: Real world data, Lymphoma, CAR-T, Diffuse large B cell lymphoma