1761 Improved Overall Survival with Axicabtagene Ciloleucel Vs Standard of Care in Second-Line Large B-Cell Lymphoma Among the Elderly: A Subgroup Analysis of ZUMA-7

Program: Oral and Poster Abstracts

Session: 627. Aggressive Lymphomas: Clinical and Epidemiological: Poster I

Hematology Disease Topics & Pathways:

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Introduction:

Historically, older patients (pts) with relapsed/refractory large B-cell lymphoma (R/R LBCL) were often deemed ineligible for curative-intent autologous stem cell transplant (ASCT) due to age and concern for increased toxicity related to comorbidities. We previously demonstrated in the pivotal ZUMA-7 study that older pts with R/R LBCL can safely receive axicabtagene ciloleucel (axi-cel) as second-line (2L) therapy with improved event-free survival (EFS), response rate, and quality of life compared with standard of care (SOC) based on results from the primary EFS analysis (Westin, et al. Clin Cancer Res. 2023). At a median follow-up of 47.2 months (mo), results from the ZUMA-7 primary overall survival (OS) analysis demonstrated superior OS in the intention-to-treat (ITT) analysis (hazard ratio [HR], 0.73; 95% CI, 0.54-0.98; stratified two-sided log-rank P=0.03; Westin, et al. N Engl J Med. 2023; NCT03391466). We now report updated efficacy and safety results from the primary OS analysis among ZUMA-7 pts aged ≥65 years (y) and ≥70 y.

Methods:

Eligible pts were randomized 1:1 to axi-cel or SOC (2-3 cycles of platinum-based chemoimmunotherapy; responding pts proceeded to high-dose chemotherapy with ASCT). The primary OS analysis occurred 5 y after the first pt was randomized (01/25/2018) per protocol. Other endpoints included progression-free survival (PFS) per investigator assessment and safety. A planned subgroup analysis of pts aged ≥65 y was conducted in addition to an analysis for those ≥70 y. Multivariate analyses were performed to examine treatment efficacy with axi-cel compared with SOC after adjusting for multiple covariates, including sex, disease type, molecular subgroup, lactate dehydrogenase (LDH), tumor burden, and age; strata for these analyses included second-line age-adjusted International Prognostic Index (aaIPI), and relapsed vs refractory disease. Exploratory analyses were conducted to determine the association between OS and axi-cel product characteristics for pts aged ≥65 y.

Results:

A total of 109 pts were included in the analysis (axi-cel: 51 were \geq 65 y, 26 of whom were \geq 70y, maximum age was 80 y; SOC: 58 were \geq 65 y, 27 of whom were \geq 70 y, maximum age was 81y). Compared with SOC pts at baseline, more axi-cel pts had high-risk features, including aaIPI 2-3, elevated LDH, and high-grade B-cell lymphoma. At a median follow-up of 46.6 mo, OS was prolonged in the axicel vs SOC arm in pts aged \geq 65 y (HR, 0.691; 95% CI, 0.401-1.190) and for those \geq 70 y (HR, 0.330; 95% CI, 0.135-0.809). Similar results were observed using the piecewise Cox regression model. The median OS for axi-cel and SOC pts was 43.5 mo (95% CI, 20.9-not estimable [NE]) and 19.6 mo (95% CI, 12.3-NE), respectively, among those aged \geq 65y, and 24.7 mo (95% CI, 12.8-NE) and 11.2 mo (95% CI, 6.1-NE), respectively, among those aged

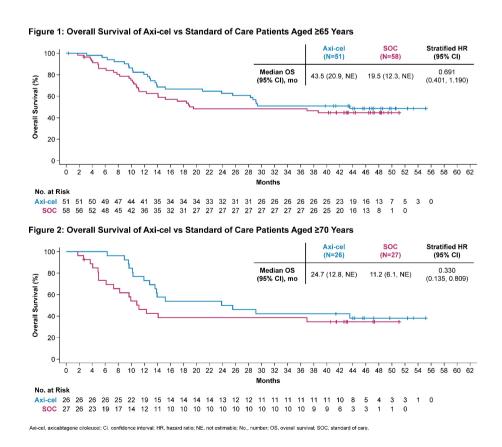
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≥70 y. In the SOC arm, 57% and 52% of pts received subsequent cellular immunotherapy off protocol in pts aged ≥65 y and ≥70 y, respectively. Multivariate analyses demonstrated an even greater OS benefit with axi-cel over SOC when adjusting for differences in baseline characteristics in pts aged ≥65 y (HR, 0.526; 95% CI, 0.266-1.041) and in pts aged ≥70 y (HR, 0.184; 95% CI, 0.045-0.755). PFS assessed by investigator confirmed benefit of axi-cel over SOC in pts aged ≥65 y (HR, 0.406; 95% CI, 0.230-0.715) and in pts aged ≥70 y (HR, 0.206; 95% CI, 0.078-0.547). The median PFS for axi-cel and SOC pts was 28.7 mo (95% CI, 5.1-NE) and 5.0 mo (95% CI, 2.8-7.2), respectively, for those aged ≥65 y, and 11.4 mo (95% CI, 4.1-NE) and 2.7 mo (95% CI, 1.7-5.0), respectively, for those aged ≥70 y. No new treatment-related deaths occurred since the primary EFS analysis. There were no manufacturing failures for any pt who underwent leukapheresis. Similar associations between product characteristics and outcomes were observed among the elderly and overall populations, including improved OS associated with a greater (>median) proportion of juvenile or stem memory T-cell phenotype cells (CCR7+CD45RA+ T cells) in the axi-cel product among pts aged ≥65 y (HR, 0.369; 95% CI, 0.138-0.984).

Conclusion:

Axi-cel as 2L therapy prolonged survival over SOC in pts aged \geq 65 y, including in pts aged \geq 70y. These findings confirm that age alone should not be a barrier for consideration of CAR T-cell therapy, supporting the use of axi-cel as a curative-intent 2L therapeutic option for older pts with R/R LBCL.



Disclosures:

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