Abstract: P1101

Title: FAVORABLE, CONTEMPORARY, REAL-WORLD OUTCOMES OF BRENTUXIMAB VEDOTIN AS POST-ASCT CONSOLIDATION IN RRHL: A SYSTEMATIC REVIEW AND META-ANALYSIS

Abstract Type: Poster Presentation

Topic: Hodgkin lymphoma - Clinical

Background:

Based on the findings of the Phase 3 AETHERA trial, the FDA and EMA approved brentuximab vedotin (BV) as post-autologous stem cell transplantation (ASCT) consolidation in high-risk patients with relapsed/refractory Hodgkin lymphoma (RRHL) in 2015 and 2016, respectively. Recent real-world evidence studies have reported the benefit of BV as post-ASCT consolidation using a current HL management approach, including positron emission tomography-computed tomography (PET-CT) and pre-ASCT BV exposure.

Aims:

To evaluate the real-world effectiveness and safety of BV as post-ASCT consolidation in adult and pediatric patients with RRHL.

Methods:

The systematic review was registered in PROSPERO (CRD42023471178) and conducted simultaneously across BIOSIS Previews®, Embase®, and MEDLINE via ProQuest-Dialog to obtain journal articles and conference abstracts (earliest indexed publication until October 2023). Abstracts not indexed in these databases were obtained from relevant conference proceedings (2014–2023). Two assessors independently extracted and reviewed data from eligible literature, with conflicts resolved by consensus or a third assessor. Here, the outcomes of BV as post-ASCT consolidation are reported.

The DerSimonian and Laird random-effects method was used to pool data, regardless of the degree of heterogeneity between the study results. Heterogeneity was quantified using the I^2 statistic, with substantial heterogeneity assumed if I^2 was* >50%.

Results:

Data were extracted from 1259 eligible patients in 18 journal articles and 8 conference abstracts, of which, 25 were retrospective studies and 1 prospective study. Of the eligible publications, 11 assessed pediatric patients. Overall, patient median age was 14–37 years, 17–88% of patients were male, and 6–57% were PET-negative pre-ASCT. Patients were administered a median of 4–16 BV cycles post-ASCT.

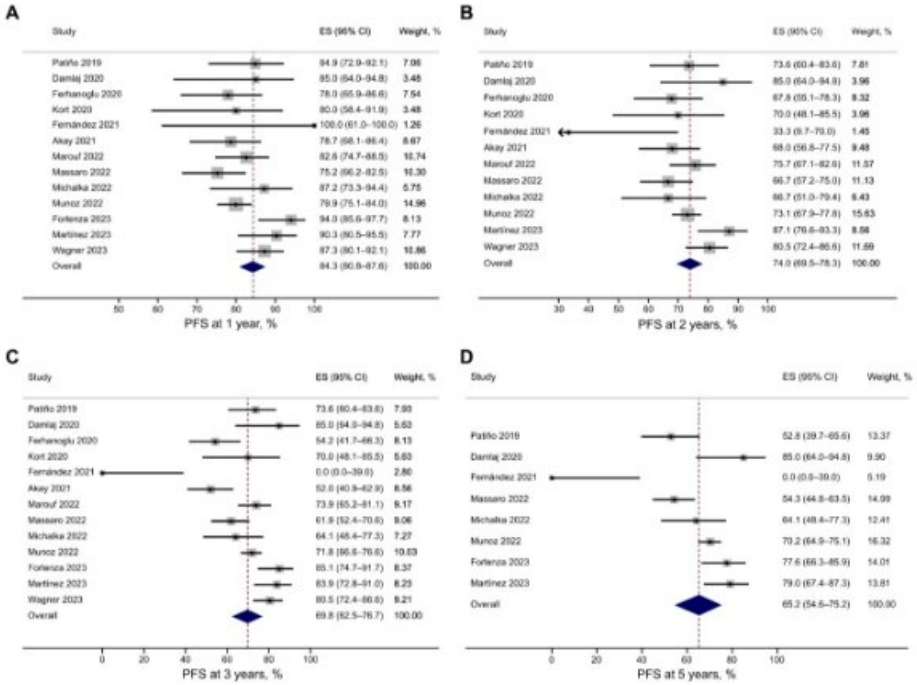
Pooled overall response rate (ORR) and complete response rate (95% confidence interval [CI]) were 87% (67–99) and 69% (56–81), respectively. The pooled median (95% CI) progression-free survival (PFS) was 6.9 years (5.7–8.1). The pooled 1-, 2-, 3-, and 5-year (95% CI) PFS rates were 84% (81–88), 74% (70–78), 70% (63–77), and 65% (55–75), respectively (Figure). The pooled 1-, 2-, 3-, and 5-year (95% CI) overall survival (OS) rates were 99% (98–100), 96% (94–98), 94% (86–99), and 94% (86–99), respectively.

Of the 26 studies, 12 reported adverse events (AEs) in eligible patients. The pooled mean number (95% CI) of any grade and Grade 3/4 AEs per patient were 0.47 (0.25–0.70) and 0.11 (0.02–0.20), respectively. The pooled proportion (95% CI) of patients with ≥1 any grade and Grade 3/4 AEs were 49% (40–58) and 2.4% (0–13.1), respectively. The most common any grade AEs (95% CI) were neuropathy (33% [23–44]) and neutropenia (25% [20–30]).

Summary/Conclusion: Despite heterogeneity in study populations and outcomes, this analysis affirms the effectiveness of BV as post-ASCT consolidation in improving PFS among patients with RRHL in real-world

clinical practice. These findings align with the improved PFS observed with BV consolidation compared to placebo in AETHERA. Furthermore, improvements in ORR and OS in patients treated with BV as post-ASCT consolidation were observed. However, unlike AETHERA, some studies in this analysis included patients with PET-CT management or pre-ASCT BV exposure, reflecting real-world scenarios and likely leading to improved treatment outcomes. These findings demonstrate the robustness of BV as post-ASCT consolidation across a diverse patient population, extending beyond the treatment environment of AETHERA.

Figure: Pooled PFS at (A) 1 year: 84% (95% CI: 81–88; I^2=44%),
(B) 2 years: 74% (95% CI: 70–78; I^2=48%), (C) 3 years: 70% (95% CI: 63–77; I^2=81%), and
(D) 5 years: 65% (95% CI: 55–75; I^2=82%).*



*The analysis incorporates data from studies conducted at various time points and involves extrapolation of median survival times, for most studies, alongside assumptions to generate the standard errors. These factors should be considered when interpreting the data.
CI: confidence interval; ES: estimated survival; PFS: progression-free survival.

Keywords: Systematic review, Real world data, Meta-analysis, Hodgkin’s lymphoma