P1740 HEALTH-RELATED QUALITY OF LIFE IN PATIENTS WITH RELAPSED/REFRACTORY MULTIPLE MYELOMA (RRMM) TREATED WITH IDECABTAGENE VICLEUCEL VS BELANTAMAB MAFODOTIN: A MATCHING-ADJUSTED INDIRECT COMPARISON STUDY

Topic: Quality of life, palliative care, ethics and health economics

Nina Shah¹, Dieter Ayers², Shannon Cope², Korinna Karampampa³, Kevin Towle², Julia Braverman³, Ali Mojebi², Clyde Caisip², Devender Dhanda³

¹ University of California San Francisco, San Francisco, CA, United States; ² PRECISIONhealth, Vancouver, BC, Canada; ³ Bristol Myers Squibb, Princeton, NJ, United States

Background: Patients (pts) with RRMM who are triple-class exposed (TCE; to an immunomodulatory imide drug [IMiD® agent], proteasome inhibitor [PI], and anti-CD38 monoclonal antibody [mAb]) have poor clinical outcomes and poor health-related quality of life (HRQoL). The B-cell maturation antigen (BCMA)-directed CAR T cell therapy idecabtagene vicleucel (ide-cel, bb2121) received regulatory approval in the US for pts with RRMM with ≥4 prior lines of therapy (LOT), including an IMiD agent, PI, and anti-CD38 mAb, and in Europe and Japan for pts with RRMM with ≥3 prior LOTs including an IMiD agent, PI, and anti-CD38 mAb. Ide-cel showed frequent, deep, and durable responses in TCE pts with RRMM in KarMMa, a phase 2, single-arm trial (NCT03361748). Clinically meaningful improvements in HRQoL outcomes vs baseline were observed. The BCMA-targeted antibody-drug conjugate belantamab mafodotin (BM) was approved in the US and Europe for pts with RRMM with ≥4 prior LOTs including an IMiD agent, PI and anti-CD38 mAb, based on data from the phase 2, single-arm DREAMM-2 trial (NCT03525678). There is a paucity of evidence comparing HRQoL for different treatment options approved in RRMM.

Aims: To compare HRQoL outcomes for TCE pts with RRMM treated with ide-cel vs BM.

Methods: Data were analyzed using unanchored matching-adjusted indirect comparisons. Between-study differences in pt characteristics were adjusted using individual-level pt data from KarMMa to align with summary-level pt characteristics from DREAMM-2. The ide-cel-treated population (N=128; median follow-up 15.4 months) from KarMMa (of whom, 54 pts received the target dose of 450×10⁶ CAR+ T cells) and the intention-to-treat population (N=97; median follow-up 13.0 months) from DREAMM-2 who received the 2.5 mg/kg dose of BM (Popat et al. HemaSphere 2020;4:S1. EP1746) were analyzed. Predefined outcomes of interest were differences in mean change from baseline scores for the European Organisation for Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire C30 (QLQ-C30) pain, fatigue, and global health/QoL domains, and the QLQ-Multiple Myeloma (MY20) pain domain. Analyses were performed at 2, 3, 4, 6, 9, and 12 months of follow-up. Given differences in time points of evaluation between KarMMa and DREAMM-2, the nearest neighbor approach was used. Pt characteristics included as covariates in the propensity model included: age, sex, race, years from initial diagnosis, disease stage, and number of prior treatments. Sensitivity analyses included additional covariates: high-risk cytogenetics and extramedullary disease.

Results: Ide-cel was associated with improved HRQoL vs BM at all evaluated time points for the QLQ-C30 global health status/QoL domain (Table). Improved HRQoL scores were statistically significant for ide-cel vs BM at 6 and 9 months for the QLQ-C30 fatigue domain (HRQoL scores were numerically better for ide-cel vs BM at all other time points). Similarly, HRQoL scores favored ide-cel vs BM at all evaluated time points for the QLQ-C30 pain and QLQ-MY20 pain domains, with statistically significant findings at 4, 6, and 9 months for QLQ-C30 and 3, 4, and 6 months for QLQ-MY20. Sensitivity analyses were consistent with the base case analyses.

Image:
Summary/Conclusion: While this analysis was limited by the availability of aggregate data from DREAMM-2, which may influence the outcomes of interest, results suggest that one-time treatment with ide-cel offers improved HRQoL vs BM across the QLQ-C30 pain, fatigue, and global health status/QoL domains, as well as the QLQ-MY20 pain domain.