HemaSphere

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P946 A PHASE I/II SINGLE ARM STUDY OF BELANTAMAB MAFODOTIN, CARFILZOMIB AND DEXAMETHASONE IN PATIENTS WITH RELAPSED MULTIPLE MYELOMA: AMARC 19-02 BELACARD STUDY.

Topic: 14. Myeloma and other monoclonal gammopathies - Clinical

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Background: Belantamab Mafodotin (Belamaf), a first in class anti- B-cell maturation antigen (BCMA) antibody-drug conjugate is efficacious in patients with triple-class exposed/refractory multiple myeloma (RRMM). Combining Belamaf (B) with carfilzomib and dexamethasone (Kd) is potentially synergistic through direct myeloma-cell kill and immune response against myeloma.

Aims: To characterize the safety, tolerability, and preliminary efficacy of BelaMaf in combination with carfilzomib and dexamethasone (Kd) in patients with early relapsed MM.

Methods: BelaCarD is an ongoing, two-part, single-arm, multicentre phase I/II study evaluating an extended schedule of B every 8 weeks in combination with Kd in patients with RRMM after 1-3 prior lines of treatment. Prior refractoriness to proteasome inhibitors was allowed. Here we report a pre-planned analysis of the safety run-in phase of the first 10 patients who have completed at least 1 treatment-cycle. Belamaf (2.5mg/kg) was administered on day (D) 1 of every 2nd 28-day cycle, K 70mg/m2 iv D1 (20mg/m2 on C1D1), D8 and D15 of every cycle and dexamethasone 40mg weekly (20mg for patients >75 years). Treatment was continued until disease progression. Adverse events (AEs) were graded per CTCAEv4, except for corneal AEs which were graded by the pre-specified keratopathy and visual acuity (KVA) scale. Response was assessed by the International Myeloma Working Group (IMWG) criteria.

Results: At cut-off (Feb 3rd 2022), 19 patients had received B-Kd. The median age of the 10 safety run-in patients was 65 years (range, 48-77); One, five and four patients had 3, 2 and 1 prior lines of therapy respectively including (exposed/refractory %) bortezomib (100/30%), carfilzomib (10/0%) lenalidomide (60/50%), pomalidomide (10/10%), ASCT (70/0%), anti-CD38 monoclonal Ab (mAb) (40/40%). The median number of treatment-cycles was 7 (5-11). The median number of cycles commenced was 9 (range, 2-13). The most frequent AE during cycle 1 was thrombocytopenia (all grade 30%, Gr 3/4 20%) and blurred vision (all grade 20%, Gr 3/4 0%) One patient experienced Gr 4 neutropenia. From cycle 2 onwards, the most frequent AEs included blurred vision (all grade 40%, Gr 3/4 20%), peripheral neuropathy (all grade 30%, Gr 3/4 10%), upper respiratory tract infection (all grade 30%, Gr 3/4 20%), dry eyes (all grade 20%, Gr 3/4 0%), neutropenia (all grade 20%, Gr 3/4 10%) and nausea (all grade 20%, Gr 3/4 0%). Six patients had an SAE, one was related to Belamaf (Gr 1 infusion reaction). Keratopathy occurred in 8 patients; grade 1, 20%; grade 2, 0%; grade 3, 60%. Decline in best corrected visual acuity (BCVA) by at least 2 lines occurred in 8 patients (Gr 3 n=6, Gr 2 n=2). One patient discontinued therapy due to corneal toxicity. Two patients died (progressive disease n=1, unrelated cause n=1).

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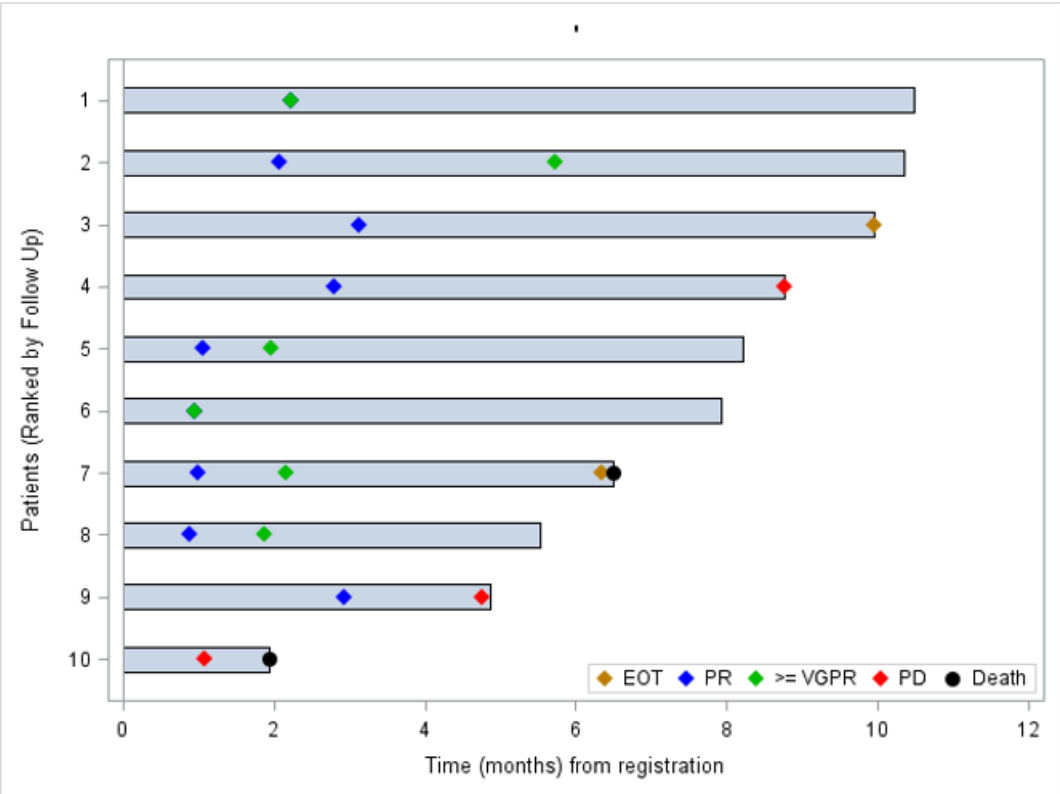
Of the 10 patients in the safety run-in, 9 achieved a PR or better (CR=3, VGPR=3, PR=3) and 2 are known to have subsequently progressed (Figure 1). At estimated median potential follow-up of 9.95 months, median PFS had not been reached (95%CI: 1.08 –NR).

Image:



EOT = end of treatment (off-treatment); PR = Partial Response; VGPR = Very good partial response; PD = Progressive Disease

Figure 1. Swimmer plot for the 10 patients in the safety run-in. Two patients ceased treatment prior to PD or Death – one for "Toxicity/AE" and the due to "Investigator's decision".

Summary/Conclusion: B-Kd with an extended B schedule, has a safety profile that is in keeping with that expected for each individual drug. Deep responses were seen. Recruitment is ongoing in an expansion phase based on the preliminary safety and efficacy.