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Efficacy outcomes in patients with relapsed/refractory multiple myeloma and baseline renal impairment treated with at least 2 prior lines of therapy in the DREAMM-7 trial

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BVd treatment was associated with improved efficacy outcomes vs DVd in patients with 3L+ RRMM presenting with mild or moderate renal impairment

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Poster narration — SCAN ME

Background

- Renal impairment is a frequent clinical complication in patients with RRMM, with up to 50% of patients presenting with renal impairment at diagnosis[1]
- Impaired renal function is associated with decreased OS in adults with RRMM, leading to challenges in treating this subgroup of patients[2]
- Belantamab mafodotin is an anti-BCMA-targeted ADC that has multimodal mechanisms of antitumor activity[3]
- In DREAMM-7, belantamab mafodotin, in combination with a bortezomib and dexamethasone (Vd) backbone (BVd) demonstrated statistically significant PFS and OS improvements vs standard-of-care triplet daratumumab with a Vd backbone (DVd) in patients with RRMM who had received ≥1 prior LOT[3,4]
- This post hoc analysis assessed efficacy outcomes with BVd vs DVd in a subgroup of patients in DREAMM-7 who had mild or moderate renal impairment and had received ≥2 prior LOTs (3L+)

Conclusions

In patients with 3L+ RRMM and mild or moderate renal impairment, BVd was associated with improved PFS vs DVd (HR 0.28, 95% CI, 0.17-0.44), including a higher 24-month PFS rate (61% vs 18%)

BVd was associated with improved OS vs DVd (HR 0.45, 95% CI, 0.25-0.80), with a higher 36-month OS rate observed with BVd (75% vs 51%)

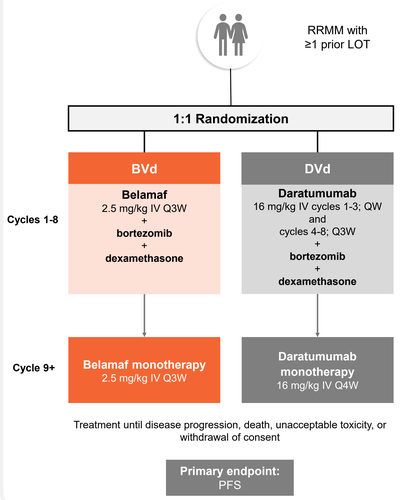
Patients treated with BVd had higher and deeper response rates, with a ≥ CR approximately 5-fold higher with BVd vs DVd (31.3% vs 5.7%)

These results further support the benefit of BVd over a dara-based triplet (DVd) in this difficult-to-treat patient population

Methods

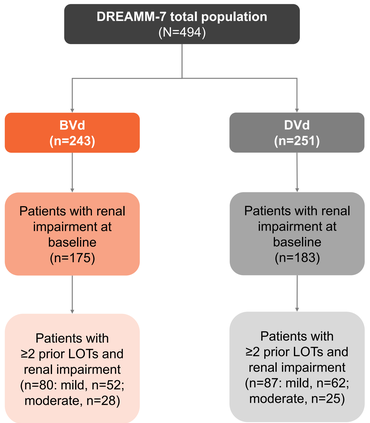
- DREAMM-7 (NCT04246047) is an open-label phase 3 study of patients with RRMM with ≥1 prior LOT. Patients were randomized (1:1) to BVd or DVd and were treated until progressive disease, death, unacceptable toxicity, or withdrawal of consent
- This post hoc analysis assessed a subgroup of patients from DREAMM-7, those with ≥2 prior LOTs, including both a proteasome inhibitor and immunomodulatory drug, who also presented with mild or moderate renal impairment at baseline (data cutoff: October 2, 2023; median follow-up 28.2 months)
- Renal function of eligible patients with RRMM was defined by eGFR at screening:
  - Normal: ≥90 mL/min/1.73 m^2
  - Mild impairment: ≥60 to 90 mL/min/1.73 m^2
  - Moderate impairment ≥30 to 60 mL/min/1.73 m^2
- Patients with eGFR <30 mL/min/1.73 m^2 were ineligible for DREAMM-7 and are not included in this analysis

DREAMM-7 study design[3]



Results

Patients with ≥2 prior LOTs and baseline mild or moderate renal impairment

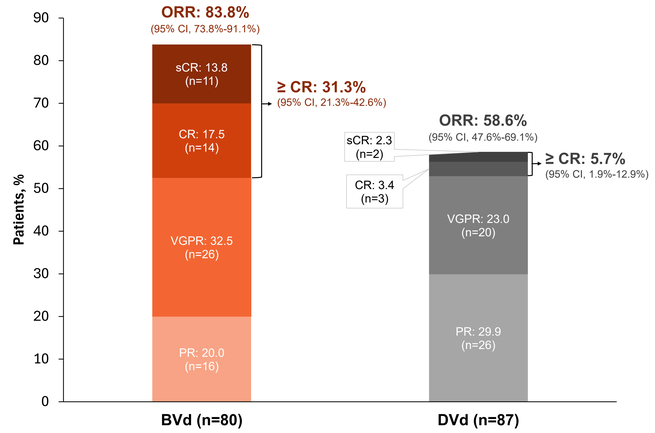


Patient characteristics were generally comparable between the 2 treatment arms

	BVd (n=80)	DVd (n=87)		
Sex, n (%)				
Female	42 (52.5)	36 (41.4)		
Male	38 (47.5)	51 (58.6)		
Age group, n (%)				
18 to <65 years	39 (48.8)	36 (41.4)		
65 to <75 years	30 (37.5)	41 (47.1)		
≥75 years	11 (13.8)	10 (11.5)		
Ethnicity, n (%)[a]				
Hispanic or Latino	10 (12.5)	11 (12.6)		
Not Hispanic or Latino	70 (87.5)	75 (86.2)		
Race, n (%)[a]				
Asian	7 (8.8)	7 (8.0)		
Black or African American	2 (2.5)	1 (1.1)		
White	71 (88.8)	77 (88.5)		
Mixed	0	1 (1.1)		
Prior treatment, n (%)	**Exposed**	**Refractory**	**Exposed**	**Refractory**
Prior proteasome inhibitor	80 (100)	15 (18.8)	87 (100)	19 (21.8)
Bortezomib	78 (97.5)	3 (3.8)	83 (95.4)	0
Carfilzomib	17 (21.3)	6 (7.5)	27 (31.0)	15 (17.2)
Ixazomib	10 (12.5)	7 (8.8)	8 (9.2)	5 (5.7)
Prior immunomodulatory agent	80 (100)	49 (61.3)	87 (100)	52 (59.8)
Lenalidomide	63 (78.8)	42 (52.5)	64 (73.6)	47 (54.0)
Thalidomide	44 (55)	9 (11.3)	53 (60.9)	7 (8.0)
Pomalidomide	18 (22.5)	12 (15.0)	14 (16.1)	8 (9.2)

[a] *Race/ethnicity data was not captured for 1 patient in the DVd arm.*

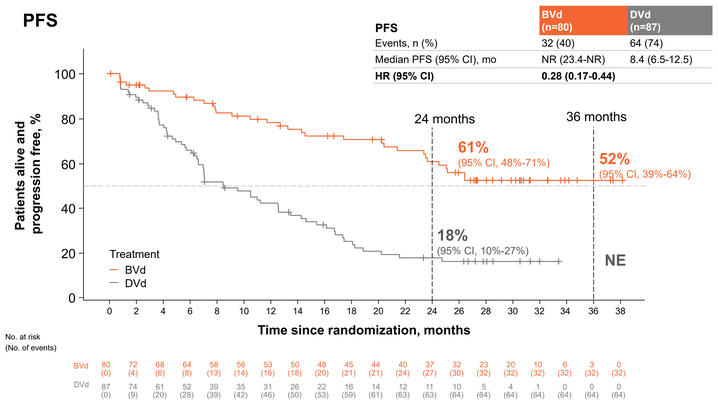
Patients treated with BVd achieved higher and deeper response rates, including a 5-fold higher ≥ CR rate compared with those treated with DVd



PFS and OS benefit favored BVd over DVd

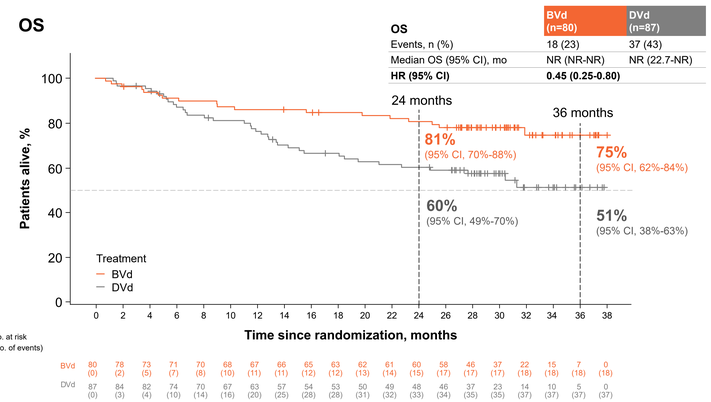
PFS

PFS	BVd (n=80)	DVd (n=87)
Events, n (%)	32 (40)	64 (74)
Median PFS (95% CI), mo	NR (23.4-NR)	8.4 (6.5-12.5)
HR (95% CI)	**0.28 (0.17-0.44)**	



OS

OS	BVd (n=80)	DVd (n=87)
Events, n (%)	18 (23)	37 (43)
Median OS (95% CI), mo	NR (NR-NR)	NR (22.7-NR)
HR (95% CI)	**0.45 (0.25-0.80)**	



Abbreviations

3L+, third line or later; ADC, antibody-drug conjugate; BCMA, B-cell maturation antigen; BVd, belantamab mafodotin, bortezomib, and dexamethasone; CR, complete response; DVd, daratumumab, bortezomib, and dexamethasone; eGFR, estimated glomerular filtration rate; HR, hazard ratio; IV, intravenous; LOT, line of therapy; NE, not estimable; NR, not reached; ORR, overall response rate; OS, overall survival; PFS, progression-free survival; PR, partial response; Q3W, every 3 weeks; Q4W; every 4 weeks; RRMM, relapsed/refractory multiple myeloma; sCR, stringent complete response; VGPR, very good partial response.

References

1. Dimopoulos MA, et al. *Ther Adv Hematol*. 2022;13:1-18.
2. Dimopoulos MA, et al. *Lancet Oncol*. 2023;24(7):e293-e311.
3. Hungria V, et al. *N Engl J Med*. 2024;391:393-407.
4. Hungria V, et al. *Lancet Oncol*. 2025;26(8):1067-1080.

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