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Belantamab mafodotin, bortezomib, and dexamethasone vs daratumumab, bortezomib, and dexamethasone in relapsed/refractory multiple myeloma: updated 4-year results of the phase 3 DREAMM-7 trial

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With >4 years of follow-up, BVd continued to demonstrate durable OS benefit vs DVd, supporting BVd as a potential new standard of care in RRMM at first relapse or later

Digital poster — SCAN ME

Poster narration — SCAN ME

Background

- Targeting BCMA has transformed the RRMM treatment landscape, with unprecedented improvement in OS outcomes vs SOC triplet regimens[1,2]
- Belamaf is a BCMA-targeting ADC with direct and indirect immunologic antitumor activity that avoids T-cell dysfunction[3]
- In DREAMM-7, BVd treatment resulted in statistically significant improvements in PFS and OS vs DVd in patients with RRMM and ≥1 prior LOT[4,5]
- This analysis evaluated the long-term benefit of a belamaf triplet (BVd) vs an anti-CD38–containing triplet (DVd) in a subgroup of patients with ≥2 prior LOTs, including prior treatment with a PI and immunomodulatory agent (3L+)

Conclusions

With >4 years of follow-up, BVd maintained an OS benefit vs an anti-CD38–containing triplet (DVd) in the ITT and 3L+ subgroups

Sustained PFS and OS benefits were observed across response categories, with 4-year OS rates in the 3L+ subgroup of 95% in patients with sCR and 89% in those with CR in the BVd arm

The overall safety profile remained generally consistent with the known profile of belamaf

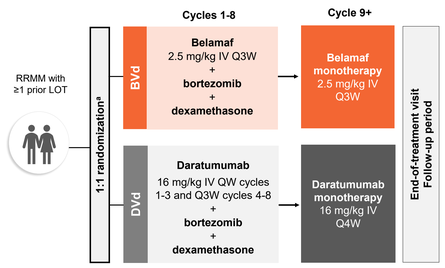
HRQOL remained stable over time, underscoring the long-term tolerability of belamaf monotherapy

Together with the convenience of outpatient administration, these findings further support BVd as a new BCMA-targeted SOC in RRMM at first relapse or later

Methods

- DREAMM-7 (NCT04246047) is a phase 3, open-label, randomized trial evaluating the efficacy and safety of belamaf vs daratumumab with a Vd backbone (BVd vs DVd) in patients with RRMM and ≥1 prior LOT[4,5]

DREAMM-7 study design[4,5]



Primary endpoint: IRC-assessed PFS[b]
Key secondary endpoints: OS, MRD negativity, and DOR
Other secondary endpoints: PFS2, response rates, HRQOL, and safety

[a] Two patients in the ITT population underwent randomization but were not treated and underwent repeat screening and randomization; they are counted as 4 unique patients. [b] Investigator-assessed PFS was used in this long-term analysis.

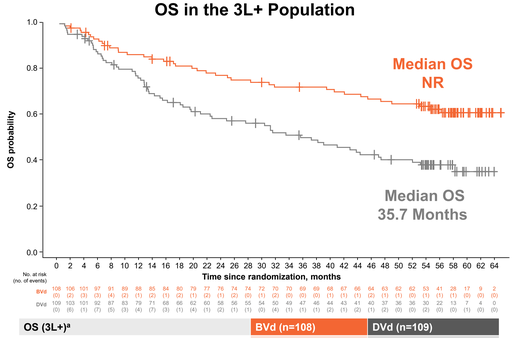
Long-term (>4 years) analysis

- OS was evaluated in the ITT population and in a subgroup with ≥2 prior LOTs, including prior treatment with a PI and immunomodulatory agent (3L+)
- KM curve analyses of OS and PFS (investigator assessed) by response category were conducted; 48-month rates and CIs were estimated using the Brookmeyer-Crowley method
- Safety outcomes were assessed in the overall population at this longer follow-up
- Patient-reported outcomes in the overall population (including the EORTC QLQ-C30) were assessed longitudinally to evaluate global HRQOL
- The DCO for this descriptive analysis was January 9, 2026 (median follow-up, 52.9 months in the ITT population and 42.9 months in the 3L+ subgroup)

Results

BVd treatment resulted in persistent OS benefit vs DVd

OS in the 3L+ Population



OS (3L+)[a]	BVd (n=108)	DVd (n=109)
Events, n (%)	39 (36)	64 (59)
OS, median (95% CI), months[b]	NR (NR-NR)	35.7 (21.1-47.4)
HR (95% CI)[c]	0.49 (0.33-0.74)	

[a] Based on all randomized patients who had received ≥2 prior LOTs including a PI and immunomodulatory agent. [b] CIs were estimated using the Brookmeyer-Crowley method. [c] Based on the stratified Cox regression model.

- Median OS was NR in the 3L+ population with BVd treatment
- In the ITT population, median OS after >4 years was NR (95% CI, 63.0 months-NR) with BVd treatment and 58.3 months (95% CI, 41.4 months-NR) with DVd treatment

No new safety concerns emerged with BVd after >4 years of follow-up (overall safety population)

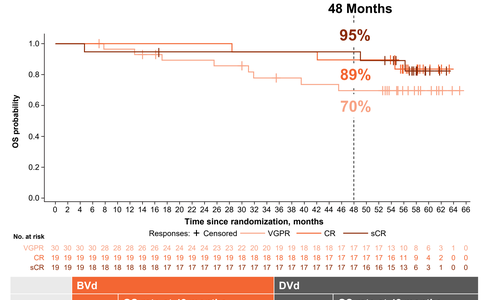
Safety population	BVd (n=242); DCO: October 7, 2024[d]		BVd (n=242); DCO: January 9, 2026	
	n (%)	Exposure-adjusted rate per 100 person-years[a]	n (%)	Exposure-adjusted rate per 100 person-years[a]
Grade 3/4 AE	230 (95)	57	230 (95)	49
AEs leading to permanent discontinuation of any study treatment	77 (32)	19	80 (33)	17
AEs leading to dose reduction	181 (75)	45	181 (75)	39
AEs leading to dose interruptions/delays[b]	229 (95)	57	228 (94)	49
Any SAE	129 (53)	32	132 (55)	28
System organ class or preferred term	All grades / Grade ≥3		All grades / Grade ≥3	
Thrombocytopenia	169 (70) / 135 (56)	42 / 34	170 (70) / 135 (56)	36 / 29
Neutropenia[c]	45 (19) / 34 (14)	11 / 8	45 (19) / 34 (14)	10 / 7
Infections and infestations[d]	176 (73) / 80 (33)	44 / 20	176 (73) / 80 (33)	38 / 17
Pneumonia	48 (20) / 30 (12)	12 / 7	52 (21) / 31 (13)	11 / 7

[a] Exposure-adjusted event rates were calculated as the total number of patients with an event divided by the total exposure time in person-years (per 100 person-years). Total person-years is the sum of all patient exposure, calculated as (last dose − first dose + 1)/365.25. [b] The decrease of 1 AE from the October 7, 2024, to January 9, 2026, DCO resulted from an updated (earlier) treatment discontinuation date for 1 patient, such that the event was no longer classified as treatment emergent. [c] Neutropenia includes preferred terms febrile neutropenia, neutropenia, and neutrophil count decreased. [d] System organ class event.

- AE incidence remained generally consistent with previous analyses, and no new fatal AEs were observed in the BVd arm
- Infection rates were unchanged, with no new safety concerns

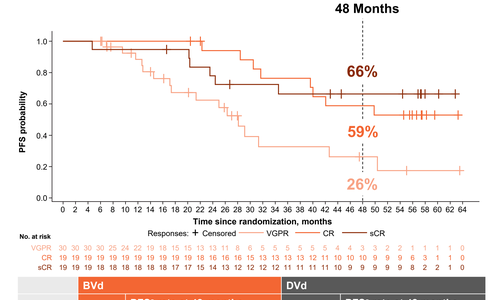
Durable PFS and OS benefits were observed with BVd across ≥ VGPR responses

OS by Response Category in the BVd Arm (3L+)



Response	BVd n	BVd OS rate at 48 months (95% CI), %	DVd n	DVd OS rate at 48 months (95% CI), %
sCR	19	95 (68-99)	7	71 (26-92)
CR	19	89 (64-97)	6	83 (27-97)
VGPR	30	70 (48-84)	19	55 (30-75)

PFS[a] by Response Category in the BVd Arm (3L+)



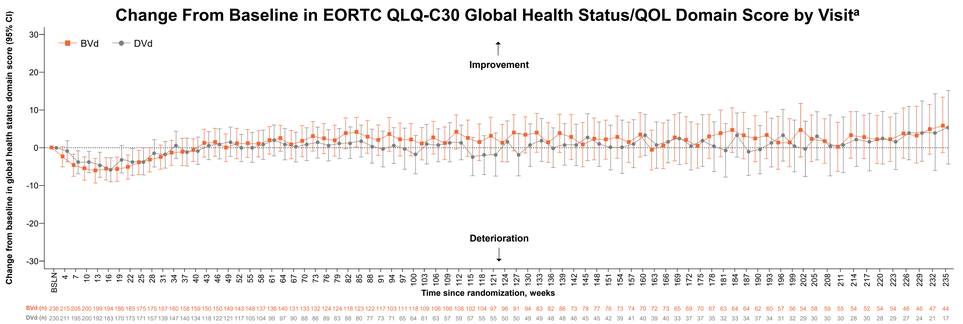
Response	BVd n	BVd PFS[a] rate at 48 months (95% CI), %	DVd n	DVd PFS[a] rate at 48 months (95% CI), %
sCR	19	66 (40-83)	7	69 (21-91)
CR	19	59 (33-78)	6	33 (5-68)
VGPR	30	26 (9-48)	19	20 (5-42)

[a] Investigator-assessed PFS.

- A total of 35% of 3L+ patients achieved sCR or CR with BVd vs 12% with DVd (ITT: 38% vs 21%, respectively)
- At the 4-year landmark, 3L+ OS rates in the BVd arm were 95% in patients with sCR and 89% in those with CR, indicating sustained OS (ITT: 98% and 82%, respectively)
- 3L+ median PFS (investigator assessed) was NR in patients with sCR or CR treated with BVd and 58.3 and 45.4 months, respectively, in patients treated with DVd (ITT: NR [sCR] and NR [CR] with BVd and 56.2 [sCR] and 45.0 [CR] months, respectively, with DVd)
- PFS2 in the overall 3L+ population continued to favor BVd vs DVd (HR, 0.51; 95% CI, 0.36-0.73), indicating sustained benefit after subsequent antimyeloma therapy

Global HRQOL remained stable over time (overall safety population)

Change From Baseline in EORTC QLQ-C30 Global Health Status/QOL Domain Score by Visit[a]



[a] Interval represents 95% CIs around the mean at each planned time point. The CIs have not been adjusted for multiplicity and cannot be used in place of hypothesis testing. Graph is truncated at week 235 because values beyond week 235 are not interpretable due to the small number of patients.

- In the BVd arm, global HRQOL has remained stable over longer follow-up

Abbreviations

3L+, third line or later; ADC, antibody-drug conjugate; AE, adverse event; BCMA, B-cell maturation antigen; belamaf, belantamab mafodotin; BSLN, baseline; BVd, belantamab mafodotin, bortezomib, and dexamethasone; CD, cluster of differentiation; CR, complete response; DCO, data cutoff; DOR, duration of response; DVd, daratumumab, bortezomib, and dexamethasone; EORTC QLQ-C30, European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire–Core 30; HR, hazard ratio; HRQOL, health-related quality of life; IRC, independent review committee; ITT, intention to treat; IV, intravenous; KM, Kaplan-Meier; LOT, line of therapy; MRD, minimal residual disease; NR, not reached; OS, overall survival; PFS, progression-free survival; PFS2, progression-free survival on subsequent line of therapy; PI, proteasome inhibitor; Q3W, every 3 weeks; Q4W, every 4 weeks; QOL, quality of life; QW, once weekly; RRMM, relapsed/refractory multiple myeloma; SAE, serious adverse event; sCR, stringent complete response; SOC, standard of care; Vd, bortezomib and dexamethasone; VGPR, very good partial response.

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