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MagnetisMM-3: Long-Term Update and Efficacy and Safety of Less Frequent Dosing of Elranatamab in Patients with Relapsed or Refractory Multiple Myeloma

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Objective

To report the long-term efficacy and safety of elranatamab in BCMA-naive patients approximately 32 months after the last patient initiated treatment, including results after the switch to dosing Q4W

Conclusions

- For patients in MagnetisMM-3, the median DOR has still not been reached after a median follow-up of 33.9 months (by reverse Kaplan-Meier)
- For patients with ≥CR, the probability of maintaining a response at 30 months was 79.1%
- MRD negativity rate was 90.3%
- Following the switch from Q2W to Q4W dosing, 92.6% of patients maintained their response ≥6 months after the switch
- Of all 28 patients who switched to Q4W dosing, the incidence of grade 3/4 infections decreased from 17.9% to 10.7%
- These data demonstrate that reducing the dosing frequency of elranatamab to Q4W may improve safety without compromising efficacy

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Supplementary Materials

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References: 1. Lesokhin AM, et al. Nat Med 2023;29:2259-2267. **2.** Elrexfio (elranatamab-bcmm). Prescribing information. Pfizer; 2023. **3.** Mohty M, et al. Presented at EHA 2024 [poster P932].

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Background

- Elranatamab is a humanized bispecific antibody that targets both B-cell maturation antigen (BCMA)–expressing multiple myeloma (MM) cells and CD3-expressing T cells[1]
- In MagnetisMM-3 (NCT04649359), a multicenter, open-label, nonrandomized, phase 2 registrational study, elranatamab monotherapy induced deep and durable responses in patients with relapsed or refractory multiple myeloma (RRMM) who had not received prior BCMA-directed therapy (ie, BCMA naive; N=123)[1,2]
- Here, we report the long-term efficacy and safety of elranatamab in BCMA-naive patients approximately 32 months after the last patient initiated treatment, including results after the switch to dosing once every 4 weeks (Q4W)

Methods

- Eligible patients had RRMM with disease refractory to ≥1 immunomodulatory drug, ≥1 proteasome inhibitor, and ≥1 anti-CD38 antibody
- Patients received subcutaneous elranatamab as step-up priming doses followed by elranatamab 76 mg once-weekly (QW) for 6 cycles
- Patients treated with elranatamab QW for ≥6 cycles who achieved partial response (PR) or better lasting ≥2 months were transitioned to Q2W dosing and to Q4W after ≥6 cycles of Q2W dosing
- The primary endpoint was objective response rate (ORR), assessed by blinded-independent central review (BICR) per International Myeloma Working Group (IMWG) criteria
- Adverse events (AEs) were graded using the National Cancer Institute Common Terminology Criteria for AEs (version 5.0)
- Outcomes in patients who switched to Q4W dosing were assessed in a post hoc analysis
- The impact of Q4W dosing on efficacy was assessed by evaluating maintenance of response ≥6 months after the switch to Q4W
  - Patients were counted as responders if they had an assessment demonstrating response ≥6 months after the switch
- The impact of switching to Q4W dosing on safety was assessed by comparing the incidence of treatment-emergent AEs before and after the switch
  - New onset AEs for each participant were included for an equal time period before and after the switch (based on individual follow-up times after the switch), with a maximum time period of up to 6 months
- The data cutoff date was September 10, 2024; median follow-up by reverse Kaplan-Meier was 33.9 (95% CI, 33.4-34.6) months

Results

PATIENTS AND TREATMENT

- Overall, 123 BCMA-naive patients were treated with elranatamab (**Supplementary Table 1**)
  - Median age 68.0 years; 55.3% male
  - Race: 7.3% African American or Black, 13.0% Asian, 58.5% White, and the rest (21.1%) unknown/not reported
  - Patients were heavily pretreated: median 5 prior lines of therapy and 96.7% with triple-class refractory disease
- At data cutoff, 20 (16.3%) patients were still receiving treatment
- In patients without progressive disease by BICR and still on treatment at the start of cycle 7 (n=64), 90.6% fulfilled the protocol criteria to switch to Q2W dosing at C7D1
- 58 patients switched to Q2W dosing; the median duration of Q2W dosing was 13.4 (range, 0.03-25.89) months
- Of 43 responding patients who completed ≥6 cycles of Q2W dosing, 28 patients switched to Q4W dosing; the median duration of Q4W dosing was 12.0 (range, 1.87-14.29) months
  - Among the remaining 15 patients, reasons for not switching were: timing of the protocol amendment that enabled Q4W dosing (n=10), treatment hold (n=2), or unknown (n=3)

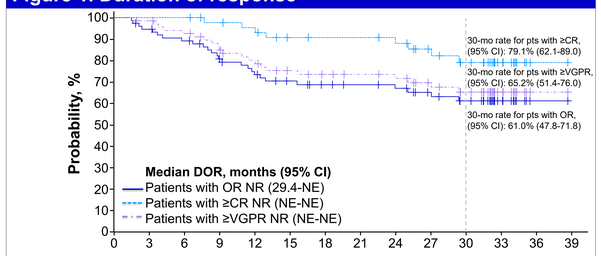
EFFICACY

- With extended follow-up, ORR per BICR was 61.0% (≥CR, 37.4%)
  - sCR, 16.3%; CR, 21.1%; VGPR, 18.7%; PR, 4.9%
  - Minimal residual disease (MRD) negativity (10^{-5}) rate was 90.3% in patients with CR or better who were evaluable for MRD (n=31)
- Median DOR was not reached (NR; 95% CI, 29.4-not evaluable [NE]; **Figure 1**)
- Median PFS was 17.2 (95% CI, 9.8-NE) months (**Figure 2**)
- Median OS was 24.6 (95% CI, 13.4-NE) months (**Figure 3**)
- Among responders per BICR who switched to Q4W dosing ≥6 months before the data cutoff (n=27), 25 (92.6%) maintained their response ≥6 months after the switch, including 22 (88.0%) who maintained ≥CR
- 1 (3.7%) patient had progressive disease (per IMWG criteria in ≥1 assessment), and 1 (3.7%) patient permanently discontinued elranatamab 6 months after the switch to Q4W

SAFETY

- No new safety signals were observed with extended follow-up (**Supplementary Table 2**)
  - Infections (any grade, 70.7%; grade 3/4, 41.5%; grade 5, 7.3%), cytokine release syndrome (57.7%), and immune effector cell associated–neurotoxicity syndrome (4.9%)
- There were 3 new deaths with ≈6 more months of follow-up since the last report[3], including 1 each due to progressive disease, treatment toxicity, and unknown reason
- The incidence and severity of treatment-emergent AEs up to 6 months before and after switching to Q4W dosing are presented in **Figure 4**

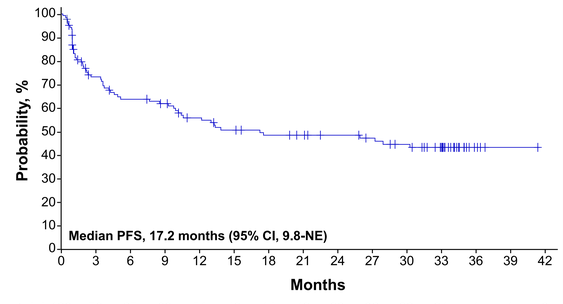
Figure 1. Duration of response



No. at risk													
Pts with OR	75	70	65	57	50	45	41	39	37	32	27	11	1	0
Pts with ≥CR	46	46	46	43	40	36	35	35	33	28	23	11	1	0
Pts with ≥VGPR	69	67	62	55	49	44	41	39	37	32	27	11	1	0

CR=complete response; DOR=duration of response; mo=month; NE=not evaluable; NR=not reached; OR=objective response; pts=patients; VGPR=very good partial response

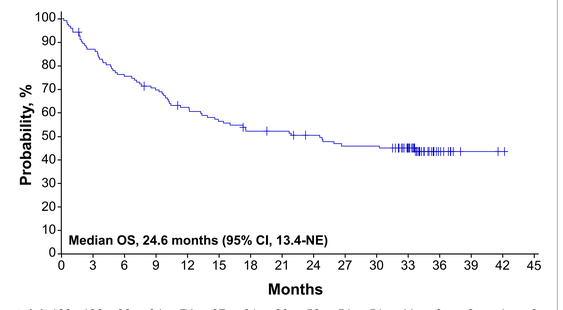
Figure 2. Progression-free survival



No. at risk													
	123	78	67	63	54	48	44	42	39	36	32	24	4	1	0

NE=not evaluable; PFS=progression-free survival

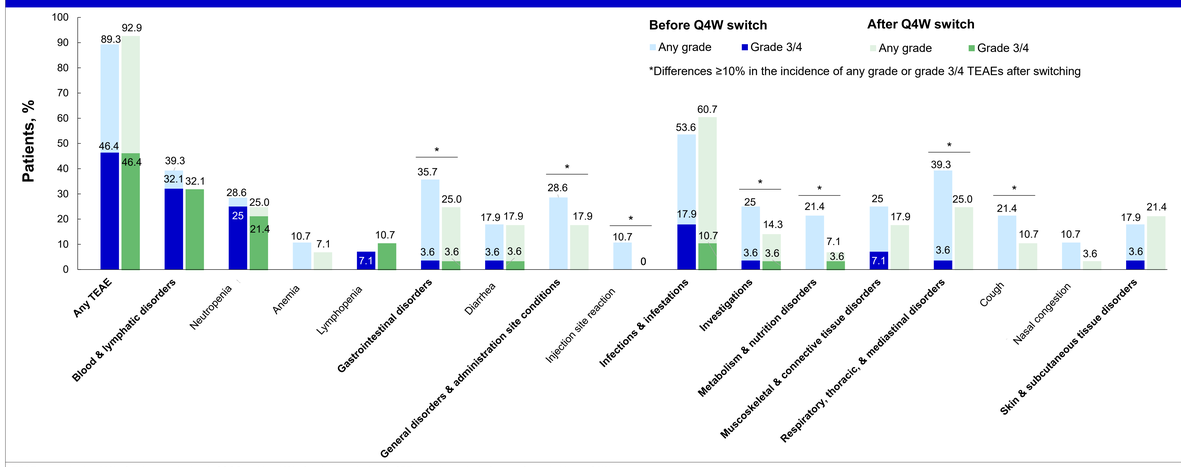
Figure 3. Overall survival



No. at risk															
	123	106	92	84	74	67	61	60	56	51	51	41	9	2	1	0

NE=not evaluable; OS=overall survival

Figure 4. Most common TEAEs before and after switch Q4W dosing[a]



[a] TEAEs occurring in ≥20% of patients at the level of SOC and in ≥10% of patients at the level of PT up to 6 months before or after switching to Q2W
PT=preferred term; Q4W=once every 4 weeks; SOC=system organ class; TEAE=treatment-emergent adverse event