**TPS7568** **Poster Session**

# MagnetisMM-32: A phase 3 randomized study of elranatamab vs EPd, PVd, or Kd in patients with relapsed or refractory multiple myeloma (RRMM) and prior anti-CD38–directed therapy.

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**Background:** Elranatamab (ELRA), a BCMA-CD3 bispecific antibody, has shown efficacy and manageable safety as a monotherapy in patients with RRMM. This study will evaluate ELRA monotherapy vs elotuzumab-pomalidomide-dexamethasone (EPd), pomalidomide-bortezomib-dexamethasone (PVd), or carfilzomib-dexamethasone (Kd) in patients with RRMM to determine whether ELRA can provide superior clinical benefit in early relapse (2L+). **Methods:** MagnetisMM-32 (NCT06152575), a phase 3, open-label, multicenter, randomized study, will enroll ≈492 patients. Patients will receive ELRA (Arm A) or investigator's choice of EPd, PVd or Kd (Arm B), until disease progression, unacceptable toxicity, withdrawal of consent, loss to follow-up, or study termination. Patients treated with ELRA will receive 2 step-up priming doses followed by weekly doses and subsequently less frequent doses in 28-day cycles. Patients will be randomized 1:1 (stratified by prior line of therapy [1 vs 2 vs 3/4] and International Staging System disease stage [1/2 vs 3]). Key inclusion criteria include age of ≥18 years, prior multiple myeloma diagnosis with measurable disease (per IMWG criteria), evidence of progressive disease or failure to achieve a response to last line of multiple myeloma therapy, 1 to 4 prior lines of therapy including an anti–CD38 antibody–containing regimen (for ≥2 consecutive cycles) and a lenalidomide-containing regimen (for ≥2 consecutive cycles), adequate bone marrow function, and an ECOG performance status of ≤2. Key exclusion criteria include stem cell transplant ≤12 weeks prior to enrollment or active graft vs host disease; active, uncontrolled infection; any other active malignancy <3 yrs prior to enrollment; ongoing grade ≥3 peripheral sensory or motor neuropathy; history of any grade ≥3 peripheral motor polyneuropathy, prior BCMA-directed or CD3-redirecting therapy; never achieved ≥PR with any treatment during disease course; and unable to receive any of the Arm B regimens (EPd, PVd, or Kd). The primary and key secondary endpoints are progression-free survival (PFS) by blinded independent central review (BICR) per IMWG criteria and overall survival (OS), respectively. Other secondary endpoints include PFS and PFS2 (PFS on next line of therapy) by investigator per IMWG, objective response rate, duration of response, very good partial response rate, complete response rate, duration of complete response, and time to response (all by BICR per IMWG), MRD negativity rate (including sustained for ≥12 months) and duration, safety and pharmacokinetics of ELRA, immunogenicity, and health-related quality of life outcomes. The primary endpoint and OS will be compared statistically between treatment arms by stratified log-rank tests. Study funding: Pfizer. Clinical trial information: NCT06152575. Research Sponsor: Pfizer.