



## The 65th ASH Annual Meeting Abstracts

## ONLINE PUBLICATION ONLY

## 652.Multiple Myeloma: Clinical and Epidemiological

**Real-World Clinical Outcomes of Pomalidomide-Based and Daratumumab-Based Therapies in Patients with Relapsed/Refractory Multiple Myeloma: A Single-Center Retrospective Cohort Study**

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**Background:** Prior studies have revealed promising clinical outcomes of pomalidomide-based (Pom-based) and daratumumab-based (Dara-based) regimens. However, there is limited data directly comparing Pom-based versus Dara-based therapies for relapsed/refractory multiple myeloma (RRMM) in either clinical trials or real-world practice. This study aimed to compare real-world clinical outcomes and safety between Pom-based and Dara-based therapies in patients with RRMM.

**Methods:** This single-center retrospective cohort study included 89 adult patients with RRMM treated with Pom-based or Dara-based or pomalidomide-daratumumab combination (DPd) regimens at the First Affiliated Hospital, Zhejiang University School of Medicine, Hangzhou, China between December 1<sup>st</sup>, 2018 and July 31<sup>st</sup>, 2022. Eligible patients had received  $\geq 1$  prior line of therapy (LOT) and completed  $\geq 1$  cycle of one of the aforementioned regimens as salvage treatment. The study cohort was divided into three groups for analysis: Pom-based (n=37), Dara-based (n=32), and DPd (n=20).

**Results:** The median follow-up periods were 13.8 months (95% CI: 13.1-14.5) for Pom-based group, 12.5 months (8.8-16.2) for Dara-based group, and 14.0 months (8.1-19.9) for DPd group ( $P = 0.42$ ). Overall response rates (ORR) for Pom-based, Dara-based, and DPd groups were 54.3%, 83.9%, and 75.0%, respectively ( $P = 0.03$ ; Pom-based vs Dara-based,  $P = 0.01$ ; Pom-based vs DPd,  $P = 0.13$ ). As of the data cutoff date (December 1<sup>st</sup>, 2022), the median progression-free survival (PFS) was 5.7 months (95% CI: 4.9-6.5) for Pom-based group, 13.0 months (4.8-21.2) for Dara-based group, and 6.6 months (4.9-8.3) for DPd group ( $P = 0.09$ ; Pom-based vs Dara-based,  $P = 0.03$ ; Pom-based vs DPd,  $P = 0.47$ ). The median overall survival was not reached for any of the groups. Multivariate analysis identified Eastern Cooperative Oncology Group performance status (ECOG PS)  $\geq 2$  as an independent adverse prognostic factor for PFS (multivariate HR 2.35, 95% CI 1.22-4.52,  $P = 0.01$ ). The PFS benefit of Dara-based versus Pom-based regimens was not statistically significant (multivariate HR 0.48, 95% CI 0.22-1.08,  $P = 0.08$ ). However, subgroup analysis and interaction testing revealed that the PFS improvement with Dara-based versus Pom-based therapies was more pronounced among patients at first relapse compared to those receiving  $\geq 2$  prior LOTs (HR 0.42, 95% CI 0.23-0.77 vs HR 0.83, 95% CI 0.48-1.45;  $P$  for interaction = 0.03). Concerning safety, Grade 3/4 neutropenia and pneumonia occurred more frequently in DPd group versus other groups (Pom-based vs Dara-based vs DPd: 45.9% vs 37.5% vs 85.0%,  $P = 0.003$  and 32.4% vs 18.8% vs 55.0%,  $P = 0.03$ , respectively).

**Conclusions:** In this real-world analysis, Pom-based, Dara-based, and DPd regimens demonstrated favorable clinical outcomes in RRMM. Dara-based regimens were associated with superior response rates compared to Pom-based therapy. While no significant difference in PFS was observed between these therapies overall, Dara-based regimens provided improved PFS among patients at first relapse.

**Disclosures** No relevant conflicts of interest to declare.

<https://doi.org/10.1182/blood-2023-184794>