PA-044

# Real-World Treatment Patterns Associated With Elranatamab Among Patients With Relapsed/Refractory Multiple Myeloma: The ALTITUDE-2 Study

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## Background

- Elranatamab is a humanized bispecific antibody that targets both BCMA-expressing myeloma cells and CD3-expressing T-cells[1]
- Elranatamab is currently approved for the treatment RRMM in several countries[1-3]
- Data on the efficacy and safety of elranatamab have been published from the registrational MagnetisMM-3 trial (NCT04649359), an open-label, multicenter, non-randomized, phase 2 study[4]
- However, data on the usage of elranatamab in real-world clinical practice are limited

## Objectives

To assess real-world treatment patterns and other outcomes among patients with relapsed/refractory multiple myeloma (RRMM) treated with elranatamab in the United States

## Methods

- ALTITUDE-2 (EUPAS1000000293) is an ongoing, non-interventional database study designed to assess real-world treatment patterns and other outcomes among patients with RRMM treated with elranatamab in the United States
- The data source was the Medicare Fee-For-Service (FFS) dataset, which represents 100% of the claims for all Medicare FFS beneficiaries, including demographics and inpatient, outpatient, and prescription drug claims
- All adult (aged ≥18 years) patients with ≥1 claim for elranatamab, and who met other inclusion and exclusion criteria (eg, ≥180 days and ≥30 days of continuous closed-claim enrollment pre- and post-index, respectively), were included in the analyses
- The first elranatamab claim represented the index date
- This interim analysis, based on a December 2024 data cut (median duration of therapy was 61 days [interquartile range (IQR), 30-122]), descriptively reported the treatment patterns of elranatamab separately for the following 3 periods:
  1. Index to day 8 (representing the SUD period)
  2. Day 9 to day 168 (representing maintenance period 1 [MP1], in which elranatamab would be expected to be administered once weekly)
  3. Day 169+ (representing maintenance period 2 [MP2], in which elranatamab could be administered every 2 weeks, depending on individual patient response)

## Conclusions

- Patients treated with elranatamab in the real-world were heavily pre-treated and prior exposure to B-cell maturation antigen (BCMA)-directed therapy was common
- Post-step-up dosing (SUD), real-world treatment patterns suggest less frequent administration of elranatamab compared with the label

## Results

### PATIENTS AND TREATMENT

- 214 patients with a median (IQR) age of 75 (70-80) years were included (**Table 1**)
- 53% of patients were female, 73% were White, and 14% were Black or African American; 62% were penta-drug exposed, 21% had a prior BCMA-directed therapy (either CAR T-cell therapy or belantamab mafodotin), and 18% had a prior BCMA-directed CAR T-cell therapy

### TREATMENT PATTERNS

- **Figure 1** shows the proportions of claims made per vial size reported as the percentage of total elranatamab claims
  - High proportions of unknown vial sizes limits the ability to draw inferences from these real-world data
- **Figure 2** presents the mean (SD) and median (IQR) number of days between administrations
  - Collectively, the mean number of days between administrations from real-world data suggest less frequent administration of elranatamab compared with the label
- **Table 2** shows the use of supportive MM medications during the SUD period and both MPs
  - Overall, use of supportive medication was common across all periods
  - 10% of patients received tocilizumab during the SUD period

### *SUD period (index date to day 8)*

- 214 patients contributed 358 claims of elranatamab during the SUD period
- Mean (SD) number of days between administrations was 4.3 (1.8) days
  - Median (IQR) number of days between administrations was 4 (3-6) days
- 102 patients (48%) reported supportive medication use during SUD

### *MP1 (days 9 to 168 post index date)*

- 178 patients contributed 1517 claims of elranatamab in MP1
- Mean (SD) number of days between administrations was 10.2 (7.0) days
  - Median (IQR) number of days between administrations was 7 (7-13) days
- 126 patients (71%) reported supportive medication use during MP1

### *MP2 (days 169+ post index date)*

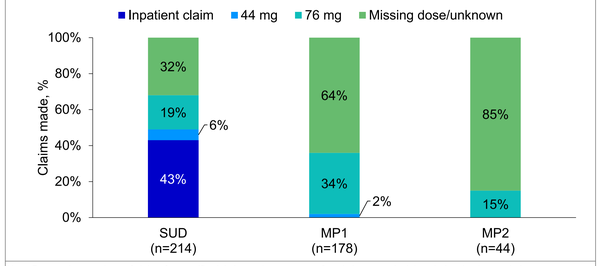
- 44 patients contributed 221 claims of elranatamab in MP2
- Mean (SD) number of days between administrations was 18.0 (9.3) days
  - Median (IQR) number of days between administrations was 14 (14-24) days
- 18 patients (41%) reported supportive medication use during MP2

### Table 1. Baseline demographic and clinical characteristics

| | N=214 |
|---|---|
| Age at index date, median (IQR), years[a] | 75 (70-80) |
| Sex, n (%) | |
| Male | 100 (47) |
| Female | 114 (53) |
| Race/ethnicity, n (%) | |
| Asian or Pacific Islander | <11 |
| Black or African American | 29 (14) |
| Hispanic or Latino | 13 (6) |
| White | 157 (73) |
| Other | <11 |
| Unknown or missing | <11 |
| Region on index date, n (%) | |
| South | 88 (41) |
| Northeast | 63 (29) |
| West | 36 (17) |
| Midwest | 27 (13) |
| Care setting at time of treatment, n (%)[b] | |
| Inpatient | 152 (71) |
| Outpatient | 62 (29) |
| Time from initial MM diagnosis to index date, median (IQR), months[c] | 70 (42-98) |
| Prior treatment history, n (%)[d] | |
| Penta-drug exposed[e] | 133 (62) |
| BCMA-directed therapy | 46 (21) |
| CAR-T | 38 (18) |
| Talquetamab | <11 |
| Relevant disease history (>20%), n (%)[d] | |
| Any infection | 198 (93) |
| Hypertension | 187 (87) |
| Renal failure | 155 (72) |
| Peripheral neuropathy | 152 (71) |
| Neutropenia | 125 (58) |
| Any non-hematological malignancy | 113 (53) |
| Renal disease | 84 (39) |
| Congestive heart failure | 73 (34) |
| Use of IV anti-infective | 72 (34) |
| Other hematological malignancy | 65 (30) |
| Hypercalcemia | 63 (29) |
| Metastatic solid tumor | 58 (27) |
| Diabetes | 57 (27) |
| Chronic pulmonary disease | 50 (23) |
| Peripheral vascular disease | 45 (21) |
| Categorical CCI score, n (%) | |
| 0 (no comorbidities) | 27 (13) |
| 1-2 (mild) | 110 (51) |
| 3-4 (moderate) | 67 (31) |
| ≥5 (severe) | <11 |

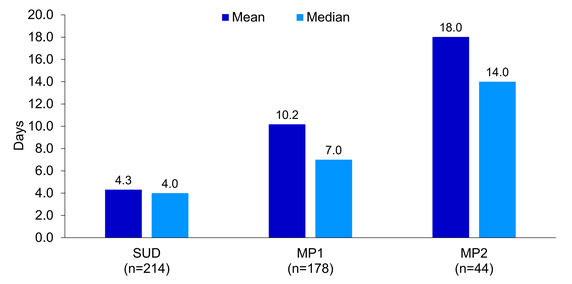
Note: Due to the Centers for Medicare & Medicaid Services (CMS) suppression policies, which applies to the Medicare Fee-For-Service data used in the ALTITUDE-2 study, any cell size 10 or lower is blinded as '<11'.
[a]Age is calculated based on the count of years between the index date and the birth date; [b]Patient cohort diminishes between treatment dates, due to patients coming off therapy. The overall total includes the care setting for all patients; [c]Diagnosis date was identified via any inpatient or outpatient claim for the study population between quarter 1 of 2016 and quarter 4 of 2024; [d]Variables includes all of the claims identified with the variable's associated NDC/HCPCS_CD/ICD-10 Diagnosis Codes and were reported from either the initial diagnosis to 1 day before index date or within 180 days of index date; [e]Exposed to >2 unique proteasome inhibitors, >2 unique immunomodulatory agents, and >1 anti-CD38 monoclonal antibodies.
BCMA=B-cell maturation antigen; CAR T=chimeric antigen receptor T-cell therapy; CCI=Charlson Comorbidity Index; IQR=interquartile range; IV=intravenous; MM=multiple myeloma

### Figure 1. Proportions of claims by vial size during SUD and maintenance




Note: Reported as numbers of claims for specific vial size and percentage of total elranatamab claims during the time period.
MP=maintenance period; SUD=step-up dosing

### Figure 2. Mean and median numbers of days between administrations[a]




Note: Patients were followed from their index elranatamab claim and censored at the earliest of death, the end of observability, or end of data availability.
[a]Assessed in patients with ≥2 administrations for elranatamab during the time period of interest.
MP=maintenance period; SUD=step-up dosing

### Table 2. Supportive multiple myeloma therapies received during SUD and overall maintenance[a]

| | |
|---|---|
| **SUD period, n (%)** | **N=214** |
| Overall | 102 (48) |
| Corticosteroids | 95 (44) |
| Diphenhydramine | 28 (13) |
| Tocilizumab | 22 (10) |
| Acetaminophen | 0 |
| **MP1, n (%)** | **n=178** |
| Overall | 126 (71) |
| Corticosteroids | 114 (64) |
| Diphenhydramine | 53 (30) |
| Tocilizumab | <11 |
| Acetaminophen | <11 |
| **MP2, n (%)** | **n=44** |
| Overall | 18 (41) |
| Corticosteroids | 17 (39) |
| Diphenhydramine | <11 |
| Tocilizumab | – |
| Acetaminophen | 0 |

Note: Due to the Centers for Medicare & Medicaid Services (CMS) suppression policies, which applies to the Medicare FFS data used in the ALTITUDE-2 study, any cell size 10 or lower is blinded as '<11'.
[a]Proportions are based on the count of patients associated with the variable, divided by the total population of patients who received elranatamab. Thus, percentages in the column will not sum to 100%.
MP=maintenance period; SUD=step-up dosing

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