ALTITUDE-1: Real-World Treatment Patterns Associated With Elranatamab Among Patients With Multiple Myeloma

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Objectives

The primary objective of this analysis is to understand the treatment/dosing patterns of elranatamab (ELRA) in a real-world (RW) setting

Conclusions

- This is the first RW analysis of ELRA using claims data of patients with heavily pretreated MM, with nearly a third previously treated with a BCMA directed therapy
- ELRA was administered less frequently than per label with earlier Q2W, and even Q4W, dosing schedules observed
- Continued analyses with larger sample sizes and longer follow-up are ongoing

Background

- ELRA is a humanized bispecific antibody that targets both B-cell maturation antigen (BCMA)-expressing myeloma cells and CD3-expressing T cells[1]
- ELRA is currently approved for the treatment of relapsed/refractory multiple myeloma (RRMM) in several countries[1-3]
- While ELRA's efficacy and safety were established in the phase 2 MagnetisMM-3 trial,[4] data on the usage of ELRA in RW patients (including those who may not have been eligible for MagnetisMM-3 due to comorbidities) are missing

Methods

- ALTITUDE-1 (EUPAS1000000229) is an ongoing, non-interventional database study designed to capture real-world ELRA use among patients with MM
- The data source is Komodo Health's Healthcare Map™, which integrates both open- and closed-claims databases from ≥150 public and private payers/insurers, as well as clearinghouses across the United States
- Adult (≥18 years) patients with MM who had ≥1 claim for ELRA and had ≥180 days of continuous closed medical and pharmacy claims enrollment prior to their first ELRA claim (defined as the index date) were included in the analyses
- Patients with a prior claim for a BCMA-directed bispecific antibody were excluded

- This interim analysis, based on a January 2025 data cut (representing a median [interquartile range, IQR] of 65 [17-127] days on therapy, descriptively reports the treatment patterns of ELRA separately for the following 3 periods:
  1. Index to Day 8 (representing the step-up dosing [SUD] period)
  2. Day 9 to Day 168 (representing maintenance period 1 [MP1], in which ELRA would be expected to be administered once weekly)
  3. Day 169+ (representing maintenance period 2 [MP2], in which ELRA could be administered every 2 weeks (Q2W), depending on individual patient response)

Results

PATIENTS AND TREATMENT

- 69 patients were included with a median (IQR) age of 70.0 (63.0-78.0) years (**Table 1**)
- Patients were 46.4% male, 56.5% White, and 21.7% Black or African American; 46.4% were penta-drug exposed, 29.0% had a prior BCMA-directed therapy (either CAR T-cell therapy or belantamab), and 15.9% 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
- Mean (SD) and median (IQR) number of days between administrations are presented in **Figure 2**

SUD period (index date to Day 8)

- 69 patients contributed 109 claims of ELRA during the SUD period (1.6 per patient)
- Although the data are uncertain due to the potential for missing inpatient data, the mean (SD) number of days between administrations was 5.7 (1.8) days
  - Median (IQR) number of days between administrations was 7 (4-7) days

MP1 (Days 9 to 168 post index date)

- 62 patients contributed 424 claims of ELRA in MP1
- Mean (SD) number of days between administrations was 10.7 (8.2) days
  - Median (IQR) number of days between administrations was 7 (7-14) days
  - Nearly a quarter of administrations occurred on a Q2W basis during MP1

MP2 (Days 169+ post index date)

- 10 patients contributed 39 claims of ELRA in MP2
- Mean (SD) number of days between administrations was 26.0 (22.3)
  - Median (IQR) number of days between administrations was 27 (14-28) days, suggesting a monthly (Q4W) basis in a quarter of patients
- Among the post-SUD administrations with non-missing dose information (342 claims), the 44-mg vial was used in 10.8% of these claims
- At any point during the post-index period, 76.8% of patients received antivirals, 56.5% received antibiotics, 27.5% received antifungals, and 40.6% received intravenous immunoglobulin (**Table 2**)

Table 1. Baseline demographic and clinical characteristics

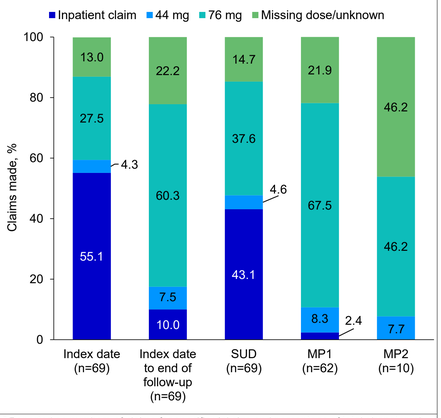
	N=69
Age at index date, median (IQR), years	70.0 (63.0-78.0)
Sex, n (%)	
Male	32 (46.4)
Female	31 (44.9)
Unknown or missing	6 (8.7)
Race/ethnicity, n (%)	
Asian or Pacific Islander	1 (1.4)
Black or African American	15 (21.7)
Hispanic or Latino	5 (7.2)
White	39 (56.5)
Other	3 (4.3)
Unknown or missing	6 (8.7)
Region on index date, n (%)[a]	
South	25 (36.2)
Northeast	22 (31.9)
West	16 (23.2)
Midwest	6 (8.7)
Care setting on index date, n (%)	
Inpatient	38 (55.1)
Outpatient	13 (18.8)
Pharmacy	0 (0.0)
Unknown or missing	18 (26.1)
Time from initial MM diagnosis to index date, median (IQR), months	74.8 (48.4-97.5)
Prior treatment history, n (%)[b]	
Penta-drug exposed[c]	32 (46.4)
BCMA-directed therapy	20 (29.0)
CAR T	11 (15.9)
Talquetamab	5 (7.2)
Relevant disease history, n (%)[b]	
Any infection	62 (89.9)
Hypertension	61 (88.4)
Peripheral neuropathy	56 (81.2)
Neutropenia	45 (65.2)
Use of IV anti-infective[d]	44 (63.8)
Hypercalcemia	23 (33.3)
Extramedullary disease	11 (15.9)
Amyloidosis	9 (13.0)

Table 1. Baseline demographic and clinical characteristics (cont'd)

	N=69
CCI score, mean (SD)[e]	3.6 (3.4)
Categorical CCI score, n (%)[e]	
0 (no comorbidities)	14 (20.3)
1 to 2 (mild)	20 (29.0)
3 to 4 (moderate)	11 (15.9)
≥5 (severe)	24 (34.8)
CCI comorbidities (≥5%), n (%)[e]	
Metastatic solid tumor	21 (30.4)
Renal disease	20 (29.0)
Congestive heart failure	20 (29.0)
Chronic pulmonary disease	16 (23.2)
Diabetes	14 (20.3)
Cerebrovascular disease	10 (14.5)
Perivascular disease	10 (14.5)
Myocardial infarction	6 (8.7)

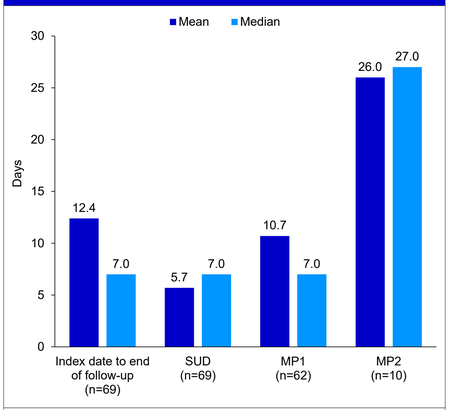
[a] Assessed from any time prior to index date to index date; [b] Assessed from the initial MM diagnosis date to 1 day prior to index date; [c] Exposed to 2 unique proteasome inhibitors, 2 unique immunomodulatory agents, and CD38 monoclonal antibodies; [d] Assessed from 14 days prior to index date to index date; [e] Assessed from 180 days prior to index date to index date
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 step-up dosing and maintenance[a-c]



[a] Reported as numbers of claims for specific vial size and percentage of total elranatamab claims during the time period of interest; [b] For 44 mg and 76 mg, the reported dose was based on the dose associated with NDC code in the non-inpatient and pharmacy setting, if the NDC code was not available, then the quantity of dosing was used; [c] Missing or unknown dose was defined as an elranatamab claim with a missing dose or a recorded dose that was not 44 mg/1.1 mL or 76 mg/1.9 mL. Note: Patients were followed from their index elranatamab claim and censored at the earliest of death, next treatment, end of observability, or end of data availability
MP=maintenance period; SUD=step-up dosing

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



[a] Assessed in patients with ≥2 administrations for elranatamab during the time period of interest. 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
MP=maintenance period; SUD=step-up dosing

Table 2. Therapies received during the entire follow-up period

	N=69
Anti myeloma therapies, n (%)	
HSCT	6 (8.7)
Proteasome inhibitors	5 (7.2)
Chemotherapies	3 (4.3)
IMiDs	3 (4.3)
CD38 mAbs	2 (2.9)
Nuclear export inhibitor	2 (2.9)
Talquetamab	2 (2.9)
Supportive care therapies, n (%)	
Antivirals	53 (76.8)
Antibiotics	39 (56.5)
Antifungals	19 (27.5)
Intravenous immunoglobulin	28 (40.6)

HSCT=hematopoietic stem cell transplant; IMiDs=immunomodulatory drugs; mAb=monoclonal antibody

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