EHA2025 Congress
June 12-15 | Milan, Italy

eha

PF772

# Retrospective, observational study to describe the clinical characteristics, management, and outcomes of bispecific anti-GPRC5D antibody in patients with relapsed refractory multiple myeloma treated outside clinical trials in Spain.

M.J. Blanchard[1], E. Fernández Poveda[2], E. Lavilla Rubira[3], C. López-Santamaría Castro[4], P. Lorente Alegre[5], J.M. Sánchez Pina[6], M. González-Pardo[7], P. Rodriguez-Otero[8], and M.V. Mateos Manteca[9] on behalf of BiTAL study investigators.

[1]Hospital Universitario Ramón y Cajal; [2]Hospital General Universitario Santa Lucía; [3]Hospital Universitario Lucus Augusti; [4]Hospital Universitario de Badajoz; [5]Hospital Arnau de Vilanova; [6]Hospital Universitario Doce de Octubre; [7]Medical Department, Janssen-Cilag S.A., Johnson & Johnson Company; [8]Cancer Center Clinica Universidad de Navarra, CCUN, Cima, IDISNA, CIBERONC, Spain; [9]University Hospital of Salamanca/IBSAL/Cancer Research Center-IBMCC (USAL-CSIC), CIBERONC.
[1,6,7]Madrid (Spain), [2]Cartagena (Spain), [3]Lugo (Spain), [4]Badajoz (Spain), [5]Valencia (Spain), [8]Navarra (Spain), [9]Salamanca (Spain).

## Key takeaway

- The high number of patients included in the Spanish TAL PAA suggests the willing of their doctors to offer them new treatment alternatives.
- The ongoing BiTAL study will allow us to collect the management experience and effectiveness of TAL in a cohort of patients outside of clinical trials to inform clinical decisions.

## Conclusions

- The BiTAL study may represent one of the largest cohorts of RRMM TCE patients treated with TAL outside clinical trials, including both academic and non-academic centers.
- The intermediate analysis revealed the complex profile and prior treatment of TCE RRMM patients in close to real-world conditions, underscoring the need to consider individual patient profiles when developing tailored therapeutic strategies.
- The overall ORR was 79% and 62% achieved a VGPR or better, with 26% showing a CR or better.
- With a median follow-up time for the overall population of 10.1 months, the mean PFS was 10.73 months.
- Few patients (n=5, 7.2%) discontinued treatment due to AEs.
- Early data on effectiveness and safety, while limited because of the retrospective nature of the study and despite the differences in patients' characteristics, appear to align with results from MONUMENTAL-1 study.

**Disclosure declaration**
MJBR has received honoraria derived from lectures and participation in advisory boards from Pfizer, GSK, Johnson&Johnson, Sanofi, AMGEN, Menarini, BMS and Beigene.

**Acknowledgments**
The authors thank the patients who volunteered for participating in this study, their families, and the staff members of the participating study sites who cared for them. The authors thank Evidenze Health Espana S.L.U. for their support in the development of this study (64407564MMY4006) and this poster, which were fundered by Janssen-Cilag S.A., in accordance with the Good Publication Practices (GPP 2022) guidelines (www.ismpp.org/ppf-2022).
**This work has been founded by Janssen-Cilag S.A.**
**Poster presented at: EHA2025 Congress (June 12 - 15, 2025 Milan, Italy).**



## Introduction

- Multiple myeloma (MM) is the second most common hematological malignancy[1]. Despite the arsenal of available therapeutic options, MM remains an uncurable disease, with a median overall survival of 5-10 years[1].
- Poor clinical outcomes have been reported in patients with TCE RRMM treated with real-world therapy[2]. Thus, new therapeutic approaches are still needed.
- Talquetamab (TAL), a pioneering bispecific antibody targeting GPRC5D, received approval in Europe in August 2023. Before this, in November 2022, Spanish health authorities authorized Pre-Approval Access programs (PAA) for TAL as monotherapy. This was offered for adult patients with RRMM who were TCE and had no remaining treatment alternatives, after reviewing for program eligibility based on specified PAA treatment guidelines. From November 2022 to 2024, 215 patients across 87 academic and non-academic centers began treatment through PAA, underscoring the unmet medical need for this population in Spain.
- The BiTAL study aims to collect the clinical experience of patients treated within the TAL PAA. The objective of this poster is to present the preliminary results on effectiveness and safety of the patients included in the study at the second programmed data cut-off (February 2025).

## Methods

- This is an ongoing retrospective, non-interventional, observational study conducted currently at 55 Spanish sites, presenting data collected during chart review period (September 2024 to February 2025).
- Adult (≥18 years) patients, diagnosed with TCE RRMM, who had initiated treatment with TAL monotherapy (at least one dose) outside clinical trials through PAA in Spain and had received the first dose of TAL in monotherapy at least 30 days before study initiation were included in the study after, for living patients, signing an Informed Consent Form (ICF).
- Quantitative variables are described using measures of central tendency and dispersion (mean, standard deviation [SD], median, minimum [min], maximum [max]. Qualitative variables are described using absolute and relative frequencies (N, %).

## Results

### Patient demographic and clinical characteristics

- At database cut-off, a total of 123 patients were evaluable and analyzed for this interim analysis. Of these, 80 (65.0%) received a biweekly initial dosage regimen (**Table 1**), following TAL SmPC.
- Forty-eight (39.0%) patients were not considered eligible for the Monumental-1 study. Non-measurable disease (52.1%), kidney failure (11.4%), and anemia (7.3%) were the main reasons for not eligibility.

**Table 1. Patients' demographic and clinical characteristics at inclusion**

| Characteristics | Biweekly (N = 80) | Overall population (N = 123) |
|---|---|---|
| **Age** (years), median (range)[a] | 67.0 (42.0-84.0) | 66.5 (42.0-84.0) |
| **Age (years) categorization**, n (%)[a] | | |
| <65 | 36 (45.0) | 47 (38.2) |
| 65-75 | 29 (36.2) | 45 (36.6) |
| >75 | 15 (18.8) | 18 (14.6) |
| NA | 0 (0.0) | 13 (10.6) |
| **Sex,** n (%)[b] | | |
| Male | 38 (47.5) | 55 (44.7) |
| Female | 42 (52.5) | 56 (45.5) |
| NA | 0 (0.0) | 12 (9.8) |
| **ECOG,** n (%) | | |
| 0-1 | 54 (67.5) | 69 (56.1) |
| ≥2 | 14 (17.5) | 19 (15.4) |
| NA | 12 (15.0) | 35 (28.5) |
| **Pre-MM comorbidities**, n (%) | | |
| Cardiovascular | 28 (35.0) | 43 (35.0) |
| Diabetes | 13 (16.2) | 18 (14.6) |
| Nervous system | 11 (13.8) | 14 (11.4) |
| Respiratory system[c] | 4 (5.0) | 6 (4.9) |
| Renal impairement | 9 (11.2) | 10 (8.1) |
| Other neoplasms | 3 (3.8) | 3 (2.4) |
| Infections[d] | 16 (20.0) | 23 (18.7) |
| **Creatinine clearance**, n (%) | | |
| 30-60 ml/min | 19 (23.8) | 21 (17.1) |
| <30 ml/min | 6 (7.5) | 8 (6.5) |
| NA | 7 (8.8) | 26 (21.1) |
| **Charlson Index**, n (%) | | |
| 0-1 | 60 (75.0) | 80 (65.0) |
| ≥2 | 20 (25.0) | 27 (22.0) |
| NA | 0 (0.0) | 16 (13.0) |
| **Frailty[e],** n (%) | | |
| Fit | 17 (21.2) | 22 (17.9) |
| Intermediate | 21 (26.2) | 25 (20.3) |
| Frail | 30 (37.5) | 39 (31.7) |
| NA | 12 (15.0) | 37 (30.1) |
| **Patient not eligible for Monumental-1 study**, n (%) | | |
| Not eligible[f] | 36 (45.0) | 48 (39.0) |
| Eligible | 28 (35.0) | 36 (29.3) |
| NA | 16 (20.0) | 39 (31.7) |
| **CRAB criteria[g],** n (%) | | |
| Yes | 69 (86.2) | 92 (74.8) |
| No | 7 (8.8) | 13 (10.6) |
| NA | 4 (5.0) | 18 (14.6) |
| **Time from diagnosis (years),** median (range)[h] | 5.0 (0.7-25.3) | 5.2 (0.7-25.3) |
| **ISS**, n (%) | | |
| I | 21 (26.2) | 27 (22.0) |
| II | 22 (27.5) | 35 (28.5) |
| III | 23 (28.8) | 30 (24.4) |
| NA | 14 (17.5) | 31 (25.2) |
| **Plasmacytoma type,** n (%) | | |
| Bone-related | 22 (57.9) | 34 (27.6) |
| Extramedullary | 14 (36.8) | 20 (16.3) |
| NA | 2 (5.3) | 23 (18.7) |
| **Cytogenetic abnormality risk,** n (%) | | |
| Standard | 53 (66.3) | 76 (61.8) |
| High | 10 (12.5) | 11 (8.9) |
| t(4;14) | 4 (5.0) | 4 (3.3) |
| t(14;16) | 1 (1.3) | 2 (1.6) |
| del(17p) | 9 (11.2) | 9 (7.3) |
| NA | 17 (21.2) | 36 (29.3) |

[a]n = 110; [b]n = 111; [c]Chronic obstructive pulmonary disease and/or oxygen therapy <28 days prior to TAL initiation; [d]HIV, HBV, HCV, uncontrolled systemic infection <28 days prior to TAL initiation, severe infection with hospitalization <6 months prior to TAL initiation; [e]Frailty assessment was performed using age, CCI and ECOG PS score, Facon et al. Leukemia 2020;34:224–33; [f]Most common reasons for not eligibility: non-measurable disease, creatinine clearance <40 ml/min, hemoglobin level <8 g/dl; [g]28 days prior to TAL initiation; [h]n = 102. del: deletion; ECOG: Eastern Cooperative Oncology Group; Ig, immunoglobulin; IQR: interquartile range; ISS: International Staging System; NA: data not available; t: translocation.

- Patients had a median of 4.0 (min-max, 1.0-9.0) prior treatment lines (**Figure 1**) and 77 (62.6%) and 4 (3.3%) received an autologous and allogenic hematopoietic stem cell transplant, respectively.
- All of them were exposed to IMiDs, PIs, and anti-CD38 antibodies (**Table 2**).
- Eighty-six (69.9%) patients were triple refractory and 33 (26.8%) were penta refractory.

**Figure 1. Distribution of patients by number of previous treatment lines**

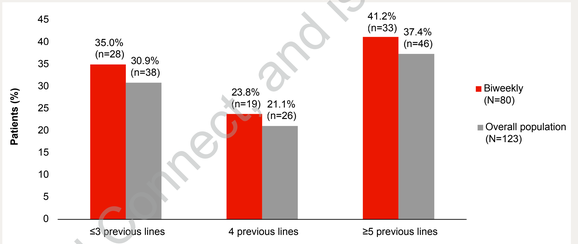



**Table 2. Prior treatment regimens received**

| Agents | Exposed patients | | Refractory patients[a] | |
|---|---|---|---|---|
| | Biweekly (N = 80) | Overall population (N = 110) | Biweekly (N = 78) | Overall population (N = 107) |
| **IMiDs,** n (%) | 80 (100.0) | 110 (100.0) | 73 (93.6) | 99 (92.5) |
| Thalidomide | 32 (40.0) | 42 (38.2) | 12 (16.4) | 17 (17.2) |
| Pomalidomide | 54 (67.5) | 77 (70.0) | 47 (64.4) | 63 (63.6) |
| Lenalidomide | 77 (96.2) | 106 (96.4) | 62 (84.9) | 86 (86.9) |
| **PI,** n (%)[b] | 79 (98.8) | 109 (99.1) | 73 (93.6) | 101 (94.4) |
| Bortezomib | 79 (100.0) | 109 (100.0) | 52 (71.2) | 74 (73.3) |
| Carfilzomib | 70 (88.6) | 97 (89.0) | 55 (75.3) | 77 (76.2) |
| Ixazomib | 1 (1.3) | 1 (0.9) | 0 (0.0) | 0 (0.0) |
| **Anti-CD38,** n (%) | 80 (100.0) | 110 (100.0) | 71 (91.0) | 96 (89.7) |
| Daratumumab | 65 (81.2) | 87 (79.1) | 54 (76.1) | 73 (76.0) |
| Isatuximab | 32 (40.0) | 48 (43.6) | 27 (38.0) | 38 (39.6) |
| **Anti-BCMA**, n (%) | 29 (36.3) | 40 (36.4) | 25 (32.1) | 32 (29.9) |
| CAR-T[c] | 3 (10.3) | 3 (7.5) | 2 (8.0) | 2 (6.3) |
| ADC[d] | 23 (79.3) | 30 (75.0) | 20 (80.0) | 24 (75.0) |
| Bispecific Ab | 3 (10.3) | 7 (17.5) | 2 (8.0) | 6 (18.8) |

[a]Refractory was defined as disease that progresses while on therapy or within 60 days of the last therapy; [b]At the database cut-off, the data concerning one patient exposure to PI was not available; [c]CAR-T: Idecabtagene vicleucel, Citacabtagene autoleucel, ARI00002h, BCMA CAR-T; [d]ADC: belantamab. ADC: antibody-drug conjugate; IMiDs: immunomodulatory drugs; PI: proteasome inhibitor.

### Effectiveness

- The overall response rate (ORR) was 79%, including 7.0% who achieved stringent complete response (sCR), 19.0% CR, 36.0% very good partial response (VGPR), and 17.0% PR **(Table 3)**.

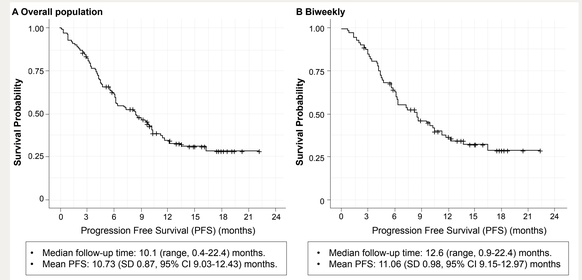
**Table 3. Best response rates obtained in patients treated with TAL**

| Response[a] | Biweekly, n (%; 95% CI[b]) (N = 75) | Overall population, n (%; 95% CI[b]) (N = 100) |
|---|---|---|
| **ORR** | 61 (81.3; 70.7-89.4) | 79 (79.0; 69.7-86.5) |
| ≥CR | 20 (26.7; 17.1-38.1) | 26 (26.0; 17.7-35.7) |
| VGPR | 27 (36.0; 25.2-47.9) | 36 (36.0; 26.6-46.2) |
| PR | 14 (18.7; 10.6-29.3) | 17 (17.0; 10.2-25.8) |
| **NA** | 3 (4.0) | 7 (7.0) |

[a]According to the Internation Myeloma Working Group criteria; [b]Clopper-Pearson 95% confidence interval. CI: confidence interval; CR: complete response; NA: data not available; ORR: overall response rate; PR: partial response; VGPR: very good partial response.

- With a median follow-up time for the overall population of 10.1 (min-max, 0.4-22.4) months, the mean progression free survival (PFS) was 10.73 (SD 0.87, 95% CI 9.03-12.43) months **(Figure 2)**.

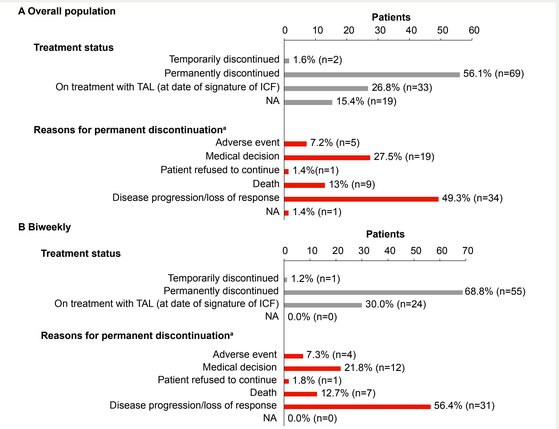
**Figure 2. PFS (months) of talquetamab treatment in the overall population (A, N = 97;) and in patients with a biweekly initial dosage regimen[a] (B, N = 73)**




### Safety

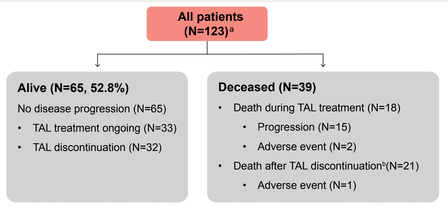
- The median duration of TAL treatment was 7.5 months (min-max, 0.1-22.4).
- Ninety-eight (79.7%) and seventy-four (92.5%) patients in the overall and biweekly populations, respectively, completed step-up dosing.
- At database cut-off, 69 (56.1%) patients had permanently discontinued treatment with TAL. Of these, 34 (49.3%) discontinued treatment due to disease progression or loss of response and 19 (27.5%) stopped due to medical decision (**Figure 3**).
- During last available follow-up, 65 (52.8%) patients were still alive and 39 (31.7%) had died; 15 (12.2%) due to disease progression or loss of response and 2 (1.6%) due to adverse events during TAL treatment (**Figure 4**).
- Additional safety analyses are planned and will be reported in future communications.

**Figure 3. Distribution of patients by treatment status and reasons for permanent discontinuation in the overall population (A, N = 123) and in patients with a biweekly initial dosage regimen (B, N = 80)**




[a]percentage calculated considering the total number of patients who permanently discontinued treatment with TAL. ICF: informed consent form; NA: data not available

**Figure 4. Patients' status during the last available follow-up**




[a]Data from 19 patients was not available; [b]Defined as a death to have occurred after TAL treatment discontinuation and at least within 30 days after last drug dose.

**References**
1. van de Donk N, Pawlyn C, Yong KL. Multiple myeloma. Lancet. 2021;397(10272):410-27.
2. Manteca M-VM, Weisel K, Garcia MEG, Einsele H, Lindsey-Hill J, De Stefano V, et al. P-409 Real-Life Outcomes in Triple-Class Exposed (TCE) Relapsed/Refractory Multiple Myeloma (RRMM) Treated With Carfilzomibandor Pomalidomide-Based Regimens in the LocoMMotion and MoMMent Studies. Clinical Lymphoma, Myeloma and Leukemia. 2024;24:S270-S1.

Multiple myeloma