2392

Real-world Talquetamab Utilization Patterns and Dose Schedules in the United States: An Analysis Using Claims Data

Rahul Banerjee[1], Ruibin Wang[2], Yi-Hsuan Liu[2], Jinghua He[2], Hoa H Le[2], Saurabh Patel[2], Xinke Zhang[2]

[1]Fred Hutchinson Cancer Center, Seattle, WA, USA; [2]Janssen Scientific Affairs, LLC, Horsham, PA, and Titusville, NJ, USA

Key Takeaway

In this real-world analysis of talquetamab utilization patterns, talquetamab recipients were heavily pretreated but were not always exposed to prior commercial BCMA-targeted therapies

Around 10% of patients received commercial talquetamab in combination with other agents, such as teclistamab or pomalidomide; a small proportion of patients received talquetamab as a bridging therapy to CAR-T therapies

Q2W dosing was the most common starting and ending dose of talquetamab

Conclusions

In this real-world study among patients treated with talquetamab in the US, talquetamab was predominantly given as a monotherapy, while a few patients received talquetamab as part of a combination therapy

Although most talquetamab recipients were heavily pretreated, 39% had not yet received any prior commercial BCMA-targeted therapy

The most commonly observed dosing schedule for talquetamab was Q2W

While this study represents the largest real-world analysis of talquetamab utilization since its US approval, further real-world research into clinical outcomes is needed to provide insights into long-term use practices

Scan the QR code

Poster

https://www.congresshub.com/ASH2024/Oncology/Talquetamab/Banerjee

Acknowledgments

This study was sponsored by Janssen Scientific Affairs, LLC. Medical writing and editorial support were provided by Jessica A Weaver, PhD, and Holly Clarke, PhD, of Lumanity Communications Inc., and were funded by Janssen Scientific Affairs, LLC.

Introduction

- Talquetamab, a first-in-class GPRC5D-targeting bispecific monoclonal antibody, has recently been approved in the United States (US) for the treatment of patients with relapsed/refractory multiple myeloma (RRMM) after ≥4 prior lines of therapy (LOTs) and triple-class exposure to a proteasome inhibitor (PI), an immunomodulatory drug (IMiD), and an anti-CD38 monoclonal antibody[1]
  - The approval of talquetamab was based on promising data from the phase 1/2 MonumenTAL-1 study (ClinicalTrials.gov Identifier: NCT03399799/NCT04634552), in which heavily pretreated patients with RRMM received talquetamab[2,3]
  - Talquetamab was approved at 2 dosing schedules: a weekly (QW) schedule with 3 step-up doses (SUDs) followed by talquetamab 0.4 mg/kg QW, and a biweekly (every 2 weeks; Q2W) schedule with 4 SUDs followed by talquetamab 0.8 mg/kg Q2W[1]
- Due in part to the recent approval of talquetamab, there are limited real-world data on talquetamab utilization patterns in clinical practice. In an earlier analysis, we presented results of the first real-world analysis of talquetamab utilization patterns since its US approval (August 2023) and showed that talquetamab was mostly used as a monotherapy, with most patients on a Q2W schedule[4]

Objective

- To understand demographic and clinical characteristics, dosing practices, and clinical use scenarios in the real-world setting among patients treated with talquetamab from the Komodo Healthcare Map™ database

Methods

Study design

- In this real-world, retrospective, observational, descriptive cohort study, patients with multiple myeloma (MM) who received talquetamab therapy between August 9, 2023 (US approval date) and June 8, 2024 (last data cut) were identified from the Komodo Healthcare Map™ database (**Figure 1**)
- The index date was defined as either the date of the first outpatient talquetamab SUD (3 mg/1.5 mL vial size use) claim or the date of an inpatient talquetamab encounter occurring 28 days before the first talquetamab treatment dose (40 mg/mL vial size use) in the outpatient setting

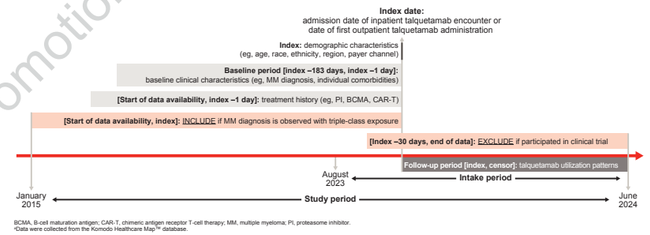
Study population

- Patients aged ≥18 years with ≥1 diagnosis code for MM any time prior to or on the index date and ≥1 medical or pharmacy claim for commercial talquetamab between August 9, 2023 (US approval date) and June 8, 2024 (last data cut) were identified
- Patients had triple-class–exposed RRMM (≥1 PI, ≥1 IMiD, and ≥1 anti-CD38 therapy)
- Patients enrolled in clinical trials were excluded

Statistical analysis

- Patient demographic and clinical characteristics were described for the baseline period of 6 months prior to the index date. Talquetamab administration and utilization patterns were also evaluated. All data were reported descriptively

Figure 1: Study design[a]



BCMA, B-cell maturation antigen; CAR-T, chimeric antigen receptor T-cell therapy; MM, multiple myeloma; PI, proteasome inhibitor.
[a]Data were collected from the Komodo Healthcare Map™ database.

Results

Patient characteristics

- There were 141 patients treated with talquetamab included in the study, with a median (interquartile range [IQR]) age of 67.0 (59.0, 74.0) years at the index date (**Table 1**)
  - Most patients were male (53.9%), White (61.0%), and insured with Medicare (63.8%)
  - The median (IQR) duration of MM diagnosis was 5.9 (4.0, 7.9) years, and the median (IQR) duration of post-index follow-up was 3.3 (1.5, 5.5) months

Table 1: Demographic and clinical characteristics

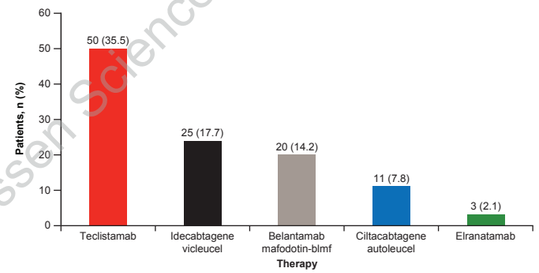
Characteristic[a]	Patients with RRMM with an eligible talquetamab claim (n=141)
Age at index	
Median (IQR), years	67.0 (59.0, 74.0)
<65 years, n (%)	60 (42.6)
65-69 years, n (%)	26 (18.4)
70-74 years, n (%)	24 (17.0)
≥75 years, n (%)	31 (22.0)
Sex, n (%)	
Male	76 (53.9)
Female	65 (46.1)
Race, n (%)	
White	86 (61.0)
Black	26 (18.4)
Hispanic	8 (5.7)
Other/unknown	21 (14.9)
US region, n (%)	
South	44 (31.2)
Northeast	36 (25.5)
West	33 (23.4)
Midwest	28 (19.9)
Insurance plan type, n (%)	
Medicare	90 (63.8)
Commercial	33 (23.4)
Medicaid	9 (6.4)
Commercial and Medicare	5 (3.5)
Other	4 (2.8)
Duration of MM diagnosis, median (IQR), years	5.9 (4.0, 7.9)
Duration of post-index follow-up,[b] median (IQR), months	3.3 (1.5, 5.5)
Treatment history, n (%)	
Prior penta-drug exposed[c]	64 (45.4)
Key comorbidities of interest,[d] n (%)	
Infections	67 (47.5)
Hypogammaglobulinemia	62 (44.0)
Peripheral neuropathy	59 (41.8)
Solitary plasmacytoma	12 (8.5)
Extramedullary plasmacytoma	8 (5.7)
Plasma cell leukemia	5 (3.5)

IMiD, immunomodulatory drug; IQR, interquartile range; MM, multiple myeloma; PI, proteasome inhibitor; RRMM, relapsed/refractory multiple myeloma; US, United States.
[a]Patient demographic and clinical characteristics were described for the baseline period of 6 months prior to the index date.
[b]Post-index follow-up was determined by the last medical claim activity, death date, or end of data.
[c]Exposed to ≥2 PIs, ≥2 IMiDs, and ≥1 anti-CD38 therapy.
[d]Conditions present within 6 months prior to index date.

Treatment history

- Patients had a median (IQR) of 5 (4, 6) prior LOTs
- Prior exposure to commercial B-cell maturation antigen (BCMA)–targeted therapy occurred in 84 (59.6%) patients (**Figure 2**); overall, 78 (55.3%) patients reported prior exposure to T-cell–redirected therapies (ie, bispecific or chimeric antigen receptor T-cell [CAR-T] therapy)

Figure 2: Commercial BCMA-targeted therapies prior to index date[a]



BCMA, B-cell maturation antigen.
[a]Some patients had prior treatment with ≥1 therapy.

Talquetamab utilization

- The majority of patients received talquetamab as a monotherapy (n=130; 92.2%), followed by those who received talquetamab as part of a combination regimen (MM medication used within 2 months of index date) with teclistamab (n=3; 2.1%) or other therapies (**Table 2**)
- Talquetamab was used as a bridging therapy for a small proportion of patients: 19 (13.5%) patients received talquetamab after apheresis, and 4 (2.8%) patients were observed to receive CAR-T infusion at data cutoff

Table 2: Talquetamab utilization as a monotherapy and combination therapy in patients with RRMM and an eligible talquetamab claim

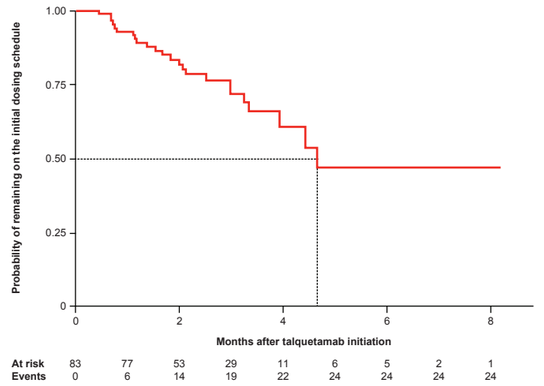
Talquetamab regimen, n (%)[a]	Patients (n=141)
Talquetamab	130 (92.2)
Talquetamab + teclistamab	3 (2.1)
Talquetamab + bortezomib	1 (0.7)
Talquetamab + daratumumab	1 (0.7)
Talquetamab + daratumumab + carfilzomib + ixazomib	1 (0.7)
Talquetamab + pomalidomide	1 (0.7)
Talquetamab + cyclophosphamide + pomalidomide	1 (0.7)
Talquetamab + carfilzomib + isatuximab	1 (0.7)
Talquetamab + isatuximab + pomalidomide	1 (0.7)
Talquetamab + selinexor	1 (0.7)

RRMM, relapsed/refractory multiple myeloma.
[a]Combination regimens were identified within 2 months after talquetamab initiation.

Dosing practices

- Overall, among patients on QW and Q2W dosing after SUD, 24 of 83 (28.9%) patients switched to every 4 weeks (Q4W) dosing or less frequent dosing (LFD; median time to switching, 4.7 months; **Figure 3**)
- At the end of follow-up, among patients with ≥3 treatment doses after SUD, 11 of 25 (44.0%) patients initially on QW dosing switched to Q2W dosing and 2 of 25 (8.0%) initially on QW dosing switched to every 3 weeks (Q3W) dosing, while 12 of 58 (20.7%) patients initially on Q2W dosing switched to Q3W or LFD (**Table 3**)
- At the end of follow-up, among patients with ≥3 treatment doses after SUD (n=94), 14 (14.9%), 62 (66.0%), 5 (5.3%), and 9 (9.6%) patients were on QW, Q2W, Q3W, and Q4W dosing schedules, respectively (**Figure 4**)

Figure 3: Time to switch to Q4W or LFD among QW/Q2W patients with ≥3 doses of talquetamab treatment (n=83)



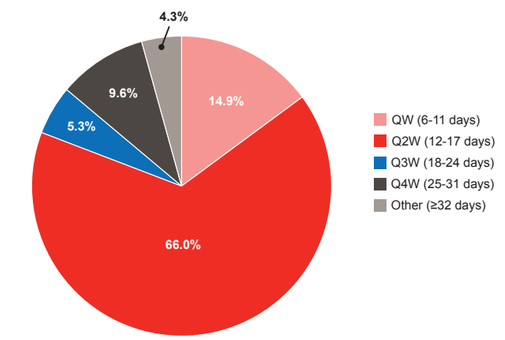
LFD, less frequent dosing; QW, weekly; Q2W, biweekly (every 2 weeks); Q4W, every 4 weeks.

Table 3: Dosing frequency at the end of follow-up by initial dosing schedule[a]

Frequency of the first treatment	Frequency at the end of follow-up, n (%)				
	QW (6-11 days)	Q2W (12-17 days)	Q3W (18-24 days)	Q4W (25-31 days)	Other (≥32 days)
QW (6-11 days; n=25)	10 (40.0)	11 (44.0)	2 (8.0)	0	2 (8.0)
Q2W (12-17 days; n=58)	4 (6.9)	42 (72.4)	3 (5.2)	8 (13.8)	1 (1.7)

QW, weekly; Q2W, biweekly (every 2 weeks); Q3W, every 3 weeks; Q4W, every 4 weeks; SUD, step-up dosing.
[a]Among patients with ≥3 treatment doses after SUD.

Figure 4: Dosing frequency at the end of follow-up[a]



QW, weekly; Q2W, biweekly (every 2 weeks); Q3W, every 3 weeks; Q4W, every 4 weeks; SUD, step-up dosing.
[a]Among patients with ≥3 treatment doses after SUD (n=94).

References

1. TALVEY™ (talquetamab-tgvs) [package insert]. Janssen Biotech, Inc.; 2023. 2. Chari A, et al. *N Engl J Med.* 2022;387(24):2232-2244. 3. Rasche L, et al. Presented at: European Hematology Association (EHA) Hybrid Congress; June 13-16, 2024; Madrid, Spain. Poster P915. 4. Banerjee R, et al. Presented at: International Myeloma Society (IMS) 21st Annual Meeting; September 25-28, 2024; Rio de Janeiro, Brazil. Poster P-381.

Multiple Myeloma

Presented by R Banerjee at the 66th American Society of Hematology (ASH) Annual Meeting and Exposition; December 7-10, 2024; San Diego, CA, USA