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Talquetamab Utilization Patterns and Dose Schedules in the United States: A Real-World Analysis

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Key Takeaways

In this first real-world analysis of talquetamab (Tal) utilization patterns, Tal recipients were heavily pretreated but not always exposed to prior B-cell maturation antigen (BCMA)–targeted therapy

Over 10% of patients received commercial Tal in combination with other agents (eg, teclistamab or pomalidomide)

Biweekly (Q2W) dosing was the most common starting and ending dose of Tal, while some patients switched to once every 3 weeks (Q3W) or less-frequent dosing

Conclusions

In this first study to investigate real-world Tal dosing since its US approval, Tal was mainly used as a monotherapy, while a small proportion of patients were treated with Tal combination therapy

While most patients receiving Tal were heavily pretreated, almost one-third of patients had not received prior commercial BCMA therapy

At the end of follow-up, most patients were on a Q2W or weekly schedule, while some patients were on Q3W or less-frequent dosing

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Poster

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https://www.congresshub.com/Oncology/IMS2024/Talquetamab/Banerjee

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Disclosures

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Introduction

- Talquetamab (Tal) is a first-in-class, G protein–coupled receptor family C group 5 member D (GPRC5D) × CD3 bispecific monoclonal antibody recently approved in the United States for the treatment of patients with relapsed/refractory multiple myeloma (RRMM) who have received ≥4 prior lines of therapy and are triple-class exposed to a proteasome inhibitor, an immunomodulatory agent, and an anti-CD38 monoclonal antibody[1,2]
- Tal demonstrated clinical efficacy in heavily pretreated patients with RRMM in the phase 1/2, open-label, multicenter MonumenTAL-1 study (ClinicalTrials.gov Identifier: NCT03399799)[2,3]
  - Patients who received Tal 0.4 mg/kg on a once per week (weekly; QW) dosing schedule or Tal 0.8 mg/kg on a once every 2 weeks (biweekly; Q2W) dosing schedule had an overall response rate of 74.1% (median follow-up: 29.8 months) and 69.5% (median follow-up: 23.4 months), respectively, a very good partial response rate or better of 59.4% and 59.1%, and a median progression-free survival of 7.5 months and 11.2 months[4]
- While the efficacy and safety of Tal have been demonstrated, there are limited real-world data on dosing with Tal

Objective

- To describe the demographic and clinical characteristics, treatment history, and Tal utilization patterns in patients treated with Tal from the Multiple Myeloma Komodo Commercial Encounters (MM KCE) claims-based database

Methods

Study design

- This was a real-world, retrospective, observational, descriptive cohort study in patients with multiple myeloma (MM) who were treated with Tal, as identified in the MM KCE database, between August 9, 2023 (US approval date), and March 4, 2024 (latest data cut; **Figure 1**)
- The index date was the date of an inpatient Tal encounter that occurred within 28 days prior to the first Tal treatment dose (40 mg/mL) in the outpatient setting, or the date of the first outpatient Tal step-up dosing (SUD; 3 mg/1.5 mL) claim
- The baseline period to describe patient demographic and clinical characteristics was 6 months before the index date

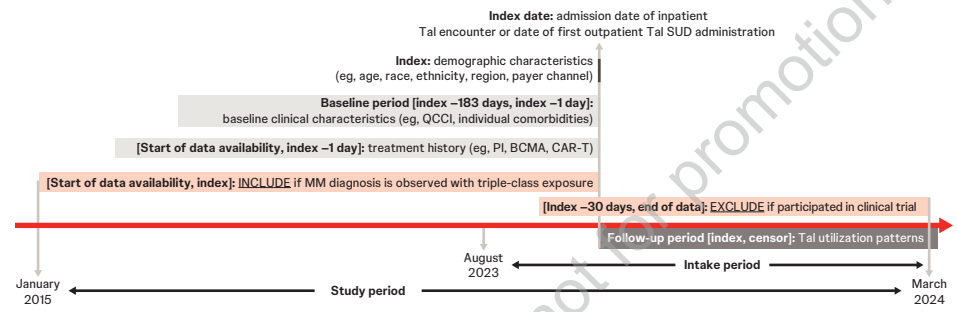
Study population

- Patients were identified using the Komodo Healthcare Map™
- Adult patients with ≥1 MM diagnosis code, ≥1 pharmacy or medical claim for Tal (between August 9, 2023 [US approval date], and March 4, 2024 [latest data cut]), and triple-class exposure were included in this study
- Patients enrolled in clinical trials were excluded

Statistics

- Patient demographic and clinical characteristics, treatment history, and Tal utilization patterns 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, protease inhibitor; QCCI, Quan-Charlson Comorbidity Index; Tal, talquetamab.
[a]Data were collected from the Komodo Health payer-complete dataset.

Results

Patient characteristics

- Among the 82 patients who were treated with Tal (median follow-up: 2.8 months), the median (interquartile range [IQR]) age at index was 65.0 years (57.0, 71.8; **Table 1**)
  - Most patients were male (58.5%), White (65.8%), and had Medicare (56.1%)
  - Median (IQR) time from MM diagnosis to the index date was 5.8 years (4.1, 7.8)
  - Baseline comorbidities before receiving Tal were common and included recent infections (46.3%) and preexisting hypogammaglobulinemia (41.5%)

Table 1: Demographic and clinical characteristics

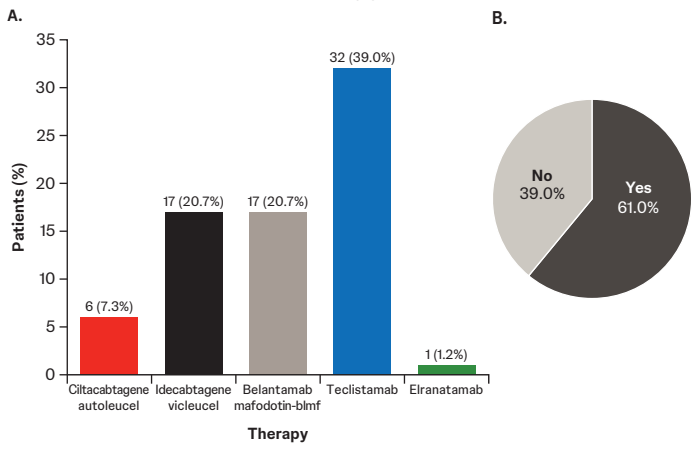
Characteristic	Patients with RRMM with an eligible Tal claim (n=82)
Age at index	
Median (IQR), years	65.0 (57.0, 71.8)
≥75 years, n (%)	14 (17.1)
Sex, n (%)	
Male	48 (58.5)
Female	34 (41.5)
Race, n (%)	
White	50 (65.8)
Black	14 (18.4)
Hispanic	3 (3.9)
Other/unknown	9 (11.8)
Insurance plan type, n (%)	
Commercial	22 (26.8)
Medicare	46 (56.1)
Commercial and Medicare	3 (3.7)
Medicaid	6 (7.3)
Other	5 (6.1)
Duration of follow-up, median (IQR), months	2.8 (2.0, 3.6)
Comorbidities, n (%)	
Infections	38 (46.3)
Peripheral neuropathy	35 (42.7)
Hypogammaglobulinemia	34 (41.5)
Extramedullary plasmacytoma	3 (3.7)
Solitary plasmacytoma	6 (7.3)
Plasma cell leukemia	1 (1.2)
Treatment history, n (%)	
Prior triple-class exposed	82 (100)
Prior penta-drug exposed	35 (42.7)

IQR, interquartile range; RRMM, relapsed/refractory multiple myeloma; Tal, talquetamab.

Treatment history

- The median (IQR) number of prior lines of therapy was 5 (4, 7)
- Prior commercial B-cell maturation antigen (BCMA)–targeted therapy was reported in 56 (68.3%) patients: 7.3% of patients received ciltacabtagene autoleucel, 20.7% received idecabtagene vicleucel, 39.0% received teclistamab, 1.2% received elranatamab, and 20.7% received belantamab mafodotin-blmf (**Figure 2A**)
- Overall, 39% of patients were naïve to prior T-cell redirection therapies (**Figure 2B**)

Figure 2: History of prior treatment with BCMA-targeted therapy (A) or prior exposure to bispecific or CAR-T therapy (B) in patients with RRMM[a]



BCMA, B-cell maturation antigen; CAR-T, chimeric antigen receptor T-cell therapy; RRMM, relapsed/refractory multiple myeloma.
[a]Some patients had prior treatment with >1 therapy.

Tal utilization

- Most patients received Tal as a monotherapy (n=73; 89.0%), but a few patients got combination therapies and received commercial Tal + teclistamab (n=3; 3.7%) or Tal + pomalidomide (n=2; 2.4%; **Table 2**)

Table 2: Tal utilization patterns in patients with RRMM

Tal regimen, n (%)[a]	Patients with RRMM with an eligible Tal claim (n=82)
Tal	73 (89.0)
Tal + teclistamab	3 (3.7)
Tal + pomalidomide	2 (2.4)
Tal + bortezomib	1 (1.2)
Tal + daratumumab + carfilzomib + ixazomib	1 (1.2)
Tal + daratumumab	1 (1.2)
Tal + isatuximab + pomalidomide	1 (1.2)

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

- For the first observed less-frequent dosing (LFD) schedule among patients with ≥3 treatment doses after SUD, 7 out of 11 (63.6%) patients on QW dosing switched to Q2W or LFD (median time to switching, 43 days), while 12 out of 33 (36.4%) patients on Q2W dosing switched to once every 3 weeks (Q3W) dosing or LFD (median time to switching, not reached; **Table 3**, **Figure 3**, and **Figure 4**)

Table 3: First observed LFD schedule[a]

Initial treatment frequency	First LFD, n (%)			
	Q2W (12-17 days)	Q3W (18-24 days)	Q4W (25-31 days)	Other (≥32 days)
QW (6-11 days; n=11)	**6 (54.5)**	0	0	**1 (9.1)**
Q2W (12-17 days; n=33)	NA	**4 (12.1)**	**6 (18.2)**	**2 (6.1)**

LFD, less-frequent dosing; NA, not applicable; Q2W, once every 2 weeks (biweekly); Q3W, once every 3 weeks; Q4W, once every 4 weeks; QW, once per week (weekly).
[a]Among patients with ≥3 treatment doses after SUD; first observed LFD was defined as having ≥2 consecutive doses that were administered at a frequency lower than the initial treatment schedule.

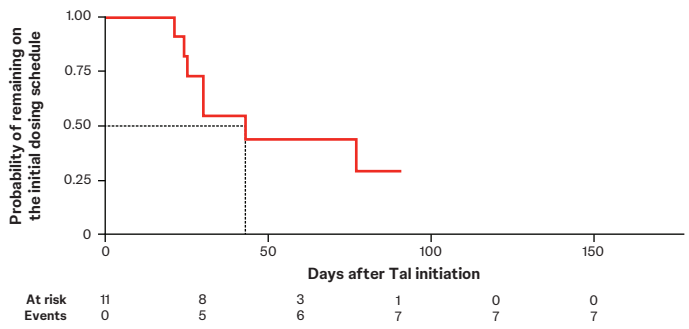
- At the end of follow-up, among patients with ≥3 treatment doses after SUD, 5 out of 11 (45%) patients on QW dosing switched to Q2W or LFD, while 9 out of 33 (27%) patients on Q2W dosing switched to Q3W or LFD (**Table 4**)

Table 4: 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				
	QW (6-11 days)	Q2W (12-17 days)	Q3W (18-24 days)	Q4W (25-31 days)	Other (≥32 days)
QW (6-11 days; n=11)	6 (54.5)	**4 (36.4)**	0	0	**1 (9.1)**
Q2W (12-17 days; n=33)	2 (6.1)	22 (66.7)	**2 (6.1)**	**6 (18.2)**	**1 (3.0)**

LFD, less-frequent dosing; Q2W, once every 2 weeks (biweekly); Q3W, once every 3 weeks; Q4W, once every 4 weeks; QW, once per week (weekly); RRMM, relapsed/refractory multiple myeloma; SUD, step-up dosing; Tal, talquetamab.
[a]Among patients with ≥3 treatment doses after SUD.

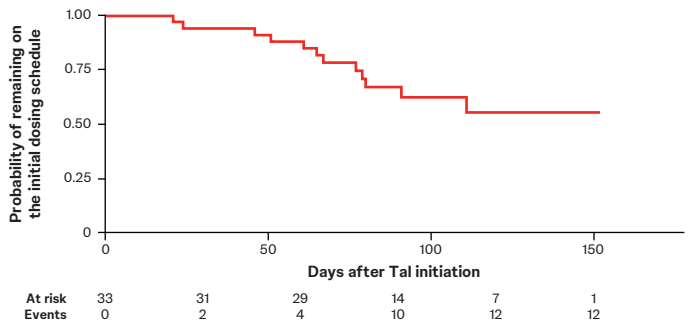
Figure 3: Time to switch to Q2W or LFD among QW patients with ≥3 doses of Tal treatment (n=11)[a]



LFD, less-frequent dosing; QW, once per week (weekly); Q2W, once every 2 weeks (biweekly); Q3W, once every 3 weeks; Tal, talquetamab.
[a]Patients on QW dosing switched to Q2W, Q3W, or other (≥32 days) dosing.

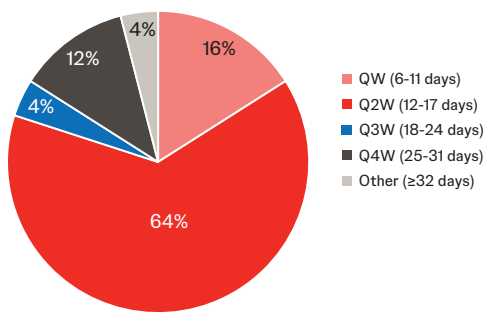
- At the data cutoff, among patients with ≥3 treatment doses after SUD (n=50), 8 (16.0%), 32 (64.0%), and 6 (12.0%) patients were on QW, Q2W, and once every 4 weeks dosing schedules, respectively (**Figure 5**)

Figure 4: Time to switch to Q3W or LFD among Q2W patients with ≥3 doses of Tal treatment (n=33)[a]



LFD, less-frequent dosing; Q2W, once every 2 weeks (biweekly) Q3W, once every 3 weeks; Q4W, once every 4 weeks; Tal, talquetamab.
[a]Patients on Q2W dosing switched to Q3W, Q4W, or other (≥32 days) dosing.

Figure 5: Dosing frequency at the end of follow-up[a]



Q2W, once every 2 weeks (biweekly); Q3W, once every 3 weeks; Q4W, once every 4 weeks; QW, once per week (weekly); RRMM, relapsed/refractory multiple myeloma; SUD, step-up dosing; Tal, talquetamab.
[a]Among patients with ≥3 treatment doses after SUD (n=50).

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. Schinke CD, et al. *J Clin Oncol*. 2023;41(suppl 16). Abstract 8036. 4. Rasche L, et al. Presented at: European Hematology Association Hybrid Congress; June 13-16, 2024; Madrid, Spain. Abstract P915.

Multiple Myeloma

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