

A large, stylized orange wireframe globe graphic that dominates the background of the slide, positioned behind a dark grey horizontal band.

## Targeting BCMA in multiple myeloma: Insights from COMy and EHA 2024

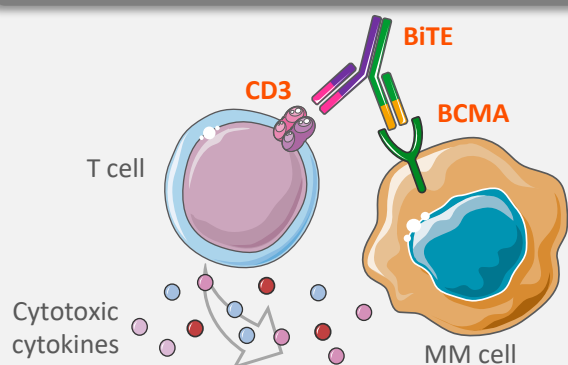
---

Practice aid for the role of BCMA-targeting agents in relapsed/refractory multiple myeloma

For more information, visit: [www.touchoncology.com](http://www.touchoncology.com)

# Role of BCMA-targeted agents in the management of relapsed or refractory multiple myeloma

## Bispecific T-cell engager antibodies<sup>1</sup>



## Elranatamab<sup>2,3</sup>

**Warning:**<sup>2,3</sup> CRS and neurotoxicity incl. ICANS



≥3 prior lines (incl. PI, IMiD, anti-CD38 mAb) and disease progression on last therapy<sup>2</sup>

Subject to additional monitoring<sup>2</sup>



≥4 prior lines (incl. PI, IMiD, anti-CD38 mAb)<sup>3</sup>

Only available through REMS<sup>3</sup>

## Teclistamab<sup>4,5</sup>

**Warning:**<sup>4,5</sup> CRS and neurotoxicity incl. ICANS



≥3 prior lines (incl. PI, IMiD, anti-CD38 mAb) and disease progression on last therapy<sup>4</sup>

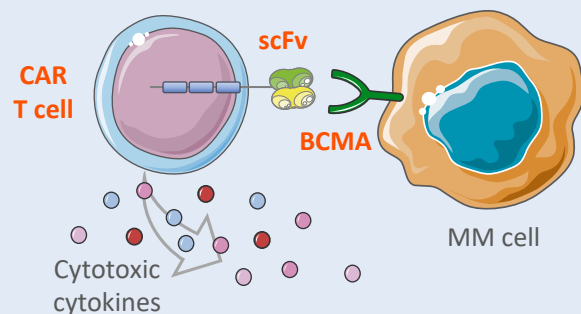
Subject to additional monitoring<sup>4</sup>



≥4 prior lines (incl. PI, IMiD, anti-CD38 mAb)<sup>5</sup>

Only available through REMS<sup>5</sup>

## Chimeric Antigen Receptor T cells<sup>1</sup>



## Cilta-cel<sup>6,7</sup>

**Warning:**<sup>6,7</sup> CRS, neurotoxicities, HLH/MAS, prolonged and recurrent cytopenia, SHMs



≥1 prior line (incl. PI, IMiD), lenalidomide refractory, disease progression on last therapy<sup>6</sup>

Subject to additional monitoring<sup>6</sup>



≥1 prior line (incl. PI, IMiD) and refractory to lenalidomide<sup>7</sup>

Only available through REMS<sup>7</sup>

## Ide-cel<sup>8,9</sup>

**Warning:**<sup>8,9</sup> CRS, neurotoxicities, HLH/MAS, prolonged and recurrent cytopenia, SHMs



≥2 prior lines (incl. PI, IMiD, anti-CD38 mAb) and disease progression on last therapy<sup>8</sup>

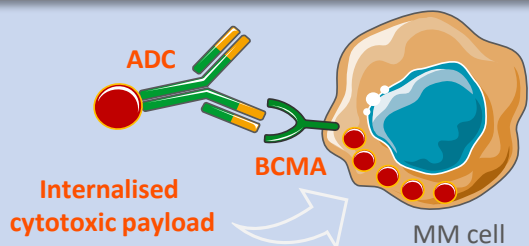
Subject to additional monitoring<sup>8</sup>



≥2 prior lines (incl. PI, IMiD, anti-CD38 mAb)<sup>9</sup>

Only available through REMS<sup>9</sup>

## Antibody–drug conjugates<sup>1</sup>



## Belantamab mafodotin



**WITHDRAWN**<sup>10,11</sup>



July 2024:

The EMA accepted an MAA seeking approval of belantamab mafodotin in combination with bortezomib and dexamethasone (BVd) or with pomalidomide and dexamethasone (BPd) for the treatment of patients with RRMM<sup>12</sup>

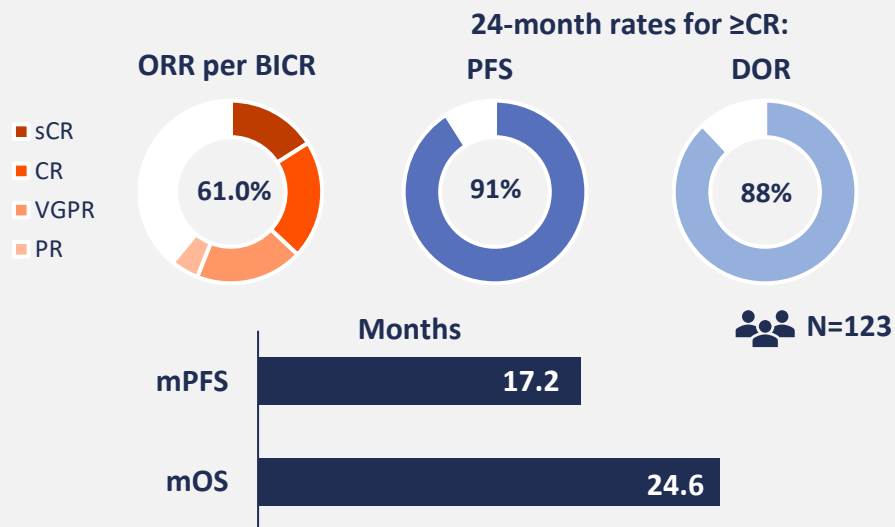
### Regulatory body



## Summary of latest data for approved BCMA-targeted antibodies in multiple myeloma\*

### Elranatamab: MagnetisMM-3<sup>13</sup>

Elranatamab continued to demonstrate deep and durable responses in heavily pretreated BCMA-naïve patients with RRMM refractory to prior PI, IMiD and anti-CD38 therapies



No new safety signals observed with extended follow-up

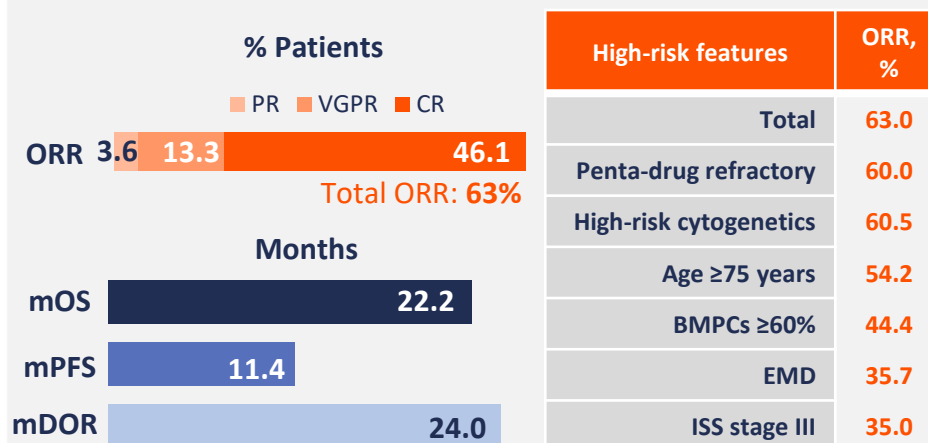
With an additional 6 months' follow-up:

- **4 new deaths** had occurred
- **5 patients** had **secondary primary malignancies**  
All were cutaneous squamous cell carcinoma  
All received prior lenalidomide and a stem cell transplant  
**No haematological SPMs** were observed

### Teclistamab: MajesTEC-1<sup>14</sup>

Teclistamab continued to demonstrate deep and durable responses, even with less frequent (Q2W) dosing, and can provide clinical benefit to patients with some high-risk features

- 30.4-month follow-up
- N=165 (weekly); n=65 (transitioned to Q2W)
  - Patients still on treatment: n=38 (n=37 on Q2W)



No new safety signals and a manageable safety profile

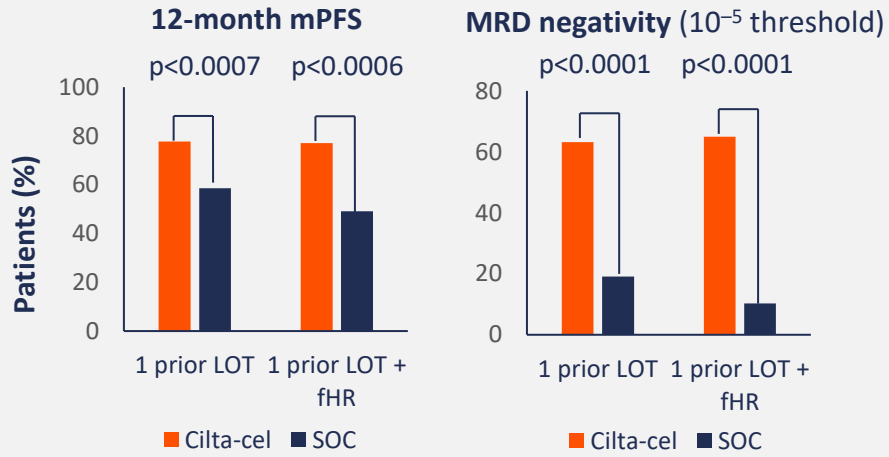
- **78.8%** of patients (grade 3/4, 55.2%)
- No new grade 5 COVID-19 TEAEs
- Onset of new grade ≥3 infections declined over time:  
*Transitioning to Q2W dose and increased use of Ig replacement may contribute to this trend*
- **CRS and ICANS**: **CRS: 72.1%** of patients (grade 3/4, 0.6%)
- **No changes** at 30.4-month follow-up

# Summary of latest data for approved BCMA-targeted CAR T-cell therapy in multiple myeloma\*

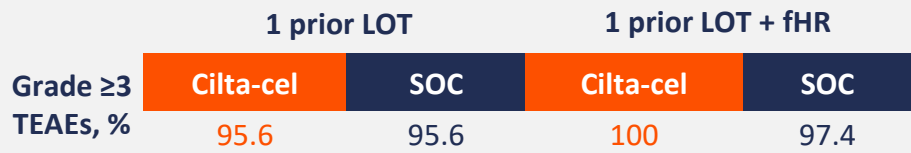
## Cilta-cel: CARTITUDE-4<sup>15</sup>

A single cilta-cel infusion improved PFS vs SOC in lenalidomide-refractory patients with MM, regardless of functional risk strata, after 1 prior LOT

- 1 prior LOT: **Cilta-cel n=68; SOC n=68**
- 1 prior LOT+ fHR: **Cilta-cel n=40; SOC n=39**



**AEs were generally similar between 1 prior LOT vs 1 prior LOT and fHR cohorts**



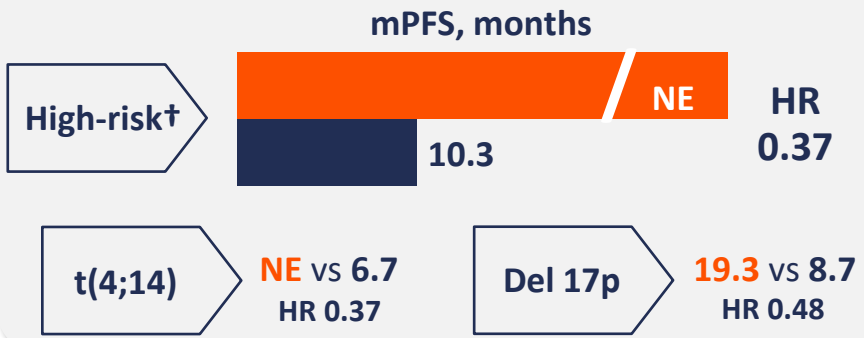
- **No grade 3/4 ICANS, MNT or PN** in patients with 1 prior LOT and fHR
- **Grade 3/4 CRS only in 1 patient; CNP in 2 patients** with 1 prior LOT

## Cilta-cel: CARTITUDE-4<sup>16</sup>

Cilta-cel demonstrated favourable efficacy outcomes vs SOC in patients with standard and high-risk cytogenetics†

	Median PFS, months (range)	ORR, %
<b>Cilta-cel standard risk n=69</b>	NE (NE-NE)	85.5
<b>Cilta-cel high-risk n=123</b>	NE (18.4-NE)	85.4
<b>SOC standard risk n=70</b>	20.6 (11.2-NE)	71.4
<b>SOC high-risk n=132</b>	10.3 (7.6-12.5)	65.9

Cilta-cel lessens the impact of high-risk cytogenetics on PFS, and improved PFS compared with SOC



\*Not all congress data are included in this practice aid. Data included here were selected by faculty for discussion within the accompanying educational activity.

†High-risk cytogenetic abnormalities, including t(4;14), del(17p), t(14;16), and gain/amp(1q).

## New horizons for BCMA-targeting agents in multiple myeloma

### Belantamab mafodotin: DREAMM-7,<sup>17</sup> -8<sup>18</sup>

Favourable survival outcomes and treatment response with belantamab mafodotin-based regimens vs comparator arms (pomalidomide or daratumumab); OS follow-up is ongoing


 ≥1 prior LOT; PD on/after latest therapy

mPFS (months)



Safety profile broadly consistent with known profiles of individual regimen components

Ocular AEs (any grade), %	DREAMM-7		DREAMM-8	
	BVd n=242	DVd n=246	BPd n=150	PVd n=145
	79	29	89	30

 Ocular AEs led to low (9%) rate of treatment discontinuations in both the DREAMM-7 and DREAMM-8 trials

Management of ocular AEs

- Dose holds
- Dose reductions
- Dose delays/interruptions
- ↓ dose frequency

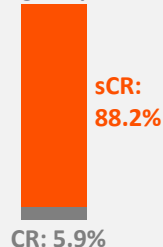
### Cilta-cel: CARTITUDE-2<sup>19</sup>

Cilta-cel ± lenalidomide maintenance is promising in newly diagnosed patients with poor response to frontline ASCT, especially given the historically poorer clinical outcomes



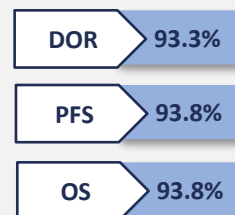
N=17

ORR:  
94.1%



sCR:  
88.2%

18-month rates for:



AEs were consistent with known safety profile of cilta-cel

- No cases of MNT/parkinsonism were observed
- 1 patient with ICANS, which resolved
- 6 patients with other neurotoxicities (mostly grade 1/2)
- No grade 3/4 CRS (82.4% grade 1/2)

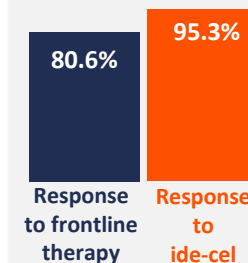
### Ide-cel: KarMMa-2<sup>20</sup>

Ide-cel showed a favourable risk-benefit profile in in clinical high-risk early relapse MM without frontline ASCT

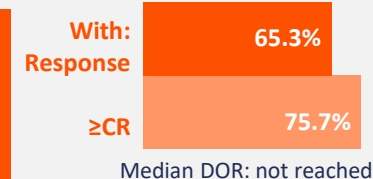


N=31

ORR



DOR rate at 24 months



Ide-cel showed a favourable risk-benefit profile; no grade 3/4 CRS or iINTs occurred

Grade 1/2 CRS occurred in 83.9% of patients

- 94.4% managed with tocilizumab

Grade 1/2 iINT occurred in 9.7% of patients and managed with:

- Tocilizumab (33.3%)
- Steroids (33.3%)
- Anakinra (33.3%)



Grade 3/4 infection and infestations occurred in 19.4% of patients

Emerging agents



Bispecific antibodies

ABBV-383<sup>21</sup>

Linvoseltamab<sup>22</sup>



CAR Ts

Anitocabtagene autoleucel (anito-cel)<sup>23</sup>

Equcabtagene autoleucel (eque-cel)<sup>24</sup>

# Abbreviations and references

## Abbreviations

ADC, antibody–drug conjugate; AE, adverse event; ASCT, autologous stem cell transplant; B, belantamab mafodotin; BCMA, B cell maturation antigen; BICR, blinded independent central review; BiTE, bispecific T cell engager; BMPC, bone marrow plasma cell; CAR, chimeric antigen receptor; cilta-cel, ciltacabtagene autoleucl; CNP, cranial nerve palsy; CR, complete response; CRS, cytokine release syndrome; d, dexamethasone; DOR, duration of response; EMD, extramedullary disease; fHR, functionally high risk; HLH/MAS, haemophagocytic lymphohistiocytosis/macrophage activation syndrome; HR, hazard ratio; ICANS, immune effector cell-associated neurotoxicity syndrome; ide-cel, idcabtagene vicleucl; iINT, investigator-identified neurotoxicity; IMiD, immunomodulatory drug; ISS, international staging system; ITT, intention-to-treat; LOT, line of therapy; m, median; MAA, marketing authorization application; MM, multiple myeloma; MNT, movement and neurocognitive TEAE; MRD, minimal residual diseases; NE, not evaluable; NR, not reached; ORR, overall response rate; OS, overall survival; P, pomalidomide; PD, progressive disease; PFS, progression-free survival; PI, proteasome inhibitor; PN, peripheral neuropathy; PR, partial response; Q2W, every 2 weeks; REMS, Risk Evaluation and Mitigation Strategies; RRMM, relapsed/refractory MM; scFv, single-chain variable fragment; sCR, stringent CR; SHM, secondary haematological malignancy; SOC, standard of care; SPM, second primary malignancies; TEAE, treatment-emergent AE; V, bortezomib; VGPR, very good partial response.

## References

1. Yu B, et al. *J Hematol Oncol*. 2020;13:125.
2. EMA. Elranatamab SmPC. 2024.\*
3. FDA. Elranatamab PI. 2023.†
4. EMA. Teclistamab SmPC. 2024.\*
5. FDA. Teclistamab PI. 2024.†
6. EMA. Ciltacabtagene autoleucl (cilta-cel) SmPC. 2024.\*
7. FDA. Ciltacabtagene autoleucl (cilta-cel) PI. 2024.†
8. EMA. Idecabtagene vicleucl (ide-cel) SmPC. 2024.\*
9. FDA. Idecabtagene vicleucl (ide-cel) PI. 2024.†
10. EMA. Available at: <https://bit.ly/3MQfRiG>
11. FDA. Available at: <https://shorturl.at/Ff1mx>
12. Rosa K. Available at <https://shorturl.at/BFXJo>
13. Mohty M, et al. EHA2024. Abstr. P932.‡
14. Oriol A, et al. EHA2024. Abstr. P942.‡
15. Weisel K, et al. EHA2024. Abstr. P959.‡
16. Mina R, et al. EHA2024. Abstr. P978.‡
17. Mateos MV, et al. EHA2024. Abstr. S214.‡
18. Dimopoulos MA, et al. EHA2024. Abstr. LB3440.‡
19. Roeloffzen W, et al. EHA2024. Abstr. S205.‡
20. Leleu X, et al. EHA2024. Abstr. S208.‡
21. Weisel K, et al. EHA2024. Abstr. S211.‡
22. Jagannath S, et al. Presented at COMy, Paris, France, 23–26 May 2024.
23. Frigault M, et al. EHA2024. Abstr. S207.‡
24. Chen L, et al. EHA2024. Abstr. S206.‡

\*EMA Summary of product characteristics available at: [www.ema.europa.eu/en/medicines](http://www.ema.europa.eu/en/medicines).

†FDA prescribing information available at: [www.accessdata.fda.gov/scripts/cder/daf/index.cfm](http://www.accessdata.fda.gov/scripts/cder/daf/index.cfm).

All URLs accessed 10 September 2024.

‡EHA 2024 was held in Madrid, Spain, 13-16 June 2024.

The guidance provided by this practice aid is not intended to directly influence patient care. Clinicians should always evaluate their patients' conditions and potential contraindications and review any relevant manufacturer product information or recommendations of other authorities prior to consideration of procedures, medications, or other courses of diagnosis or therapy included here.

Our practice aid coverage does not constitute implied endorsement of any product(s) or use(s). touchONCOLOGY cannot guarantee the accuracy, adequacy or completeness of any information and cannot be held responsible for any errors or omissions.