Long-Term Follow-Up From the Phase 1/2 MajesTEC-1 Trial of Teclistamab in Patients With Relapsed/Refractory Multiple Myeloma

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Introduction

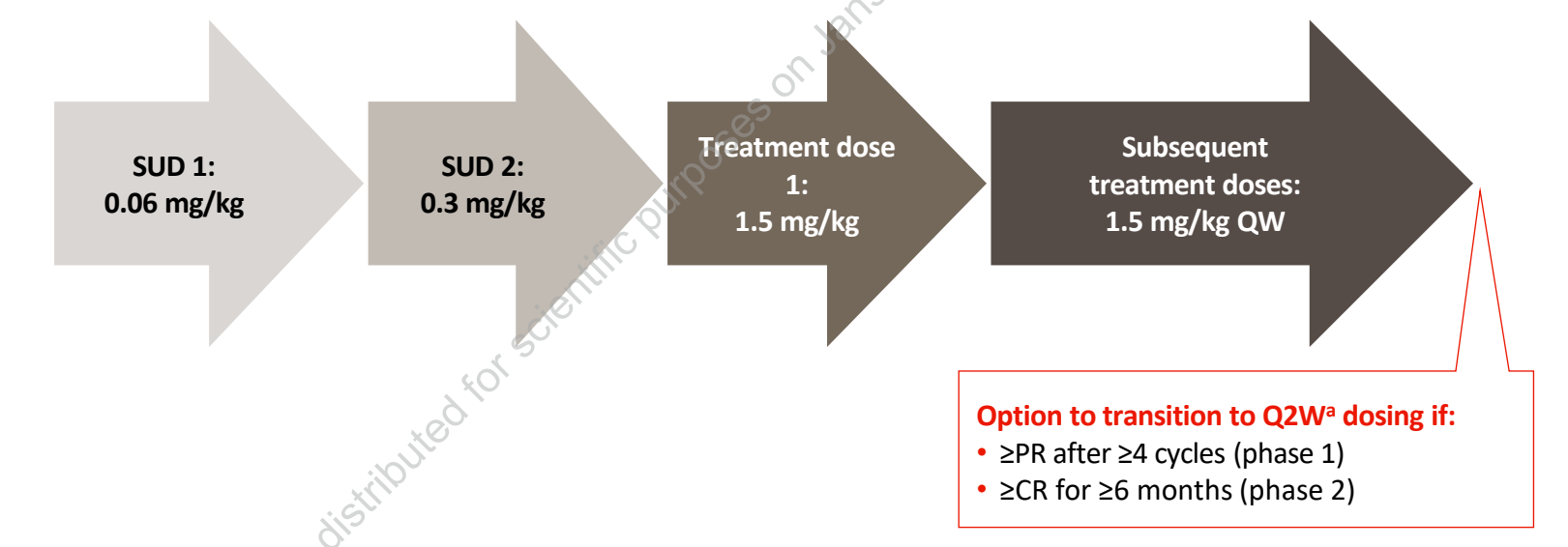
- Teclistamab is the first approved BCMA×CD3 bispecific antibody for the treatment of TCE RRMM, with weight-based dosing[1-3]
- At 22.8-month median follow-up in the MajesTEC-1 study, rapid, deep, and durable responses were observed in patients treated with teclistamab[4]
  - ORR, 63.0%; ≥CR rate, 45.5%
  - Median DOR, 21.6 months; median PFS, 11.3 months; median OS, 21.9 months
- Here, we present longer-term results from MajesTEC-1 at 30.4 months median follow-up

BCMA, B-cell maturation antigen; CR, complete response; DOR, duration of response; OS, overall survival; PFS, progression-free survival; RRMM, relapsed/refractory multiple myeloma; TCE, triple-class exposed.

1. TECVAYLI (teclistamab-cqyv). Prescribing information. Horsham, PA: Janssen Biotech, Inc; 2022. 2. TECVAYLI (teclistamab). Summary of product characteristics. Leiden, Netherlands: Janssen Biologics BV; 2022. 3. Moreau P, et al. *N Eng J Med* 2022;387:495-505. 4. van de Donk NWCJ, et al. Presented at ASCO; June 2–6, 2023; Chicago, IL, USA & Virtual. Poster #8011.

MajesTEC-1: Study Design

- The MajesTEC-1 study design has been previously described (NCT03145181, NCT04557098)[1]
  - Eligible patients had TCE RRMM with no prior BCMA-directed therapy
  - Primary endpoint: ORR
  - Patients received teclistamab at the RP2D with the option to transition to less frequent dosing



2–4 days were allowed between SUD 1, SUD 2, and treatment dose 1. [a]Patients could subsequently transition to less frequent dosing if they continued to respond on the Q2W schedule.
BCMA, B-cell maturation antigen; CR, complete response; ORR, overall response rate; PR, partial response; Q2W, every other week; QW, every week; RP2D, recommended phase 2 dose; RRMM, relapsed/refractory multiple myeloma; SUD, step-up dose; TCE, triple-class exposed.

1. Moreau P, et al. *N Eng J Med* 2022;387:495-505.

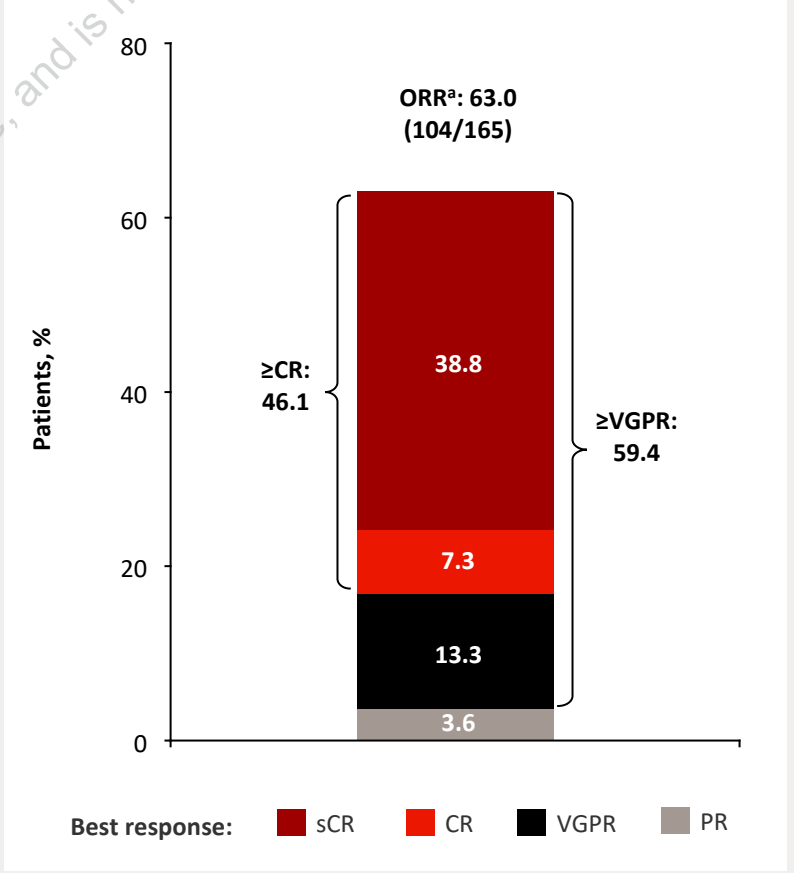
MajesTEC-1: High Rates of Deep Responses

Study population

- At 30.4-month median follow-up (data cut-off: Aug 22, 2023), 165 patients had received teclistamab at the RP2D
- Baseline characteristics have been previously presented[1,2]
- 65 patients had transitioned to less frequent dosing (eg, Q2W)
- 38 patients remain on treatment
  - 37 on a less frequent dosing schedule

Efficacy

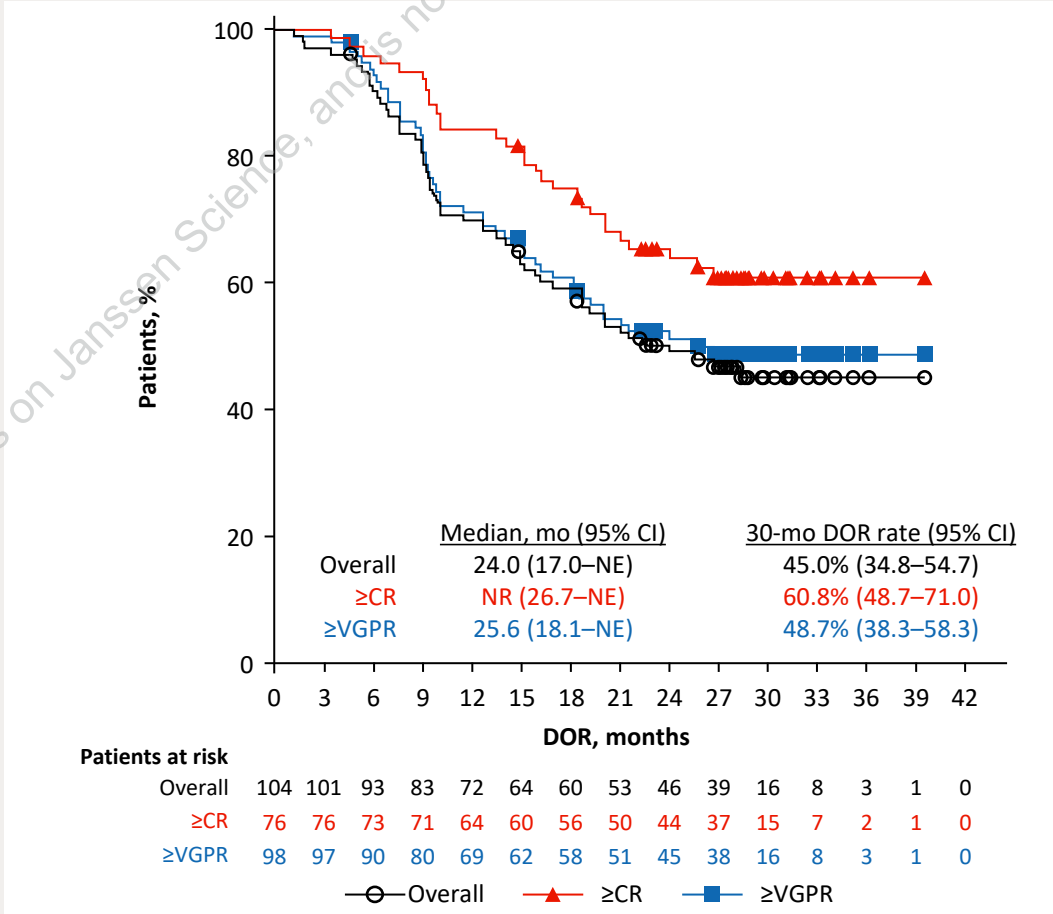
- Responses continued to deepen (ORR, 63.0%; ≥CR, 46.1%)
- 85.7% (48/56) of MRD-evaluable patients achieved MRD negativity (10^{-5} threshold), sustained for ≥6 months in 56.1% (23/41) and for ≥12 months in 38.9% (14/36)



[a]Response assessed by independent review committee.
CR, complete response; MRD, minimal residual disease; ORR, overall response rate; PR, partial response; Q2W, every other week; RP2D, recommended phase 2 dose; sCR, stringent complete response; VGPR, very good partial response.
1. Moreau P, et al. *N Eng J Med* 2022;387:495-505. 2. van de Donk NWCJ, et al. Presented at ASCO; June 2–6, 2023; Chicago, IL, USA & Virtual. Poster #8011.

MajesTEC-1: Continued Durability of Responses

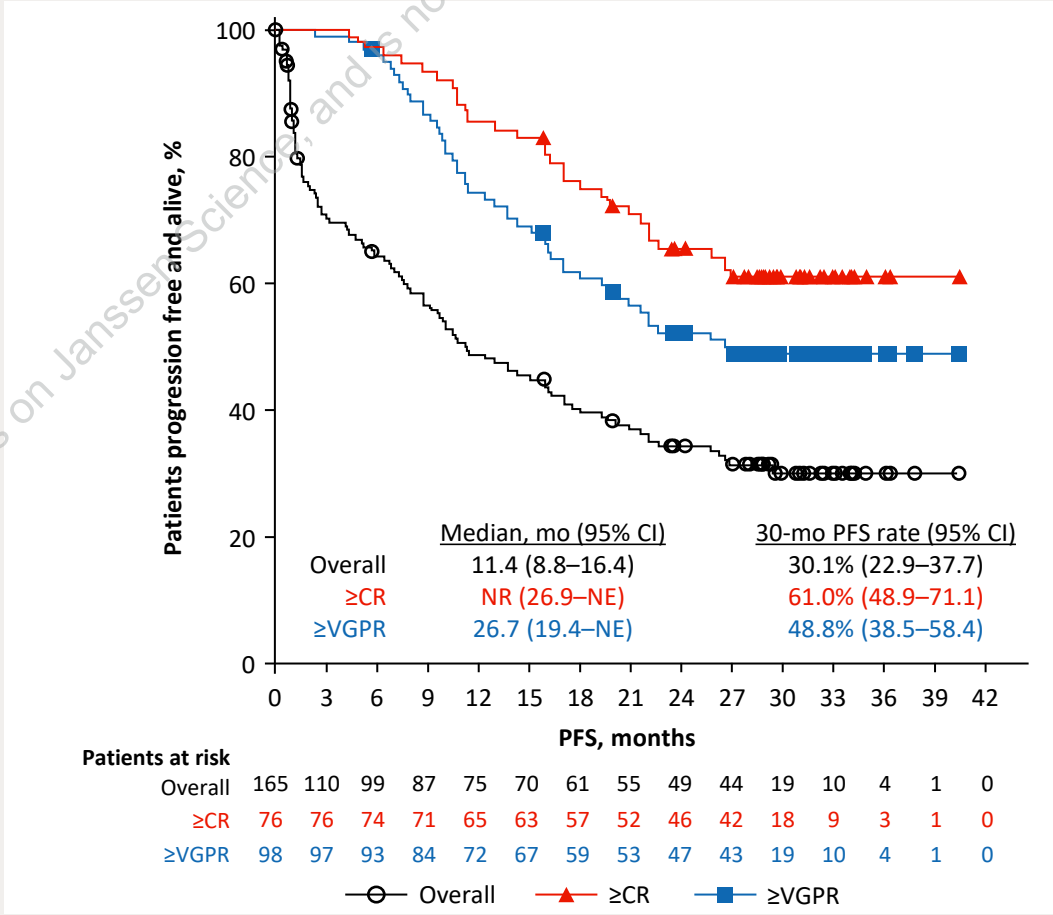
- At 30.4 months median follow-up, mDOR increased to 24.0 months for all responders
  - Further improved in patients achieving ≥VGPR (25.6 months) and ≥CR (NR)
- mDOR (95% CI) for patients who had received
  - ≤3 prior LOT: 24.0 months (14.0–NE)
  - >3 prior LOT: 22.4 months (14.9–NE)
    - No notable differences in baseline characteristics were observed between patients with ≤3 vs >3 prior LOT



CR, complete response; DOR, duration of response; LOT, line of therapy; mDOR, median duration of response; NE, not estimable; NR, not reached; RP2D, recommended phase 2 dose; VGPR, very good partial response.

MajesTEC-1: Stable Progression-Free Survival

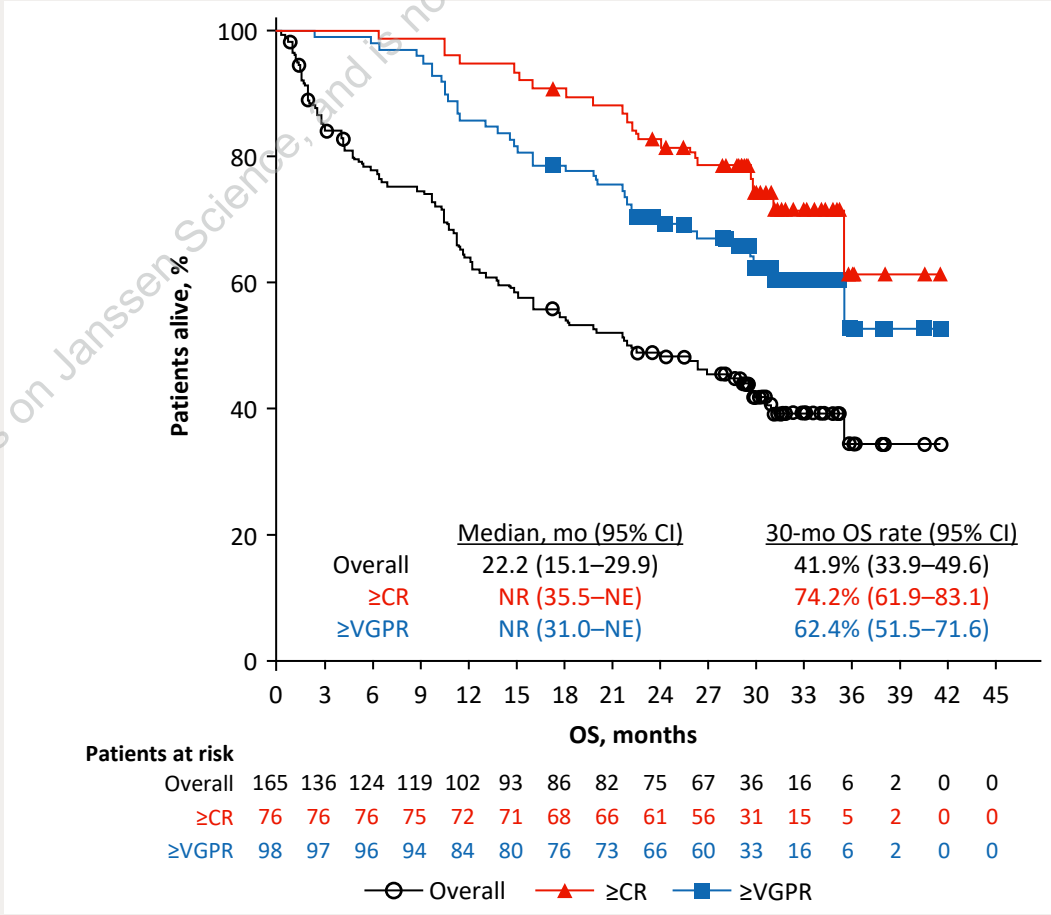
- At 30.4 months median follow-up, mPFS remained stable at 11.4 months for all patients
  - Increased in patients achieving ≥VGPR (26.7 months) and ≥CR (NR)
- mPFS (95% CI) for patients who had received
  - ≤3 prior LOT: 21.7 months (13.8–NE)
  - >3 prior LOT: 9.7 months (6.4–13.1)



CR, complete response; LOT, line of therapy; mPFS, median progression-free survival; NE, not estimable; NR, not reached; PFS, progression-free survival; RP2D, recommended phase 2 dose; VGPR, very good partial response.

MajesTEC-1: Stable Overall Survival

- At 30.4 months median follow-up, mOS remained stable at 22.2 months for all patients
  - Increased in patients achieving ≥VGPR and ≥CR (NR)
- mOS (95% CI) for patients who had received
  - ≤3 prior LOT: NR (18.3–NE)
  - >3 prior LOT: 17.7 months (12.2–29.7)

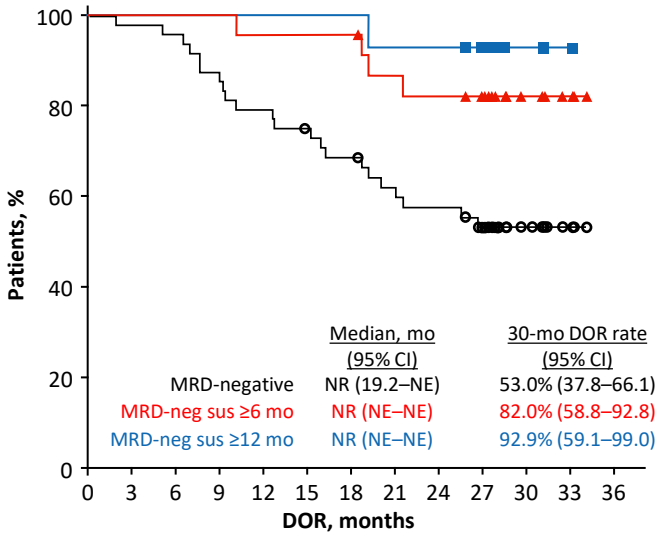


CR, complete response; LOT, line of therapy; mOS, median overall survival; NE, not estimable; NR, not reached; OS, overall survival; RP2D, recommended phase 2 dose; VGPR, very good partial response.

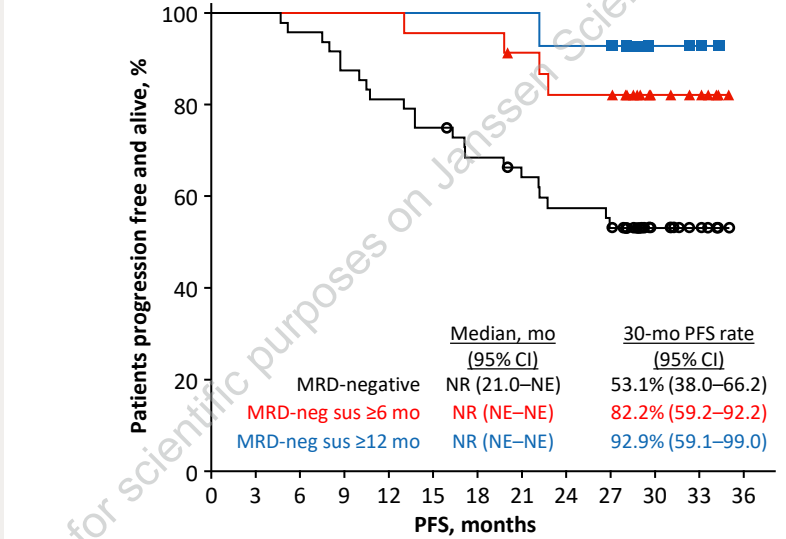
MajesTEC-1: Teclistamab Efficacy in MRD-Negative Patients

- DOR, PFS, and OS were further improved for patients who achieved MRD negativity
  - 30-month DOR, PFS and OS rates were ≥80% for patients with sustained MRD negativity for ≥6 months

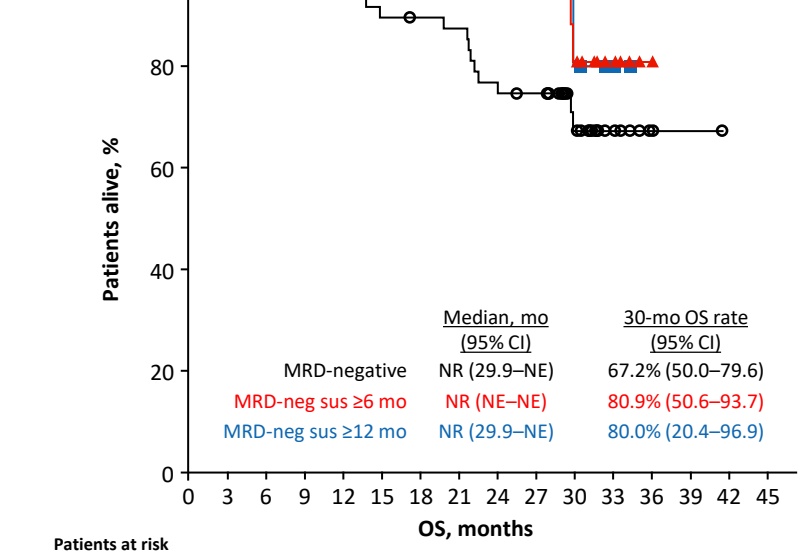
DOR



PFS



OS

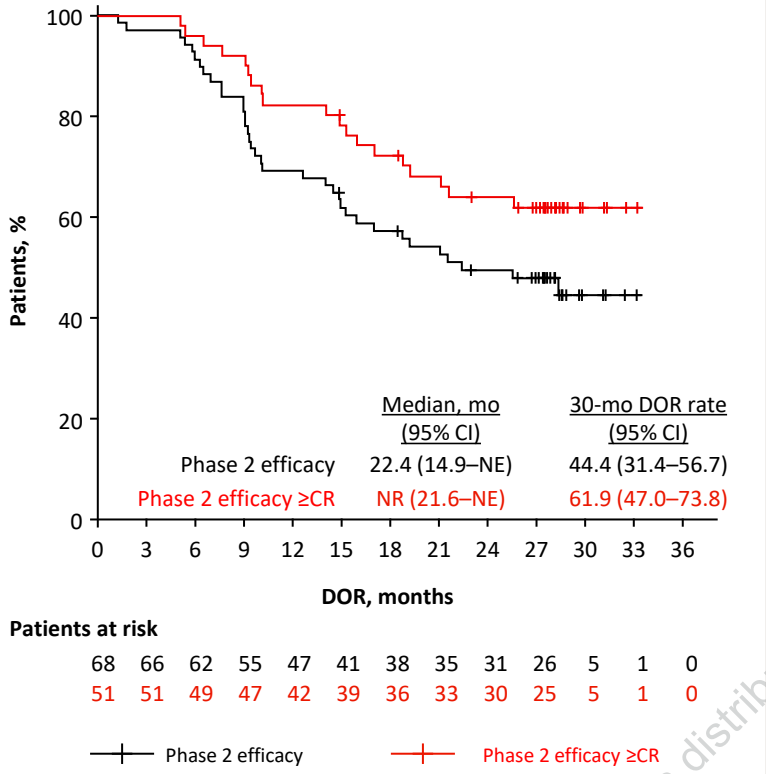


DOR, duration of response; MRD, minimal residual disease; NE, not estimable; NR, not reached; OS, overall survival; PFS, progression-free survival; sus, sustained.

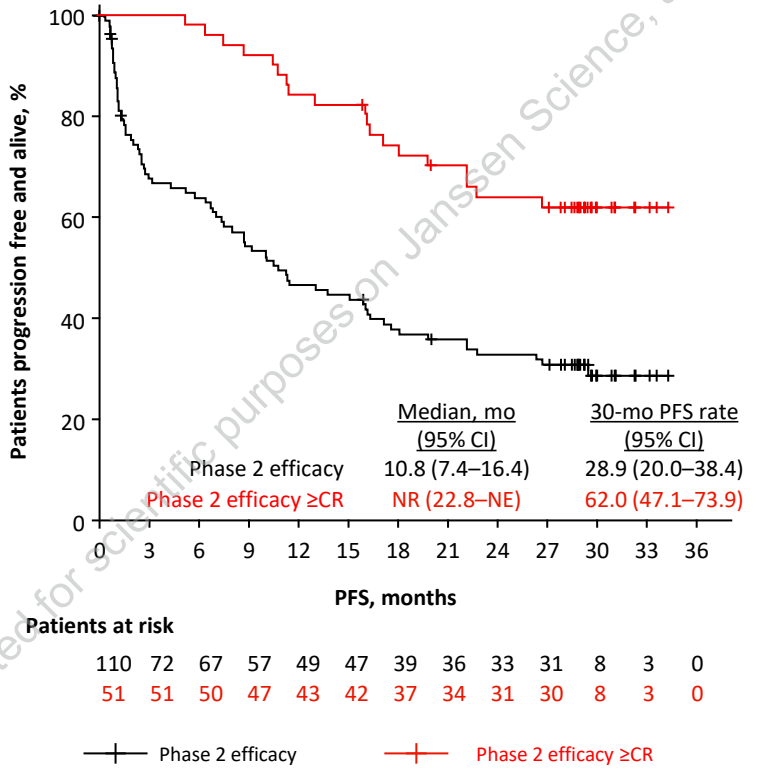
MajesTEC-1: Teclistamab Efficacy in the Phase 2 Efficacy Population (USPI)[a]

- ORR, 61.8% (68/110); ≥CR, 46.4% (51/110)

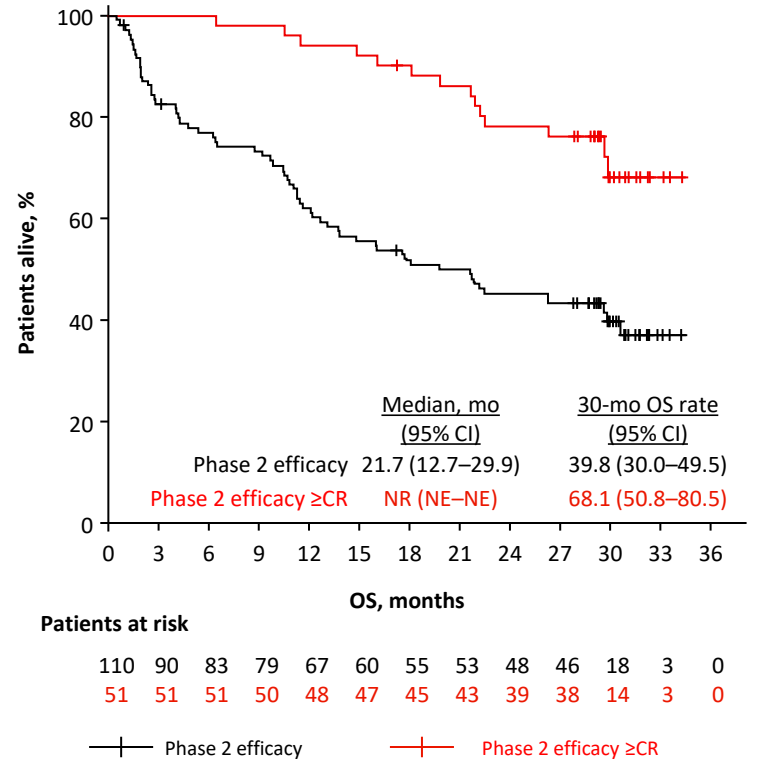
DOR



PFS



OS



[a]Includes patients enrolled in cohort A on or before March 18, 2021; these data reflect 30-month median follow-up of the n=110 patients that supported the USPI.[1]

CR, complete response; DOR, duration of response; MRD, minimal residual disease; NE, not estimable; NR, not reached; ORR, overall response rate; OS, overall survival; PFS, progression-free survival; USPI, United States prescribing information.

1. TECVAYLI (teclistamab-cqyv). Prescribing information. Horsham, PA: Janssen Biotech, Inc; 2022.

MajesTEC-1: No New Safety Signals

- The most common TEAEs remained cytopenias and infections
- No changes in CRS or ICANS at 30.4-month mFU
- Infections occurred in 78.8% of patients (grade 3/4, 55.2%)
  - Of grade 5 infections, 18/22 were due to COVID-19
    - No new grade 5 COVID-19 TEAEs at 30.4-month mFU
  - Onset of new grade ≥3 infections continued to generally decline over time
    - Factors such as transitioning to Q2W dosing and increasing use of immunoglobulin replacement may contribute to this trend
- TEAEs leading to dose reduction (n=1 [0.6%]) or discontinuation (n=8 [4.8%]; 5 due to infection) were infrequent
- No new safety signals were reported

TEAEs ≥20%, n (%)	N=165	
	Any Grade	Grade 3/4
Any TEAE	**165 (100)**	**156 (94.5)**
Hematologic		
Neutropenia	118 (71.5)	108 (65.5)
Anemia	91 (55.2)	62 (37.6)
Thrombocytopenia	69 (41.8)	38 (23.0)
Lymphopenia	60 (36.4)	57 (34.5)
Leukopenia	33 (20.0)	15 (9.1)
Nonhematologic		
Infections	130 (78.8)	91 (55.2)
COVID-19	48 (29.1)	35 (21.2)
CRS	119 (72.1)	1 (0.6)
Diarrhea	57 (34.5)	6 (3.6)
Pyrexia	51 (30.9)	1 (0.6)
Fatigue	50 (30.3)	4 (2.4)
Cough	46 (27.9)	0
Nausea	45 (27.3)	1 (0.6)
Injection site erythema	44 (26.7)	0
Arthralgia	42 (25.5)	2 (1.2)
Headache	40 (24.2)	1 (0.6)
Constipation	37 (22.4)	0
Hypogammaglobulinemia	36 (21.8)	3 (1.8)
Back pain	33 (20.0)	4 (2.4)

CRS, cytokine release syndrome; ICANS, immune effector cell–associated neurotoxicity syndrome; mFU, median follow-up; Q2W, every other week; TEAE, treatment-emergent adverse event.

MajesTEC-1: Conclusions

- Teclistamab ORR was 63.0%, with 46.1% of patients achieving ≥CR
- Of MRD-evaluable patients, 85.7% were MRD negative at any point, sustained for ≥6 months in 56.1% and ≥12 months in 38.9%
- Teclistamab mDOR increased to 24 months overall, and was NR for patients in ≥CR (30-month DOR rate, 60.8%)
- Teclistamab offers an effective treatment for patients with TCE RRMM, with a manageable safety profile and no new safety signals

With the longest follow-up of any bispecific antibody in MM (median 30.4 months), teclistamab continues to demonstrate deep and durable responses, including in patients who switch to less frequent dosing

CR, complete response; DOR, duration of response; mDOR, median duration of response; MM, multiple myeloma; MRD, minimal residual disease; NR, not reached; ORR, overall response rate; RRMM, relapsed/refractory multiple myeloma; TCE, triple-class exposed.