

BOSPHORUS MYELOMA 2026

Bispecific Antibodies in 2026: Sequencing, Safety and Practical Integration

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2026: Bispecific antibodies as standard in relapsed/refractory myeloma — why T-cell redirection?

WHY BISPECIFICS: MECHANISM

- ◆ One arm binds tumor antigen (BCMA / GPRC5D / FcRH5)
- ◆ Other arm binds T-cell CD3
- ◆ Forms antigen- & MHC-independent cytotoxic immune synapse
- ◆ GPRC5D: no soluble shedding → sustained target engagement
- ◆ 3 validated high-expression plasma-cell targets

WHY BISPECIFICS: CLINICAL VALUE

- ◆ Teclistamab ORR 63.0% (95% CI 55.2–70.4)
- ◆ ≥CR 39.4% | Median PFS 11.3 months
- ◆ Population: median 5 prior lines, 77.6% triple-class refractory
- ◆ No apheresis, no manufacturing wait, no bridging therapy
- ◆ Immediate access advantage over CAR-T

KEY MESSAGE Bispecifics deliver deep, durable, off-the-shelf responses where no standard option remains.

Wave of approved and emerging agents: consistent efficacy across BCMA, GPRC5D, and FcRH5 targets

Agent	Target	Trial	n	ORR	≥CR	Key Outcome
Teclistamab	BCMA	MajesTEC-1	165	63%	46%	—
Elranatamab	BCMA	MagnetisMM-3	123	61%	37%	Median PFS 17.2 mo
Linvoseltamab	BCMA	LINKER-MM1	117	71%	52%	—
Talquetamab 0.4 mg/kg QW	GPRC5D	MonumenTAL-1	143	74%	—	Post T-cell redirecting ORR 67%
Talquetamab 0.8 mg/kg Q2W	GPRC5D	MonumenTAL-1	154	69%	—	Post T-cell redirecting ORR 67%
Cevostamab (fixed ~12 mo)	FcRH5	GO39775 160 mg	167	44.3%	—	BCMA-naïve 60.6% vs post-BCMA 32.3%
Tec-Dara (combo)	BCMA	MajesTEC-3 (Ph3)	587	89.0%	—	36-mo PFS 83.4% vs 29.7%; HR 0.17 (p<0.0001)
Talquetamab + Teclistamab	GPRC5D + BCMA	RedirecTT-1 RP2R	44	80%	52%	EMD ORR 61%

KEY MESSAGE Bispecifics now deliver frontline-level depth across three distinct myeloma targets.

Three Targets, Three Biologies: BCMA, GPRC5D, and FcRH5 Expression Profiles

Feature	BCMA (TNFRSF17/CD269)	GPRC5D	FcRH5 (FcRL5)
Chromosomal locus	16p	12p	1q21
Protein family	TNF-receptor superfamily (type-3 transmembrane)	Orphan G-protein–coupled receptor	Immunoglobulin superfamily (surface membrane)
Expression onset	Normal & malignant plasma cells	Malignant plasma cells >> healthy tissue	Pre-B cells → peaks at plasma cell stage
Healthy-tissue expression	Normal plasma cells (high)	Keratinized structures only (hair shaft, eccrine gland, nail, filiform papillae)	Increases with B-cell maturation; lower than malignant PC
Malignant PC expression	Progressive MGUS → SMM → active MM increase	High & highly restricted	Higher than normal plasma cells; amplified by 1q21 gain
Expression density rank (flow cytometry)	3rd	1st (highest)	2nd
Prevalence rank (flow cytometry)	3rd	2nd	1st (broadest)
Prognostic link	High BCMA = poor prognosis	—	1q21 gain → FcRL5 overexpression = high-risk cytogenetics
On-target toxicity driver	—	Skin/nail changes, dysgeusia (keratinized-tissue expression)	—

KEY MESSAGE GPRC5D leads expression density; FcRH5 broadest prevalence; 1q21 gain amplifies FcRH5 in high-risk MM.

T-Cell Engagement and Antigen Escape: Why Multiple Targets Are Needed

BCMA — Vulnerabilities

- ◆ Gamma-secretase cleaves membrane BCMA → soluble BCMA (sBCMA) released into circulation
- ◆ sBCMA acts as decoy: binds therapeutic antibodies, reducing on-tumor efficacy
- ◆ Antigen downregulation/loss documented after BCMA-directed therapy
- ◆ Sequential BCMA-BsAb after BCMA BsAb: ORR only 12.5%, PFS 0.7 mo

GPRC5D — Advantages

- ◆ Short extracellular N-terminal domain: shedding into serum unlikely — no decoy problem
- ◆ Expressed on CD138+ malignant plasma cells at levels comparable to BCMA
- ◆ Expression pattern INDEPENDENT of BCMA — not co-regulated
- ◆ Unaffected by prior BCMA-targeted therapy: target switch yields ORR 72%, PFS 13.0 mo

KEY MESSAGE After BCMA failure, switching to GPRC5D delivers ORR 72% vs 12.5% — different target beats antigen escape.

Teclistamab — MajesTEC-1: Pivotal Efficacy and Depth of Response

Key inclusion criteria

- Triple-class exposed (IMiD, PI, and anti-CD38 mAb)
- ECOG PS 0-1
- No prior BCMA therapy

Selected baseline characteristics

- ISS III: 12.3%
- High cytogenetic risk: 25.7%
- ≥ 1 Extramedullary plasmacytoma: 17.0%
- Median lines of previous therapy: 5 (range 2-14)
- Penta-drug refractory: 30.3%

- ◆ ORR 63.0% (95% CI 55.2–70.4) in heavily pretreated RRMM (median 5 prior lines)
- ◆ MRD-negativity (10^{-5}): 26.7% overall; 46% among \geq CR patients — deep, durable responses confirmed
- ◆ Median TTR 1.2 months; zero dose reductions; only 1 discontinuation due to AE

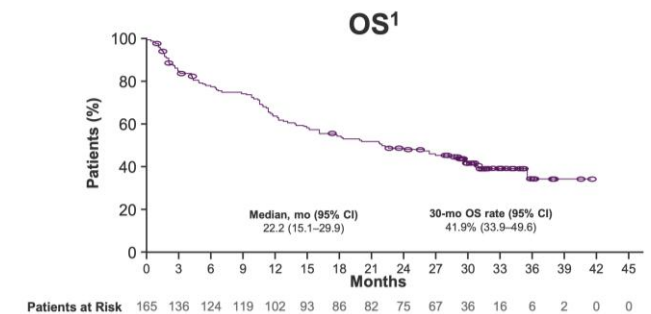
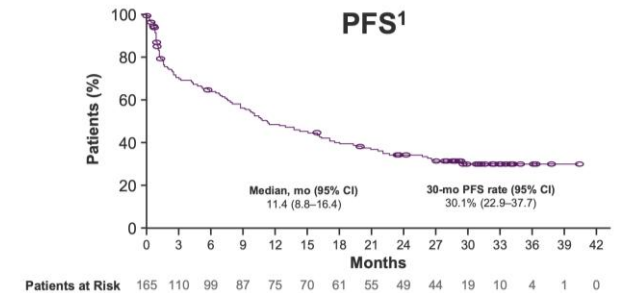
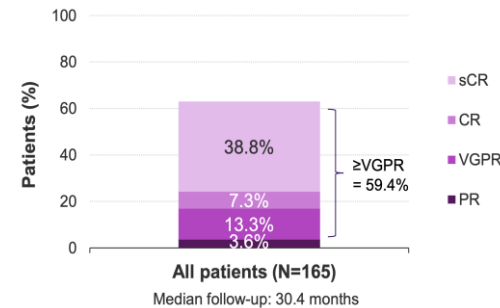
ORR: 63.0%¹

Median PFS: 11.4 months

MRD-negativity among evaluable patients: 85.7% (48/56)¹

Median DOR: 24.0 months¹

Response rates with teclistamab¹



Triple class refractory 77%

KEY MESSAGE Teclistamab delivers rapid, deep responses with 63% ORR and near-zero dose modifications in triple-class refractory myeloma.

MajesTEC-1: CRS and ICANS Profile — Low-Grade, Early-Onset, Manageable

Toxicity	Any Grade	Grade 3	Grade 4	Key Detail
CRS	72.1% (119/165)	0.6% (1 pt)	0	All events resolved; 97% limited to step-up/Cycle 1; median onset Day 2, duration 2 days
Tocilizumab use (CRS mgmt)	36.4% (60/165)	—	—	Standard CRS management protocol
Neurotoxicity (all)	14.5% (24/165)	0	0	No treatment discontinuation
ICANS (specific)	3.0% (5 pts)	0 (all Gr 1/2)	0	No treatment discontinuation
BCMA×CD3 bsAb class context	≥Gr3 CRS: 0–3%	0–3%	Rare	Majority after step-up / first full dose

KEY MESSAGE Teclistamab CRS: mostly low-grade, early-onset, self-limited — zero Grade 4 events, all resolved.

MajesTEC-1: Infections, Cytopenias, and Hypogammaglobulinemia

Adverse Event	Any Grade	Grade 3/4	Key Management
Infections (initial)	76.4% (126/165)	44.8% (74/165)	—
Infections (22.8 mo follow-up)	80%	55.2%	21 deaths (18 COVID-19)
Neutropenia	70.9%	64.2%	G-CSF in 77.8% of neutropenic pts
Anemia	52.1%	37.0%	—
Thrombocytopenia	40.0%	21.2%	—
Hypogammaglobulinemia	74.5%	—	IVIG in 65/123 pts; HR 0.33 (CI 0.17–0.64; p=0.001)

KEY MESSAGE IVIG prophylaxis cuts infection risk by 67%; COVID-19 drove 18 of 21 infection deaths at extended follow-up.

MajesTEC-3 (Phase 3): Tec-Dara vs DPd/DVd — Design and Patient Population

Tec-Dara (n=291)

- ◆ Teclistamab SC step-up: 0.06 → 0.3 mg/kg
- ◆ Then 1.5 mg/kg QW (Cycles 1–2)
- ◆ Then 3 mg/kg Q2W (Cycles 3–6)
- ◆ Then 3 mg/kg Q4W (Cycles 7+)
- ◆ Daratumumab SC throughout
- ◆ Median Tx duration: 32.4 months

DPd / DVd (n=296)

- ◆ DPd: Daratumumab + Pomalidomide + Dex (90.7%, n=263)
- ◆ DVd: Daratumumab + Bortezomib + Dex (9.3%, n=27)
- ◆ Median Tx duration: 16.1 months
- ◆ 1–3 prior lines (PI + lenalidomide exposed)
- ◆ Anti-CD38 naive; no prior BCMA therapy
- ◆ Median follow-up: 34.5 months

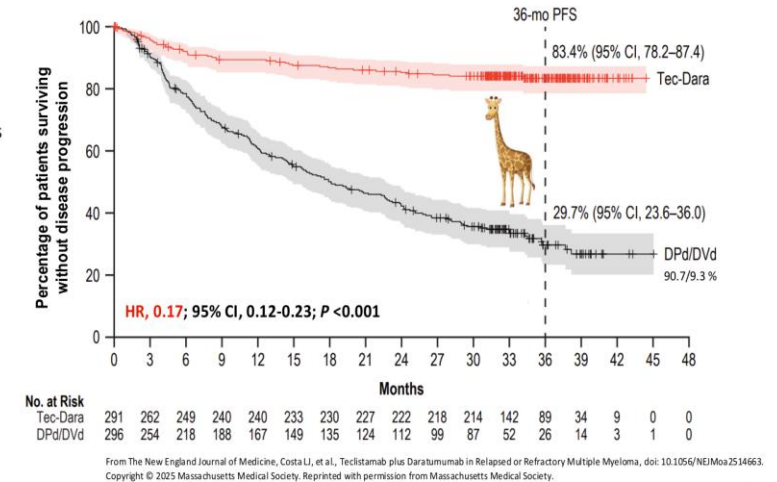
KEY MESSAGE Tec-Dara sustained 2× longer treatment duration vs DPd/DVd at 97.1% relative dose intensity.

MajesTEC-3: Efficacy — Deep Response and PFS/OS Superiority

- ◆ ORR 89.0% vs 75.3%; \geq CR 81.8% vs 32.1%; MRD-neg 58.4% vs 17.1% (all $p < 0.0001$)
- ◆ Median PFS not reached vs 18.1 mo; 36-mo PFS 83.4% vs 29.7%; HR 0.17 (95% CI 0.12–0.23)
- ◆ 36-mo OS 83.3% (95% CI 78.3–87.2) vs 65.0% (95% CI 58.8–70.5); $p < 0.0001$ (Costa LJ et al. NEJM 2026. PMID 41363801)

PFS

- Median follow-up: 34.5 months
- Median PFS was NR for Tec-Dara versus 18.1 months for DPd/DVd



Tec-Dara significantly improved PFS versus DPd/DVd, with 83% of patients in the Tec-Dara group alive and progression free at 3 years

J&J

CI, confidence interval; Dara, daratumumab; DPd/DVd, daratumumab and dexamethasone with either pomalidomide or bortezomib; HR, hazard ratio; NR, not reached; PFS, progression-free survival; Tec, teclistamab. Costa LJ, et al. *N Engl J Med*. DOI: 10.1056/NEJMoa2514663.

Oncology

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KEY MESSAGE Tec-Dara delivers 83% 3-year PFS with an 83% HR reduction versus standard triplet therapy

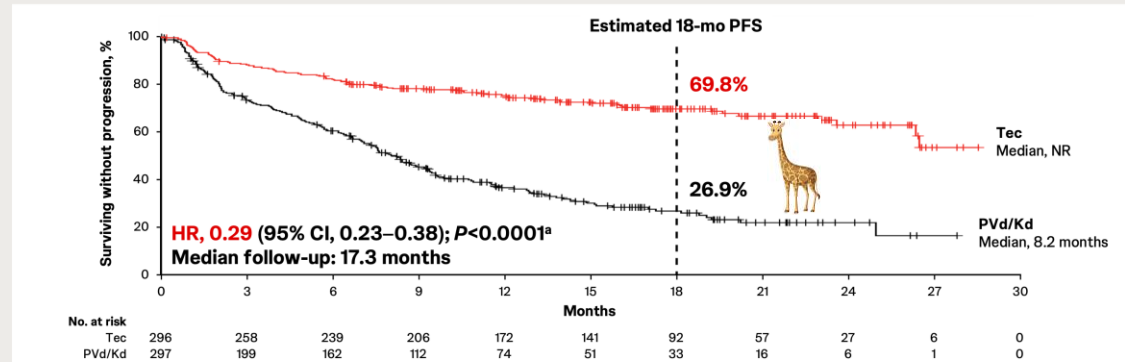
MajesTEC-3: Safety — Manageable CRS Profile and Infection Burden

Safety Parameter	Tec-Dara (n=281)	DPd/DVd (n=283)	Comment
CRS — Any Grade	60.1%	---	All Gr 1 (44.2%) or Gr 2 (15.9%)
CRS Grade ≥3	0%	—	None observed
Grade 2 CRS after Cycle 1	0%	—	None observed
ICANS	1.1% (n=3)	—	All resolved
Grade 3/4 Neutropenia	75.6%	78.6%	Similar between arms
Grade 3/4 Infections	54.1%	43.4%	Higher in Tec-Dara
Fatal Infections	4.6% (n=13)	1.4% (n=4)	12/13 within ≤6 mo; 9/12 no prior IVIG
Hypogammaglobulinemia	84.5%	60.3%	87.3% received ≥1 IVIG dose
Second Primary Malignancy	12.4%	8.6%	Mostly cutaneous/non-invasive (8.1% vs 4.5%)

KEY MESSAGE CRS is low-grade and manageable; early IVIG is critical to prevent fatal infections.

MajesTEC-9: 1-3 Prior Lines of Therapies Teclistamab vs PVd/Kd

MajesTEC-9: Tec Significantly Improved PFS (Primary Endpoint)

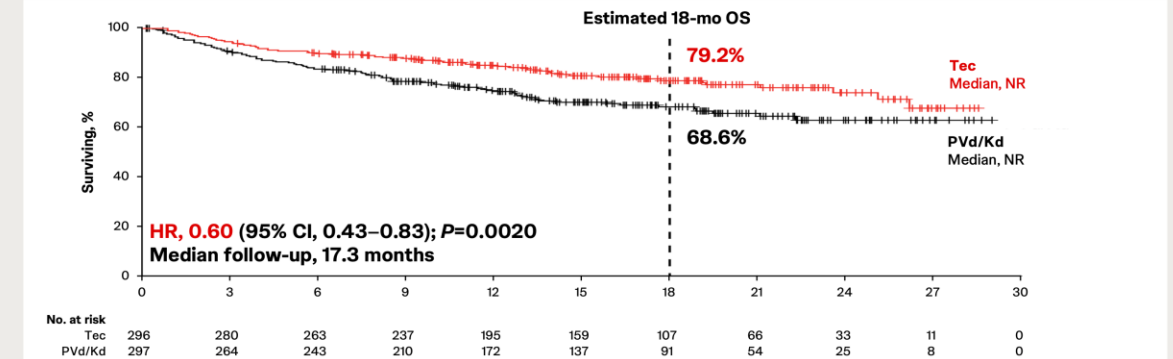


Tec significantly improved PFS, with a 71% reduction in the risk of disease progression or death in a highly refractory population

^aThe P value crossed the prespecified stopping boundary for superiority for the first interim analysis (P=0.0197).
CI, confidence interval; NR, not reached.
From The New England Journal of Medicine, Touzeau C, et al., Teclistamab in Multiple Myeloma with One to Three Previous Lines of Therapy.
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MajesTEC-9: Tec Significantly Improved OS



Tec significantly improved OS vs PVd/Kd, despite over two-thirds of PVd/Kd patients who initiated subsequent therapy receiving a BsAb or CAR-T

BsAb, bispecific antibody; CAR-T, chimeric antigen receptor T cell.
From The New England Journal of Medicine, Touzeau C, et al., Teclistamab in Multiple Myeloma with One to Three Previous Lines of Therapy.
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Presented by R Mina at the American Society of Clinical Oncology (ASCO) Annual Meeting; May 29–June 2, 2026; Chicago, IL, USA.

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75% of the patients were double refractory to an IMiD and Anti CD38 mAb

KEY MESSAGE CRS is low-grade and manageable; early IVIG is critical to prevent fatal infections.

Elranatamab — MagnetisMM-3: Study Design and Pivotal Efficacy (Cohort A, BCMA-naïve)

61.0%

ORR by BICR (95% CI 51.8–69.6;
75/123)

56.1%

≥VGPR rate

35.0%

≥CR rate

89.7%

MRD-negativity (NGS 10^{-5}) among
≥CR evaluable pts

- ◆ Elranatamab 76 mg SC QW → Q2W; step-up 12/32 mg (Days 1/4)
- ◆ Cohort A: n=123, BCMA-naïve RRMM; 96.7% triple-class refractory, median 5 prior lines (2–22)
- ◆ Median TTR 1.2 months (0.9–7.4); median follow-up 14.7 months at primary analysis

KEY MESSAGE Elranatamab delivers deep, rapid responses in heavily pre-treated BCMA-naïve RRMM.

PFS, OS, and Response Durability — 28.4-Month Long-Term Update

Key inclusion criteria

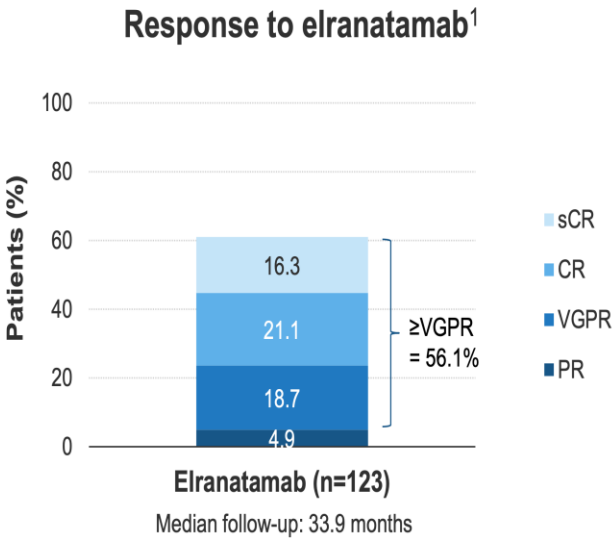
- Refractory to at least 1 IMiD, 1 PI, and 1 anti-CD38 mAb
- ECPG PS 0-2
- No prior treatment with BCMA-directed BsAb

Selected baseline characteristics

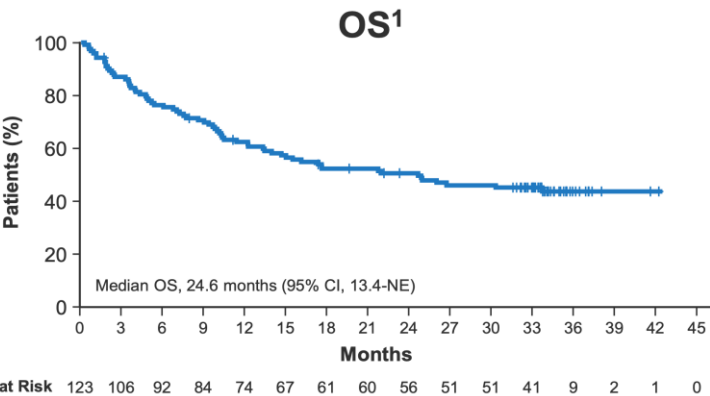
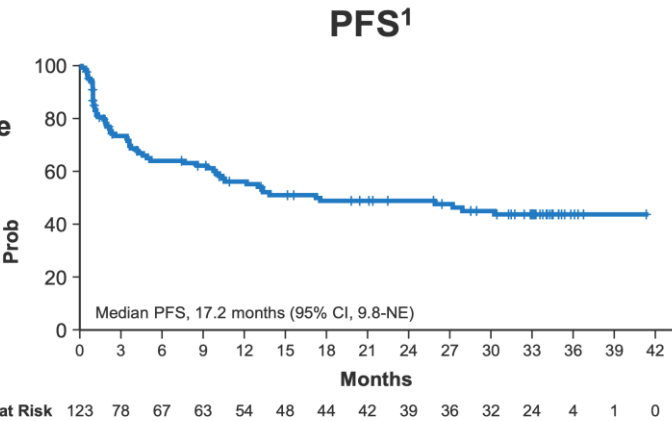
- R-ISS III: 15.4%
- High cytogenetic risk: 25.2%
- Extramedullary disease by BICR: 31.7%
- Median lines of previous therapy: 5 (range 2-22)
- Penta-drug refractory: 42.3%

- ◆ Median PFS 17.2 mo (95% CI 9.8–NE); median OS 24.6 mo (95% CI 13.4–NE) at 28.4-mo follow-up
- ◆ ORR stable at 61.0%; ≥CR deepened 35.0%→37.4%; median DOR not reached; 24-mo response maintenance 66.9% (95% CI 54.4–76.7)
- ◆ ≥CR subgroup: 15-mo DOR 89.2%, 15-mo PFS 89.5% — deep response drives durable disease control

ORR: 61.0%¹
Median PFS: 17.2 months
MRD-negativity rate among MRD-evaluable patients with ≥CR: 90.3% (28/31)¹
Median DOR: not reached¹



Triple class refractory 96.7%



KEY MESSAGE Deep, durable responses deepen over time — ≥CR achievers show 89% PFS at 15 months.

Safety — CRS, ICANS, and Step-Up / Subcutaneous Schedule

Parameter	Initial Report (n=119)	Long-Term Update
CRS — Any Grade	56.3%	57.7%
CRS Grade 1	42.0%	—
CRS Grade 2	14.3%	—
CRS Grade ≥3	0%	0%
% CRS events in first 3 doses (step-up)	90.6%	—
CRS Median onset / resolution	2.0 days / 2.0 days	—
Tocilizumab use	22.7%	—
Steroid use	8.4%	—
ICANS — Any Grade	3.4% (4/119)	4.9%

KEY MESSAGE All CRS/ICANS Grade ≤2; zero discontinuations — supports outpatient subcutaneous administration.

Infections, Cytopenias, and the Critical Role of IVIG

Toxicity Domain	Any Grade	Grade 3–4	Key Detail
Infections (all)	69.9%	39.8%	Fatal 6.5%; COVID-19 29.3%, URTI 17.9%, Pneumonia 12.2%
Neutropenia	48.8%	48.8%	—
Anemia	48.8%	37.4%	—
Thrombocytopenia	30.1%	22.0%	—
Hypogammaglobulinemia (IgG <400 mg/dL)	75.5%	—	43.1% received IVIG during treatment course

KEY MESSAGE Infections dominate elranatamab toxicity; proactive IVIG for hypogammaglobulinemia improves survival outcomes.

Talquetamab — First-in-Class GPRC5D×CD3 Bispecific: Why Is It Different?

BCMA Bispecifics

- ◆ Soluble BCMA shedding → antigen sink risk
- ◆ BCMA expression lost/reduced at relapse
- ◆ Progressive hypogammaglobulinemia persists
- ◆ CD19+ B-cell depletion observed

GPRC5D Bispecific — Talquetamab

- ◆ No antigen shedding — short N-terminal domain
- ◆ GPRC5D expression preserved in BCMA-resistant relapse
- ◆ Hypogammaglobulinemia tends to improve over time
- ◆ CD19+ B-cell populations not depleted

KEY MESSAGE GPRC5D is BCMA-independent, non-shed, and preserved in BCMA-refractory relapse — a distinct, durable target.

MonumenTAL-1 — Efficacy Across Two Dose Schedules (Updated Analysis, Lancet Haematol 2025)

Outcome	0.4 mg/kg QW	0.8 mg/kg Q2W	Prior TCR Cohort
ORR	74% (106/143; 95% CI 66–81)	69% (107/154; 95% CI 62–77)	67% (52/78; 95% CI 55–77)
Median Follow-up	25.6 mo	19.4 mo	16.8 mo
Median PFS	7.5 mo (95% CI 5.7–9.4)	11.2 mo (95% CI 8.4–14.6)	—
Median DOR	9.5 mo	17.5 mo	—
DOR in ≥CR	28.6 mo	Not reached	—
24-mo OS	60.6% (95% CI 51.7–68.4)	67.1% (95% CI 58.3–74.4)	—
Post-BCMA CAR-T ORR	72.9% (35/48)	—	—
Post-BCMA BsAb ORR	52.2% (12/23)	—	—

Trial Population: Received a median of 5 prior lines of therapies; %79 triple-class refractory, %30 penta-drug refractory.

KEY MESSAGE Q2W talquetamab delivers deeper, more durable responses than QW across heavily pretreated RRMM.

GPRC5D-Specific AEs — Skin and Nail Toxicity (Target-Specific Signature)

Toxicity	Incidence (N=339)	Schedule Detail	Onset (days)	Resolution (days)	Grade 3 / DLT	Management
Skin events (desquamation, pruritus, dry skin)	65% (221/339) — 405 µg: 67% 800 µg: 70%	—	20–27	15–28	Grade 3 rash = sole DLT (1 pt, 800 µg)	Urea 10% / ammonium lactate 12% emollient + sunscreen; oral prednisone for grade ≥3; reduce dosing frequency (Q1W→Q4W)
Nail changes	55% (188/339)	QW: 57% (17/30) vs Q2W: 27% (12/44)	64–69	74–122	—	Dose frequency reduction; supportive nail care

KEY MESSAGE Skin hits early and resolves fast; nails lag months behind — anticipate both.

GPRC5D-Specific AEs — Dysgeusia, Oral Findings, and Weight Loss

Parameter	QW	Q2W	Prior TCR / All RP2D
Dysgeusia — Any Grade	72%	71%	76%
Dysgeusia — Grade 1	59.2%	58.3%	—
Dysgeusia — Grade ≥3	0%	0%	0% (none by CTCAE)
Dose modification due to dysgeusia	7.0%	3.9%	—
Weight loss ≥10%	—	—	40% (134/339)
Weight loss — Grade ≥3	—	—	3%
Dysgeusia onset	—	—	13–20 days
Dysgeusia resolution	—	—	95–130 days

KEY MESSAGE GPRC5D-specific oral toxicities are universal, prolonged, and demand proactive nutritional management.

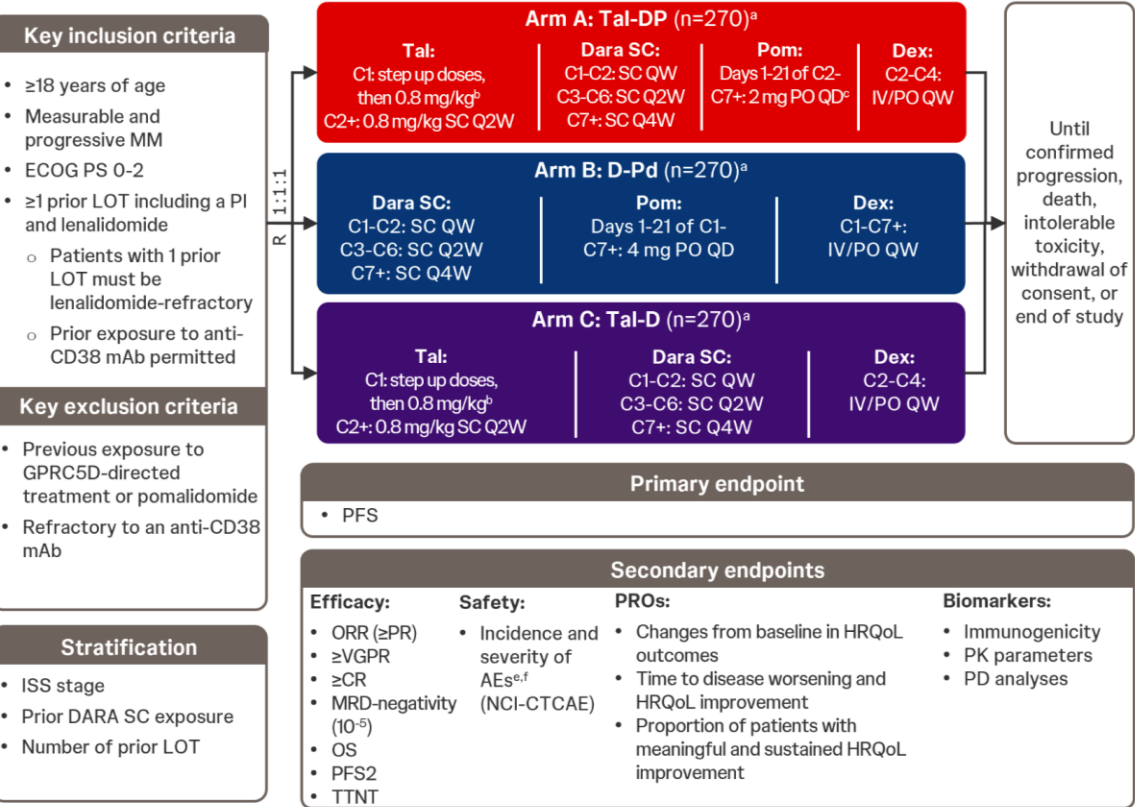
Talquetamab — CRS, Infection Advantage, and Practical Dosing Schedule

Safety Domain	QW RP2D	Q2W RP2D
CRS — All grades (N=339)	77% (260/339)	77% (260/339)
CRS — Grade ≥3	1.5% (5/339)	1.5% (5/339)
ICANS — All grades	8.2%	8.2%
Infection — All grades	58.7%	66.2%
Infection — Grade 3/4	21.7%	15.9%
IVIG initiation rate	9.8%	6.9%
Hypogammaglobulinemia (IgG <500)	≥71%	≥71%
Treatment-related deaths	0	0

KEY MESSAGE Talquetamab delivers deep responses with near-zero fatal toxicity and a clear infection advantage over BCMA bispecifics.

MONUMENTAL 3 EHA 2026 PLENARY SESSION

MonumentAL-3 Study Design¹



Cevostamab (FcRH5×CD3): First Non-BCMA/Non-GPRC5D Target — GO39775 Phase I

44.3%

ORR (74/167) — GO39775, 160 mg TD, n=167 [Richter J et al. Blood 2024;144(suppl 1):1021]

25.7%

≥VGPR rate; median DOR 21.2 mo in ≥VGPR responders [Richter J et al. Blood 2024;144(suppl 1):1021]

16.8%

≥CR rate; median DOR (all responders) 10.4 months [Richter J et al. Blood 2024;144(suppl 1):1021]

1.4 mo

Median time to first response; 28/167 completed fixed-duration therapy [Richter J et al. Blood 2024;144(suppl 1):1021]

- ◆ FcRH5: plasma-cell-maximal target; independent of BCMA pathway
- ◆ BCMA-naïve ORR 60.6% vs prior-BCMA-exposed ORR 32.3% — active despite BCMA resistance
- ◆ Fixed-duration ~12 months (17 cycles); step-up dosing 0.3→1.2→3.6→160 mg; ≥48h hospitalization per C1 infusion

KEY MESSAGE Cevostamab delivers 44% ORR and retains activity after BCMA failure — a true non-BCMA escape valve.

CRS: Grading, Timing, and Management (Tocilizumab + Steroids)

Agent / Trial	CRS Incidence	Grade ≥3	Onset (median)	Duration (median)	Tocilizumab Use	Permanent Discontinuation
Teclistamab / MajesTEC-1	72.1%	0.6% (Grade 3); Grade 4: NONE	Day 2	2 days	36.4% (60/165)	—
Elranatamab / MagnetisMM-3	56–58%	Grade ≥3: NONE	Day 2	2 days	—	0
Tec-Dara / MajesTEC-3	60.1%	Grade ≥3: NONE	Cycle 1 only	No Grade 2 CRS after Cycle 1	—	—
Prophylactic TCZ — MajesTEC-1 pilot (n=23)	26.1% (↓ from 72.1%)	—	—	—	Pre-emptive	0
Prophylactic TCZ — Cevostamab	38.7% (↓ from 90.9%)	—	—	—	Pre-emptive (p<0.001)	0

KEY MESSAGE CRS is nearly always Grade 1-2, confined to Step-Up/Cycle 1, and resolved with tocilizumab ± steroid.

ICANS and the Rationale for Step-Up Dosing

Agent	Target	ICANS Rate	Max Grade	Step-Up Scheme	Events Clustered
Teclistamab	BCMA	3.0% (5/165)	Grade 1–2	0.06 → 0.3 → 1.5 mg/kg SC q2–4d	97% in step-up period
Elranatamab	BCMA	3.4–4.9%	Grade ≤2	12 → 32 → 76 mg QW	90.6% in first 3 doses
Tec + Daratumumab	BCMA + CD38	1.1% (3 pts)	Grade ≤2 (rare Gr 4→DC)	Teclistamab step-up retained	—
Talquetamab	GPRC5D	8.2–11%	Mostly Grade 1–2	0.01 → 0.06 → 0.4/0.8 mg/kg	—

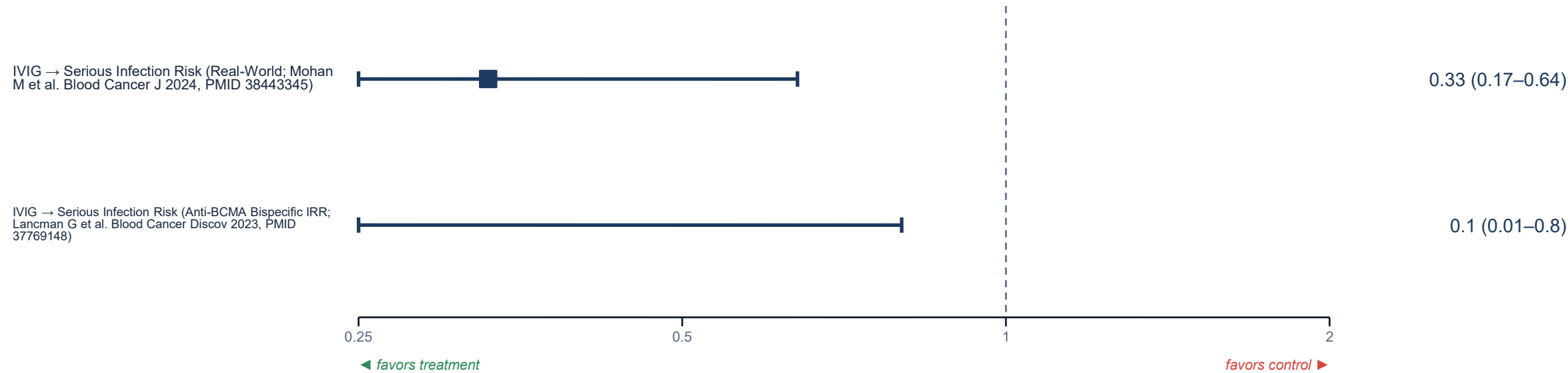
KEY MESSAGE BCMA bispecific ICANS is rare and mild; step-up dosing captures ≥90% of events in first 3 doses.

Infections: The Leading Cause of Mortality – Profile and Mechanism

Agent / Context	Any-Grade Infection	Grade 3/4 Infection	Fatal Infection	Key Mechanism
Teclistamab (mono)	76.4% (short-term) → 80.0% (22.8 mo)	44.8%	21 deaths (18 COVID-19)	Hypogammaglobulinemia: IgG <400 in 70.9%; 100% of responders persistently low
Teclistamab + Daratumumab (Tec-Dara)	96.5%	NR	4.6% (12/13 deaths before IVIG guidance, ≤6 mo)	Additive immunosuppression; most fatal events pre-IVIG protocol
DPd / DVd (comparator)	84.1%	NR	NR	—
BCMA agents (French series)	73% cumulative	NR	NR	B-cell depletion → absent humoral recovery
GPRC5D — Talquetamab (French series)	51% cumulative	NR	NR	B-cells preserved → lower infection burden; HR 0.53 vs BCMA
Corticosteroid use (CRS/ICANS mgmt)	↑ Risk	NR	NR	Infection HR 2.01 (multivariate) — minimize steroids in CRS management

KEY MESSAGE Infection kills: BCMA bispecifics drive 80% infection rates — hypogammaglobulinemia + steroids are the culprits.

Infection Prophylaxis: IVIG, Antiviral/PCP – Evidence-Based Impact



KEY MESSAGE IVIG + antiviral/PCP prophylaxis slashes serious infection risk by 67–90% in bispecific-treated myeloma.

BCMA BsAb→BCMA BsAb: The Limits of Re-Targeting the Same Antigen

Prior BCMA Therapy	Next Agent	n	ORR	Median PFS
BCMA BsAb (teclistamab)	Another BCMA BsAb	8	12.5%	0.7 mo
Ide-cel (same product retreat)	Ide-cel (KarMMa)	28	21% (≥CR 0%)	1.0 mo
Any prior BCMA-targeted Tx	Teclistamab (MajesTEC-1 Cohort C)	40	52.5% (≥CR 30%)	4.5 mo (OS 15.5 mo)
Prior BCMA CAR-T	Teclistamab (MajesTEC-1 Cohort C)	—	53.3%	4.4 mo
Prior BCMA ADC	Teclistamab (MajesTEC-1 Cohort C)	—	55.2%	7.3 mo
Prior BCMA CAR-T	Elranatamab (MagnetisMM pooled, 4 studies)	—	52.8%	10.0 mo
Prior BCMA ADC	Elranatamab (MagnetisMM pooled, 4 studies)	—	42.4%	3.9 mo

KEY MESSAGE BCMA→BCMA BsAb retreatment is futile; switch class (CAR-T→BsAb or ADC→BsAb) preserves ~50% ORR.

Target Switching (BCMA→GPRC5D): The Most Powerful Sequencing Strategy

Prior Therapy	Agent	ORR	Median PFS
Post BCMA CAR-T	Talquetamab (GPRC5D BsAb)	72%	13.0 mo
Post BCMA-targeted therapy	Arlo-cel (GPRC5D CAR-T)	79%	19.0 mo
BCMA-naïve	Arlo-cel (GPRC5D CAR-T)	95%	18.3 mo
Post BCMA BsAb	Talquetamab (GPRC5D BsAb)	58%	3.9 mo

KEY MESSAGE Switch to GPRC5D after BCMA CAR-T: ORR 72–79%, PFS 13–19 months — target switch beats BCMA exhaustion.

Prior BCMA Exposure Reduces CAR-T Efficacy — Modality Matters

- ◆ Cilta-cel after prior BCMA ADC: ORR 61.5% / \geq CR 38.5% / PFS 9.5 months; after prior BCMA BsAb: ORR 57.1% / \geq CR 14.3% / PFS 5.3 months — marked decline compared to BCMA-naïve responses
- ◆ Real-world cilta-cel: no prior BCMA-TT ORR 92% / \geq CR 75% vs prior BCMA-TT ORR 70% / \geq CR 42% (n=236)
- ◆ Ide-cel is modality-sensitive: after prior BCMA CAR-T ORR 100% (n=5), after prior BCMA ADC ORR 68% / PFS 3.2 months, after prior BCMA BsAb ORR 86% but PFS only 2.8 months (n=7)

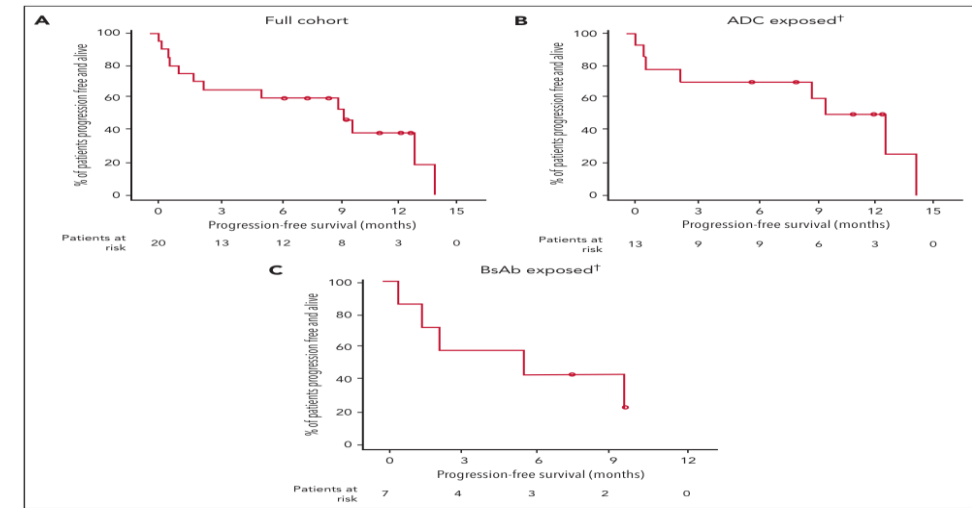


Figure 3. Progression-free survival. Kaplan-Meier curves showing progression-free survival in the overall cohort (A), the antibody-drug conjugate (ADC)-exposed patients (B), and the BsAb-exposed patients (C). [†]Classification is based on the last anti-BCMA therapy used if patients received ≥ 1 therapy.

Downloaded from <https://pubs.ascp.net/doi/10.1182/blood-2025-01-2525> and by F. Khan on

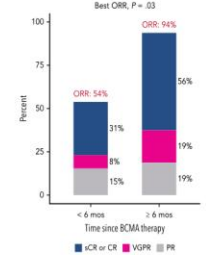
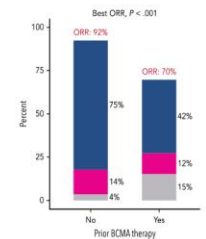
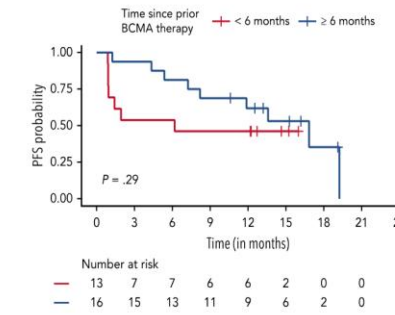
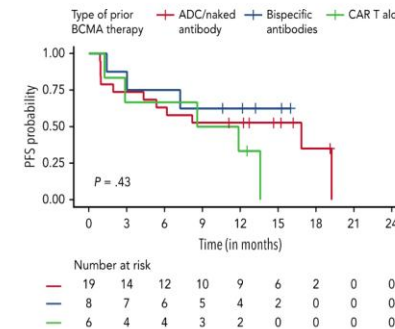
KEY MESSAGE Use CAR-T FIRST: prior BCMA exposure slashes ORR, PFS, and OS across both agents.

BCMA-Free Interval (Washout) – Quantitative Evidence for Sequencing

- ◆ Cilta-cel real world: last BCMA-TT <6 months ago ORR 54% / ≥CR 31% / PFS 6.2 months vs ≥6 months ago ORR 94% / ≥CR 56% / PFS 16.8 months — interval approximately triples efficacy
- ◆ Teclistamab real world (n=509): last BCMA-TT >9 months ago ≥VGPR 45% / PFS 6.6 months vs ≤9 months ago ≥VGPR 30% / PFS only 1.8 months
- ◆ CIBMTR ide-cel (n=821): prior BCMA-TT <6 months PFS 4.9 months vs ≥6 months PFS 5.9 months

Efficacy of Cilta-cel after prior BCMA therapy

- Real world data from 255 patients
- Prior BCMA exposure associated with worse ORR
- Longer interval between therapies associated with better ORR
- May be differences between TCE, CAR and ADCs



KEY MESSAGE A 6–9 month BCMA-free interval can triple response rates and multiply PFS up to 9-fold.

Post-BCMA FcRH5 and GPRC5D CAR-T: Third-Target Options

Agent	Prior BCMA Therapy	n	ORR	≥CR	PFS
Cevostamab (FcRH5 BsAb)	BCMA-exposed	167	32.3%	—	—
Cevostamab (FcRH5 BsAb)	BCMA-naïve	167	60.6%	—	—
Cevostamab (FcRH5 BsAb) — CAMMA-2	Prior BCMA CAR-T	11	73%	27%	—
Cevostamab (FcRH5 BsAb) — CAMMA-2	Prior BCMA BsAb	21	10%	5%	—
GPRC5D CAR-T (MCARH109)	Prior BCMA CAR-T subgroup	17	75%	41%	—
GPRC5D CAR-T (MCARH109)	All doses (incl. prior BCMA CAR-T)	—	71%	—	—
China GPRC5D CAR-T	Prior BCMA CAR-T (EMD 57%)	37	84%	35%	4.5 mo

KEY MESSAGE After BCMA failure, GPRC5D CAR-T (~75–84% ORR) outperforms FcRH5 BsAb post-BsAb (10%); sequence matters.

Dual Targeting and Bridging: Strategies That Go Beyond Sequencing

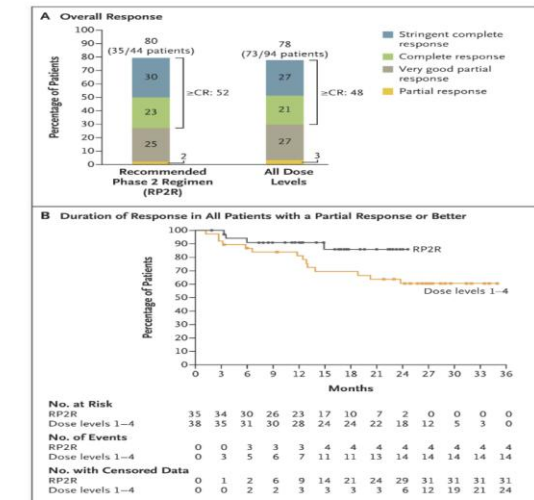
- ◆ RedirecTT-1 (Tec+Tal, n=44): ORR 80% / \geq CR 52% / 18-mo PFS 70%; EMD ORR 61% — surpasses single-target BsAb
- ◆ Bridging caution: ANY BsAb (BCMA or GPRC5D) pre-apheresis impairs CAR-T manufacturing; GPRC5D BsAb is safe as post-apheresis bridge only
- ◆ All sequencing data are small-n, retrospective/non-randomized; no randomized comparative sequence trial exists



RedirecTT-1

Talquetamab plus Teclistamab in Relapsed or Refractory Multiple Myeloma

- Among patients with EMD, a response to talquetamab monotherapy occurred in 48% and the median duration of response was 8.1 months
- Among patients with EMD who received teclistamab monotherapy, a response occurred in 36% and the median duration of response was 14.0 months
- In the RedirecTT-1 study, 61% of patients with EMD had a response, and the likelihood of continuing to have a response at 18 months was 82%; the durability of response at 18 months that was seen among all the patients was 86%



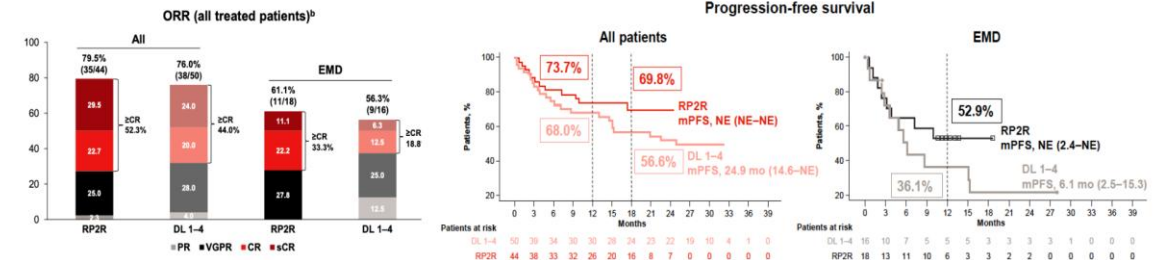
EMD = extramedullary disease.
Cohen YC, et al. *N Engl J Med.* 2025;392:138-149.

KEY MESSAGE Dual/tri-specific targeting overcomes single-agent resistance, but sequencing evidence remains non-randomized and small.

RedirecTT-1: Dual Bispecific (Talquetamab + Teclistamab) — The Power of Dual Antigen Targeting

- ◆ Dual BsAb (Tal+Tec) ORR 80%, \geq CR 52% in RP2R (n=44; median follow-up 18.2 mo) — 86% triple-class refractory.
- ◆ EMD cohort (bone-independent, n=90): ORR 79% (95% CI 69–87), 12-mo PFS 61%, 12-mo OS 74%.
- ◆ CRS 79% (Gr3 2%, no Gr4-5); Gr3/4 infection 64%; infection-related deaths 11 (12%) — prophylaxis mandatory.

Teclistamab + Talquetamab (RedirecTT-1)



International Myeloma Society
Cohen et al, IMS, 2024; Cohen et al, NEJM 2025

KEY MESSAGE Dual GPRC5D+BCMA targeting delivers 80% ORR even in EMD, but infection toxicity demands vigilance.

MajesTEC-3: Teclistamab + Daratumumab Decisively Surpasses DPd/DVd in Phase 3

Endpoint	Tec-Dara (n=291)	DPd/DVd (n=296)	Effect Size	p-value
ORR	89.0%	75.3%	—	<0.0001
≥CR rate	81.8%	32.1%	RR 2.55	<0.0001
MRD-neg (10 ⁻⁵ NGS)	58.4%	17.1%	RR 3.43	<0.0001
36-mo PFS	83.4%	29.7%	HR 0.17 (95% CI 0.12–0.23)	<0.0001
Median PFS	Not reached	18.1 months	—	—
36-mo OS	83.3%	65.0%	—	<0.0001
Any-grade CRS	60.1%	N/A	All Gr1–2; zero Gr≥3	—
ICANS	1.1%	N/A	—	—
Fatal infection	4.6%	—	12/13 events pre-enhanced-Ig	—

KEY MESSAGE Tec-Dara delivers 3× MRD negativity and an 83% PFS at 3 years — a new early-line standard.

Bispecific + IMiD/CELMoD and CD38: Deep Early Responses in Triple Combinations

Trial / Agent	N	ORR	≥VGPR	≥CR	24-mo PFS / DOR	Key Toxicity
MajesTEC-2/TRIMM-2 Tec-Dara-Pom (all lines)	27	85.2%	—	—	—	CRS 55.6% (all Gr1-2) Gr3/4 neutropenia 77.8% 1× Gr1 ICANS
Tec-Dara-Pom 1-3L subgroup	17	94.1%	88.2%	64.7%	24-mo PFS: 59.8%	↑ vs later lines
Tec-Dara-Pom ≥3L subgroup	—	—	—	—	24-mo PFS: 46.7% Median DOR: 25.6 mo	—
CAMMA-1 Cevo-Pom-Dex 70 mg	—	86.2%	72%	—	—	FcRH5 target
CAMMA-1 Cevo-Pom-Dex 105 mg	—	88.0%	76%	—	—	FcRH5 target
ISB 2001 trispecific BCMA×CD38×CD3 (≥50 µg/kg)	35	79%	—	30%	—	Prior BCMA-treated: ORR 73% (n=15)

KEY MESSAGE Triple bispecific combos achieve ≥85% ORR across targets — earlier use maximizes depth.

Post-BCMA Sequencing: Switch the Target, Preserve the Interval

Strategy / Agent	Prior Therapy	ORR	mPFS	Key Condition
BCMA BsAb → BCMA BsAb	Teclistamab → another BCMA BsAb (n=8)	12.5%	0.7 mo	⚠ Same target: AVOID
Talquetamab (GPRC5D BsAb)	Prior BCMA CAR-T	72%	13.0 mo	✅ Target switch: preferred
Arlo-cel (GPRC5D CAR-T)	Prior BCMA-targeted therapy	79%	19.0 mo	✅ Target switch: preferred
Cilta-cel (BCMA CAR-T)	Last BCMA-TT < 6 mo	54%	6.2 mo	⚠ Short interval: inferior
Cilta-cel (BCMA CAR-T)	Last BCMA-TT ≥ 6 mo	94%	16.8 mo	✅ Adequate washout: optimal
Teclistamab (real-world, n=509)	Last BCMA-TT > 9 mo	≥VGPR 45%	6.6 mo	✅ Target interval ~6–9 mo
Teclistamab (real-world, n=509)	Last BCMA-TT ≤ 9 mo	≥VGPR 30%	1.8 mo	⚠ Short interval: inferior
Teclistamab (MajesTEC-1 Cohort C)	Prior ADC	55.2%	—	Response maintained post-ADC
Teclistamab (MajesTEC-1 Cohort C)	Prior CAR-T	53.3%	—	Response maintained post-CAR-T

KEY MESSAGE Switch target, respect the gap: BCMA→GPRC5D maximizes response; <6-month washout halves outcomes.

First-in-Human Study of JNJ-79635322 (JNJ-5322), a Novel, Next-Generation Trispecific Antibody, in Patients With Relapsed/Refractory Multiple Myeloma: Initial Phase 1 Results

Niels WCJ van de Donk¹, Gala Vega², Aurore Perrot³, Sébastien Anguille⁴, Albert Oriol⁵, Monique C Minnema⁶, Martin Kaiser⁷, Hans Lee⁸, Alfred L Garfall⁹, Jeffrey V Matous¹⁰, Larysa Sanchez¹¹, Azra Borogovac¹², Lionel Karlin¹³, Saad Z Usmani¹⁴, Joseph Weidman¹⁵, Sangmin Lee¹⁵, María-Victoria Mateos¹⁶, Paula Rodríguez-Otero¹⁷, Cyrille Touzeau¹⁸, Rakesh Popat¹⁹

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Presented by NWCJ van de Donk at the American Society of Clinical Oncology (ASCO) Annual Meeting; May 30–June 3, 2025; Chicago, IL, USA & Virtual

<https://www.congresshub.com/Oncology/AM2025/Trispecific/Donk>

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JNJ-5322 Trispecific: Novel Binding Domains Targeting CD3, BCMA, and GPRC5D

Molecule

Dual-Targeted Molecule to Bind Both BCMA and GPRC5D

Novel CD3, BCMA, and GPRC5D Binding Domains

Implications

- Enhanced myeloma cell targeting due to “**double lock-down**” effect of binding 2 myeloma antigens
- **More comprehensive targeting of myeloma cells**
 - BCMA-/GPRC5D+, BCMA+/GPRC5D-, and dual BCMA+/GPRC5D+
- Prevention of antigen escape
- Potential to improve GPRC5D-related safety profile
- Manageable CRS profile with only 1 step-up dose needed



JNJ-5322 BCMA×GPRC5D×CD3 Trispecific: The Next Generation of Targeted Immunotherapies Reduces Side Effects and Enhances Efficacy

100 mg Q4W SC with 1 step-up dose selected as RP2D

Dose escalation

Dose and schedule
optimization

Step-up dose
optimization

100 mg Q4W SC
(5 mg step-up dose)

Improved or similar GPRC5D TEAEs

Taste



Weight decrease



Skin

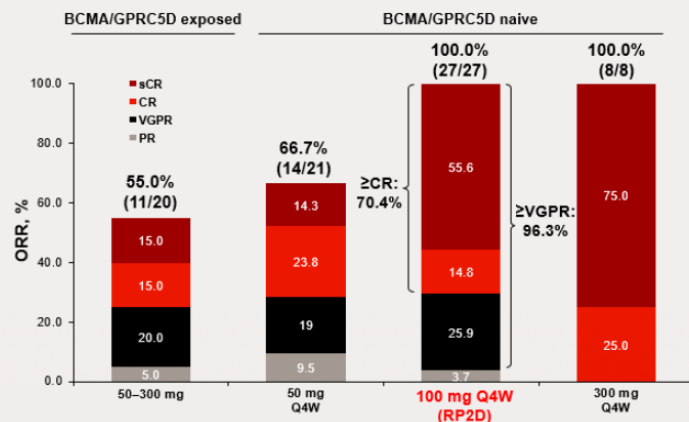


Nail

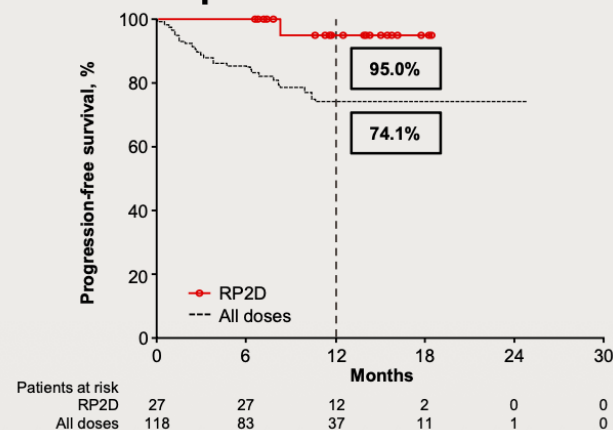


Low-grade GPRC5D TEAE profile

ORR 100% in patients naive to BCMA/GPRC5D at RP2D



12-month PFS rate 95% in patients naive to BCMA/GPRC5D at RP2D



JNJ-5322 Trispecific: Baseline Characteristics

Characteristic	RP2D (n=36)	All doses (N=147)
Median follow-up, months (range)	11.6 (0.4–18.6)	9.3 (0.3–25.8)
Median age, years (range)	67.5 (43–87)	64.0 (39–87)
Male, n (%)	22 (61.1)	87 (59.2)
Race, n (%)		
White	28 (77.8)	110 (74.8)
Black/African American	1 (2.8)	13 (8.8)
Asian	1 (2.8)	7 (4.8)
Multiple	2 (5.6)	2 (1.4)
Unknown/not reported	4 (11.1)	15 (10.2)
Extramedullary plasmacytomas ≥1, ^a n (%)	3 (8.3)	16 (10.9)
High-risk cytogenetics, ^b n (%)	9 (27.3)	39 (31.2)
ISS stage, ^c n (%)		
I	19 (52.8)	77 (53.1)
II	12 (33.3)	50 (34.5)
III	5 (13.9)	18 (12.4)
Years since diagnosis, ^d median (range)	7.0 (0.9–18.7)	6.9 (0.7–31.9)

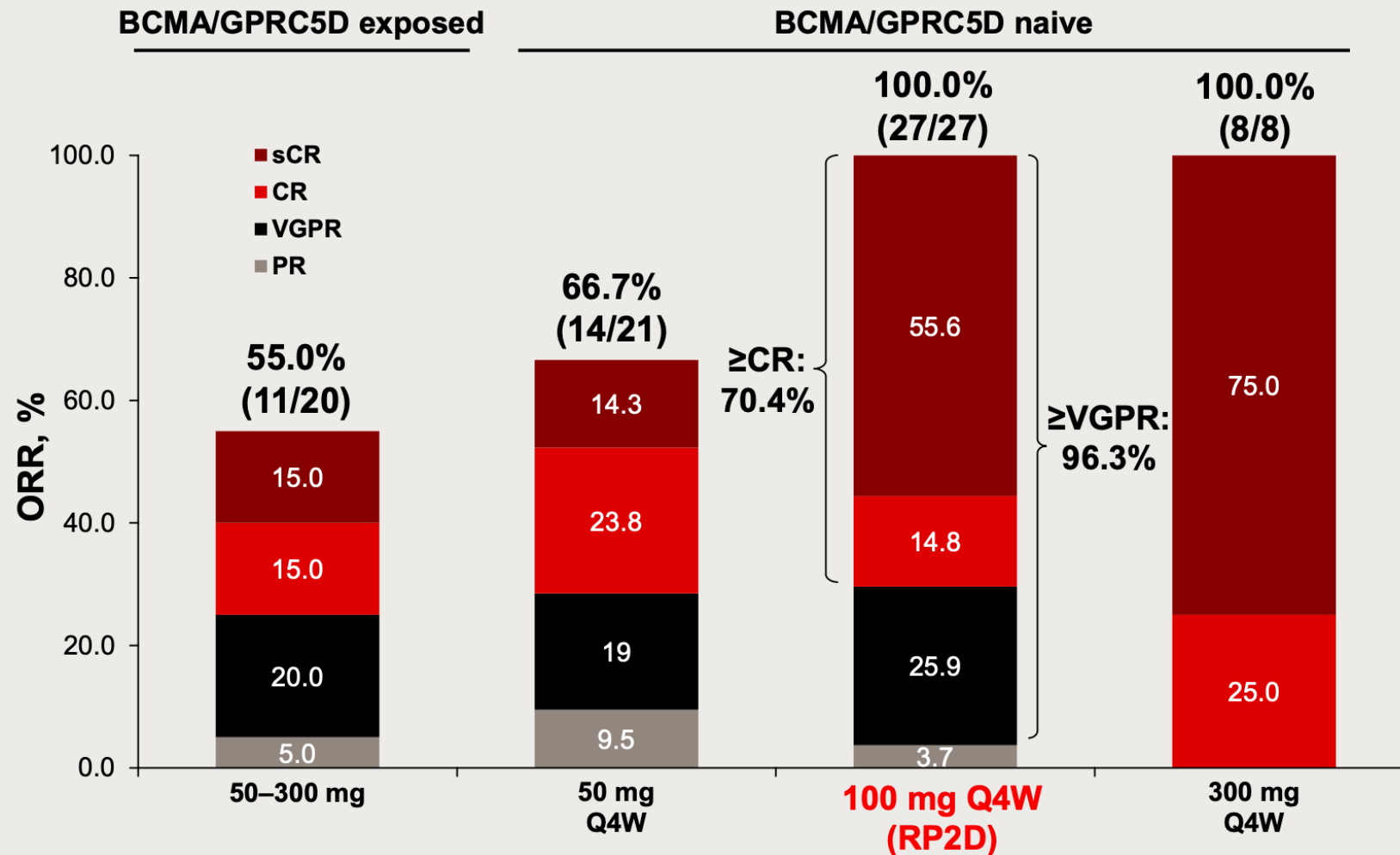
Characteristic	RP2D (n=36)	All doses (N=147)
Median prior LOT, n (range)	4.0 (2–11)	4.0 (1–11)
Exposure status, n (%)		
Triple-class ^e	36 (100.0)	147 (100.0)
Penta-drug ^f	15 (41.7)	72 (49.0)
BCMA/GPRC5D exposed	9 (25.0)	29 (19.7)
Prior BCMA	8 (22.2)	26 (17.7)
Prior GPRC5D	1 (2.8)	5 (3.4)
BCMA/GPRC5D naive	27 (75.0)	118 (80.3)
Antibody-drug conjugate	2 (5.6)	7 (4.8)
CAR-T therapy	4 (11.1)	12 (8.2)
Bispecific antibody	6 (16.7)	16 (10.9)
Refractory status, n (%)		
PI	19 (52.8)	86 (58.5)
IMiD	36 (100.0)	136 (92.5)
Anti-CD38	36 (100.0)	138 (93.9)
Triple-class ^e	19 (52.8)	79 (53.7)
Penta-drug ^f	2 (5.6)	10 (6.8)
To last LOT	34 (94.4)	132 (89.8)

Data cut-off date: April 15, 2025. RP2D selected as 100 mg Q4W with one 5 mg SUD.

^a≥1 nonradiated, bone-independent lesion ≥2 cm. Patients with paraspinal plasmacytomas were permitted but not counted as EMD. ^bFISH or karyotype testing in n=33 (RP2D) and n=125 (total). Defined as del(17p), t(4;14), or t(14;16). ^cIn n=145 (total). ^dIn n=35 (RP2D) and n=144 (total). ^e≥1 PI, ≥1 IMiD, and ≥1 anti-CD38 mAb. ^f≥2 PIs, ≥2 IMiDs, and ≥1 anti-CD38 mAb. BCMA, B-cell maturation antigen; CAR, chimeric antigen receptor; EMD, extramedullary disease; FISH, fluorescence in situ hybridization; GPRC5D, G protein-coupled receptor family C group 5 member D; IMiD, immunomodulatory drug; ISS, International Staging System; LOT, line of therapy; mAb, monoclonal antibody; PI, proteasome inhibitor; Q4W, every 4 weeks; RP2D, recommended phase 2 dose; SUD, step-up dose.



JNJ-5322 Trispecific: ORR in Patients Naive or Exposed to BCMA/GPRC5D Therapies



At the RP2D in patients naive to BCMA/GPRC5D (n=27)

Median follow-up, months (range)	12.2 (7.4–18.6)
Median time to first response, months (range)	1.2 (0.3–5.2)
Median time to best response, months (range)	5.9 (0.3–11.1)

Data cut-off date: April 15, 2025. Median follow-up 16.4 months in the 300 mg Q4W cohort. RP2D selected as 100 mg Q4W with one 5 mg SUD. BCMA, B-cell maturation antigen; CR, complete response; GPRC5D, G protein-coupled receptor family C group 5 member D; ORR, overall response rate; PR, partial response; Q4W, every 4 weeks; RP2D, recommended phase 2 dose; sCR, stringent complete response; SUD, step-up dose; VGPR, very good partial response.



Multiple Myeloma — Treatment Algorithm 2026

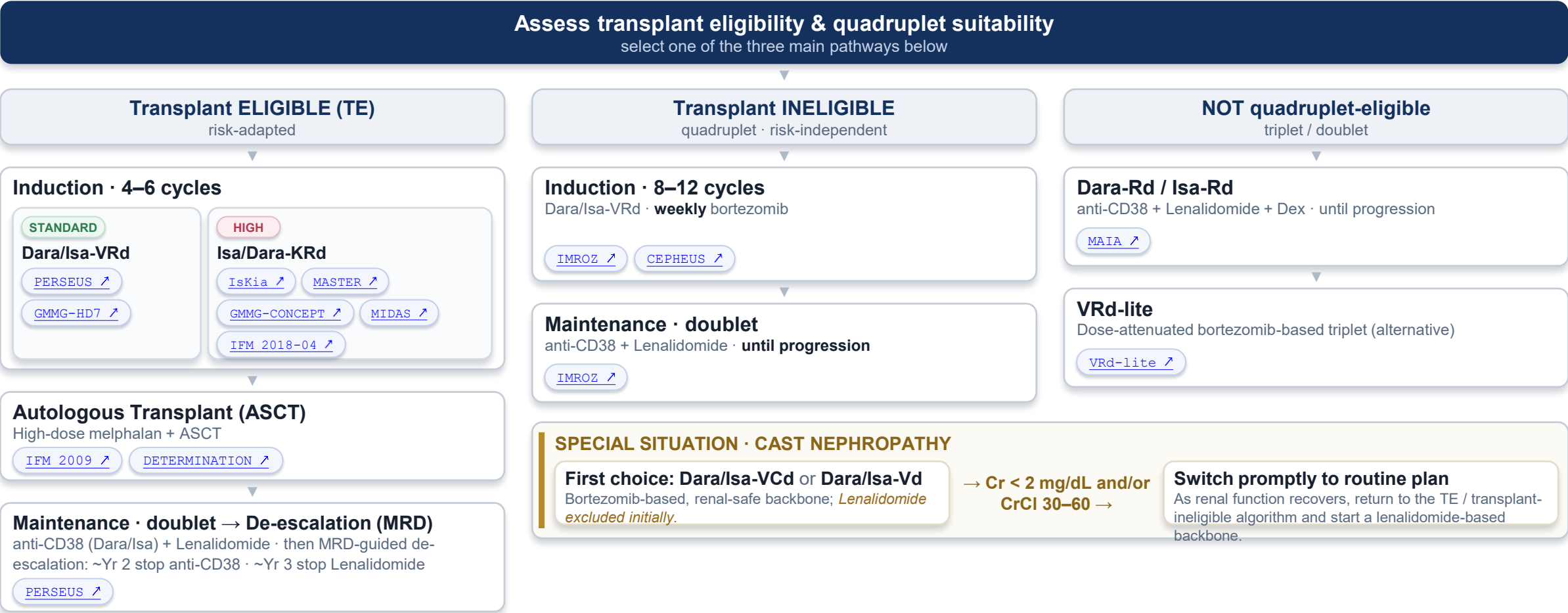
Integrated algorithm for newly diagnosed (transplant-eligible · -ineligible · cast nephropathy) and relapsed (first · advanced · extramedullary) settings.

Trial labels link to the primary publication and are clickable:

[PERSEUS](#)

STEP 1

Newly Diagnosed (NDMM)



STEP 2

Relapse (RRMM)

First relapse — Is bispecific / CAR-T access available?
pathway diverges by access and refractoriness

Access AVAILABLE
BCMA-directed · by refractoriness

DARA + LEN REFRACTORY
Teclistamab (mono) or Cilta-cel
BCMA×CD3 bispecific monotherapy · or BCMA CAR-T
[MajesTEC-9](#) [CARTITUDE-4](#)

NOT DARA-REFRACTORY
Teclistamab + Daratumumab or Cilta-cel
Bispecific + anti-CD38 · or BCMA CAR-T
[MajesTEC-3](#) [CARTITUDE-4](#)

Access UNAVAILABLE
by lenalidomide status

LENALIDOMIDE REFRACTORY

Dara-Kd / Isa-Kd	anti-CD38 · Carfilzomib · Dex	CANDOR	IKEMA
Dara-Pd / Isa-Pd	anti-CD38 · Pomalidomide · Dex	APOLLO	ICARIA
Sel-Vel-Dex	Selinexor · Bortezomib · Dex — <i>if not bortezomib-refractory</i>	BOSTON	
Belantamab-Vel-Dex	Belantamab mafodotin · Bortezomib · Dex — <i>if not bortezomib-refractory</i>	DREAMM-7	
Belantamab-Pom-Dex	Belantamab mafodotin · Pomalidomide · Dex	DREAMM-8	
KPd	Carfilzomib · Pomalidomide · Dex	Blood Adv	
If NOT lenalidomide-refractory: additionally DRd and KRd are also appropriate.			
		POLLUX	ASPIRE

Beyond first relapse · switch to a potent agent not previously used (if accessible)

Cilta-cel	BCMA CAR-T	CARTITUDE-1 ↗	CARTITUDE-4 ↗		
Teclistamab	BCMA×CD3 · monotherapy or ± daratumumab	MajesTEC-1 ↗	MajesTEC-3 ↗		
Talquetamab	GPRC5D×CD3 · monotherapy or ± daratumumab ± pomalidomide	MonumentAL-1 ↗	MonumentAL-3 ↗		
Anti-CD38 combinations	DKd / Isa-Kd · DPd / Isa-Pd — with a non-refractory backbone	CANDOR ↗	IKEMA ↗	APOLLO ↗	ICARIA ↗
Novel mAb / Belantamab	Belantamab-Vd / Belantamab-Pd; ± a non-refractory targeted agent	DREAMM-7 ↗	DREAMM-8 ↗		
Selinexor-based	Sel-Vel-Dex (XPO1 + bortezomib) — <i>if not used at first relapse</i> ; also Sel-Dex	BOSTON ↗	STORM ↗		
Chemotherapy-based	For high tumor burden: DCEP, (VTD-)PACE ± mAb ± a targeted agent	VDT-PACE ↗			

Relapse with extramedullary disease (EMD) · dual-target bispecific combination

★ IDEAL	Teclistamab + Talquetamab	BCMA×CD3 + GPRC5D×CD3 — dual bispecific; active in EMD	RedirecTT-1 ↗
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Relapse with t(11;14) · BCL-2–dependent disease

Venetoclax + Dex	BCL-2 inhibition — high response in t(11;14); backbone may add ± <i>daratumumab (VenDd)</i> or ± <i>carfilzomib (VenKd)</i>	CANOVA ↗	VenDd ↗	VenKd ↗
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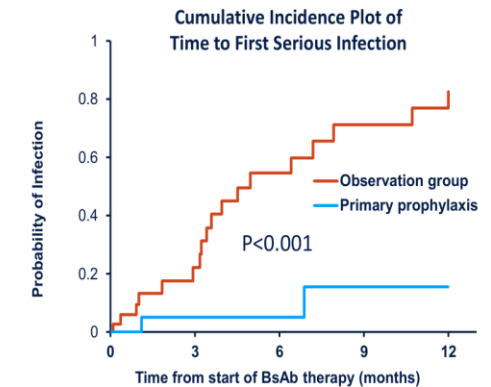
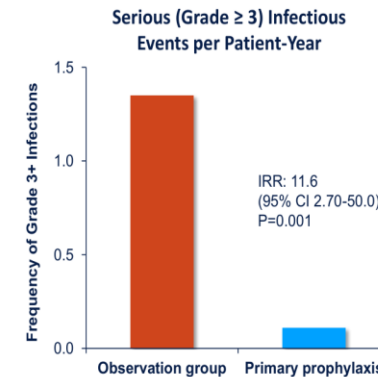
Manage Toxicity, Mobilize Treatment: Infections and Step-Up

- ◆ IVIG prophylaxis cuts serious infection risk by 67–90% (HR 0.33; $p=0.001$)
- ◆ Extending dosing interval drops serious infection rate: weekly 0.81 → monthly 0.29/patient-year; switch to Q2W/Q4W on response
- ◆ Outpatient step-up now 53% of cases (2026); zero grade ≥ 3 CRS observed

Prophylactic IVIG Supplementation Reduced the Frequency of Serious Infections in MM Patients Treated with Teclistamab



Tec Without (n=32) vs. With (n=20)
Prophylactic IVIG Use*



*MajestEC-1 patients received IVIG supplementation to prevent development of serious infections (4 patients were already receiving IVIG before Tec treatment because of history of serious infections, and 16 started IVIG supplementation early after initiating Tec therapy if polyclonal IgG level was < 4 g/L [within 1-2 months; primary prophylaxis]). None of these 20 patients discontinued IVIG supplementation during Tec treatment. The remaining 32 patients in the observation group only received IVIG supplementation when they experienced a severe infection and had polyclonal IgG of < 4 g/L to prevent new episodes of severe infections (secondary prophylaxis). Patient characteristics and disease-related factors were comparable between both groups. AE=Adverse Event, BsAb=Bispecific Antibody, HGG=Hypogammaglobulinemia, IgG=Immunoglobulin G, IRR=Incidence Rate Ratio, IVIG=Intravenous Immunoglobulin, MM=Multiple Myeloma, Tec=Teclistamab. 1. Frensch KA, et al. Blood Adv. 2024;8(1):194-206.

KEY MESSAGE Early IVIG saves lives; extended dosing and outpatient step-up make teclistamab safer and more accessible.

Bringing It Together: Prophylaxis & Sequencing

01 SAFETY

Bispecifics = prophylactic Toci + prophylactic IVIG

Prophylactic tocilizumab sharply lowers CRS; prophylactic IVIG (IgRT) protects against serious infection. Build both into every bispecific protocol.

CRS 69.2% → 7.5% with prophylactic tocilizumab

02 SEQUENCING

Switch the target whenever you can

Sequencing means moving to a not-previously-used target. Where it is accessible, use CAR T-cell therapy before bispecifics.

Preserve options · CAR-T → bispecific · BCMA → GPRC5D

THE EVIDENCE

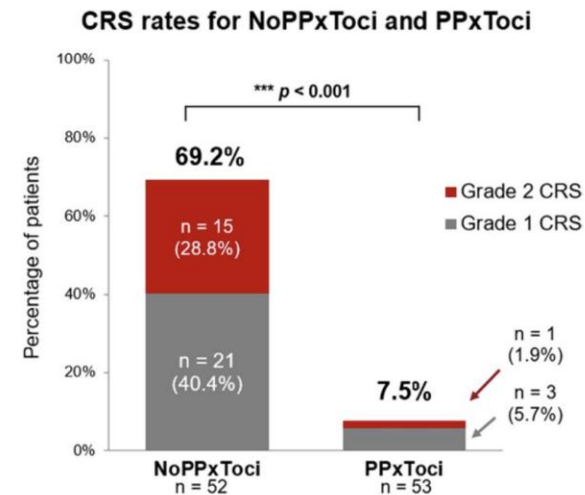


FIGURE 1 | CRS in patients treated with teclistamab by use of prophylactic tocilizumab. CRS: cytokine release syndrome. N: number. PPxToci: The group of patients who had received 1 dose of 8 mg/kg tocilizumab prior to the first teclistamab step-up dose. NoPPxToci: The group of patients not receiving 1 dose of 8 mg/kg tocilizumab prior to the first teclistamab step-up dose. *** indicates a highly statistically significant result.

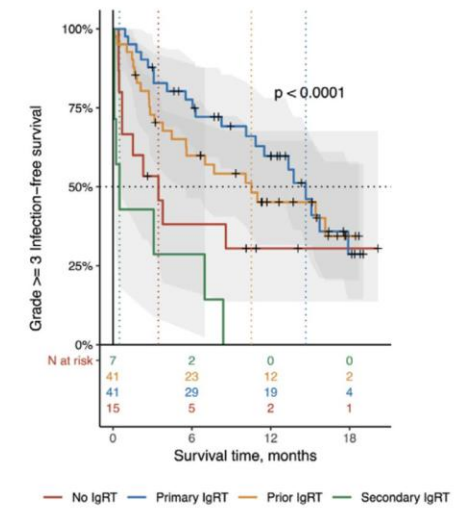


FIGURE 2 | Grade ≥ 3 infection-free survival of patients treated with teclistamab by use of IgRT. IgRT: immunoglobulin replacement therapy. No IgRT: no treatment with IgRT. Primary IgRT: IgRT started after teclistamab initiation but before any documented \geq Grade 3 infection. Prior IgRT: IgRT initiated before teclistamab. Secondary IgRT: IgRT started after Tec initiation and after a documented \geq Grade 3 infection. For each group respectively, the median infection-free survival to Grade ≥ 3 was: No IgRT: 3.4 months (IQR 3.5-NA); Primary IgRT: 14.7 months (IQR 10.8-NA); Prior IgRT: 10.5 months (IQR 5.6-NA); secondary IgRT: 0.5 months (IQR 0.1-NA).

FIGURE — Prophylactic tocilizumab collapses CRS rates (left); immunoglobulin replacement (IgRT) prolongs Grade ≥ 3 infection-free survival (right).