BCMA-Directed Therapy in Multiple Myeloma — Expert Opinions and Patient Perspectives

Part 2 of a 2-Part CME/MOC-Accredited Virtual Series

Wednesday, November 30, 2022
5:00 PM – 6:00 PM ET

Faculty

S Vincent Rajkumar, MD

Moderator

Neil Love, MD

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Faculty

S Vincent Rajkumar, MD
Edward W and Betty Knight Scripps
Professor of Medicine
Mayo Clinic
Rochester, Minnesota

Jesús G Berdeja, MD
Director of Multiple Myeloma Research
Tennessee Oncology
Nashville, Tennessee

MODERATOR
Neil Love, MD
Research To Practice

Natalie S Callander, MD
Director, Myeloma Clinical Program
Interim Director, Bone Marrow
Transplant Program
University of Wisconsin Carbone
Cancer Center
Madison, Wisconsin

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Commercial Support

This activity is supported by educational grants from Bristol-Myers Squibb Company, GlaxoSmithKline, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, and Regeneron Pharmaceuticals Inc.

Dr Love — Disclosures

Dr Love is president and CEO of Research To Practice. Research To Practice receives funds in the form of educational grants to develop CME activities from the following companies: AbbVie Inc, Adaptive Biotechnologies Corporation, ADC Therapeutics, Agios Pharmaceuticals Inc, Alexion Pharmaceuticals, Amgen Inc, Array BioPharma Inc, a subsidiary of Pfizer Inc, Astellas, AstraZeneca Pharmaceuticals LP, Aveo Pharmaceuticals, Bayer HealthCare Pharmaceuticals, BeiGene Ltd, BeyondSpring Pharmaceuticals Inc, Blueprint Medicines, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Coherus BioSciences, CTI BioPharma Corp, Daiichi Sankyo Inc, Eisai Inc, Elevation Oncology Inc, EMD Serono Inc, Epizyme Inc, Exact Sciences Corporation, Exelixis Inc, Five Prime Therapeutics Inc, Foundation Medicine, G1 Therapeutics Inc, Genentech, a member of the Roche Group, Genmab, Gilead Sciences Inc, GlaxoSmithKline, Grail Inc, Halozyme Inc, Helsinn Healthcare SA, ImmunoGen Inc, Incyte Corporation, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Karyopharm Therapeutics, Kite, A Gilead Company, Kronos Bio Inc, Lilly, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, MEI Pharma Inc, Merck, Mersana Therapeutics Inc, Mirati Therapeutics Inc, Natera Inc, Novartis, Novartis Pharmaceuticals Corporation on behalf of Advanced Accelerator Applications, Novocure Inc, Oncopeptides, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sanofi, Seagen Inc, Servier Pharmaceuticals LLC, SpringWorks Therapeutics Inc, Sumitomo Dainippon Pharma Oncology Inc, Taiho Oncology Inc, Takeda Pharmaceuticals USA Inc, TerSera Therapeutics LLC, Tesaro, A GSK Company, TG Therapeutics Inc, Turning Point Therapeutics Inc, Verastem Inc and Zymeworks Inc.

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Research To Practice CME Planning Committee Members, Staff and Reviewers

Planners, scientific staff and independent reviewers for Research To Practice have no relevant conflicts of interest to disclose.

Dr Berdeja — Disclosures

Consulting Agreements	bluebird bio, Bristol-Myers Squibb Company, Celgene Corporation, CRISPR Therapeutics, Janssen Biotech Inc, Kite, A Gilead Company, Legend Biotech, Secura Bio, Takeda Pharmaceuticals USA Inc
Contracted Research	2seventy bio, AbbVie Inc, Acetylon Pharmaceuticals, Amgen Inc, bluebird bio, Bristol-Myers Squibb Company, C4 Therapeutics, CARsgen Therapeutics, Cartesian Therapeutics, Celgene Corporation, Celularity, CRISPR Therapeutics, EMD Serono Inc, Fate Therapeutics, Genentech, a member of the Roche Group, GlaxoSmithKline, Ichnos Sciences, Incyte Corporation, Janssen Biotech Inc, Karyopharm Therapeutics, Lilly, Novartis, Poseida Therapeutics, Sanofi, Takeda Pharmaceuticals USA Inc, Teva Oncology, Zentalis Pharmaceuticals

Dr Callander — Disclosures

No relevant conflicts of interest to disclose.

Dr Rajkumar — Disclosures

No relevant conflicts of interest to disclose.

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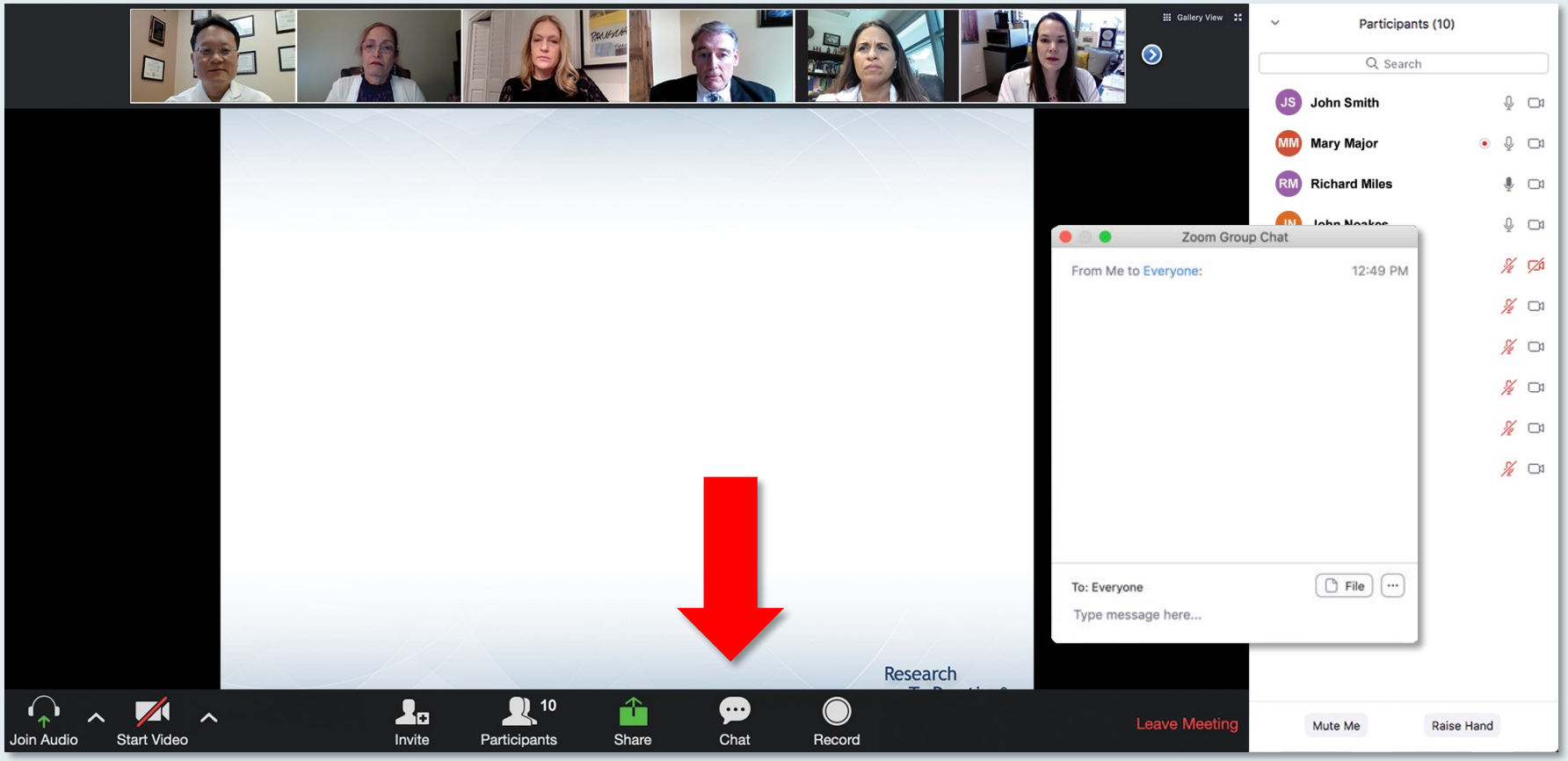
We Encourage Clinicians in Practice to Submit Questions



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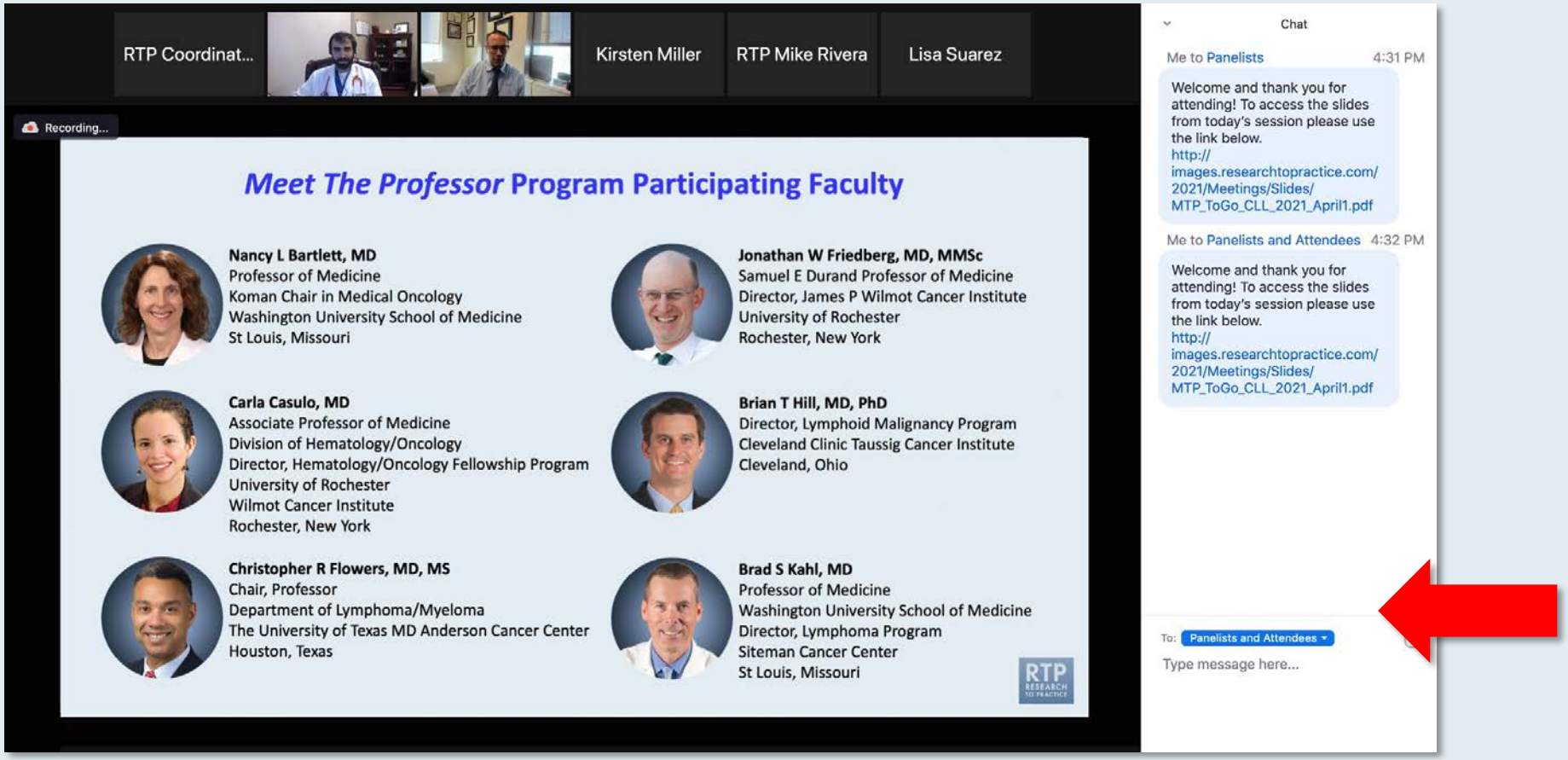
Familiarizing Yourself with the Zoom Interface

Expand chat submission box



Drag the white line above the submission box up to create more space for your message.

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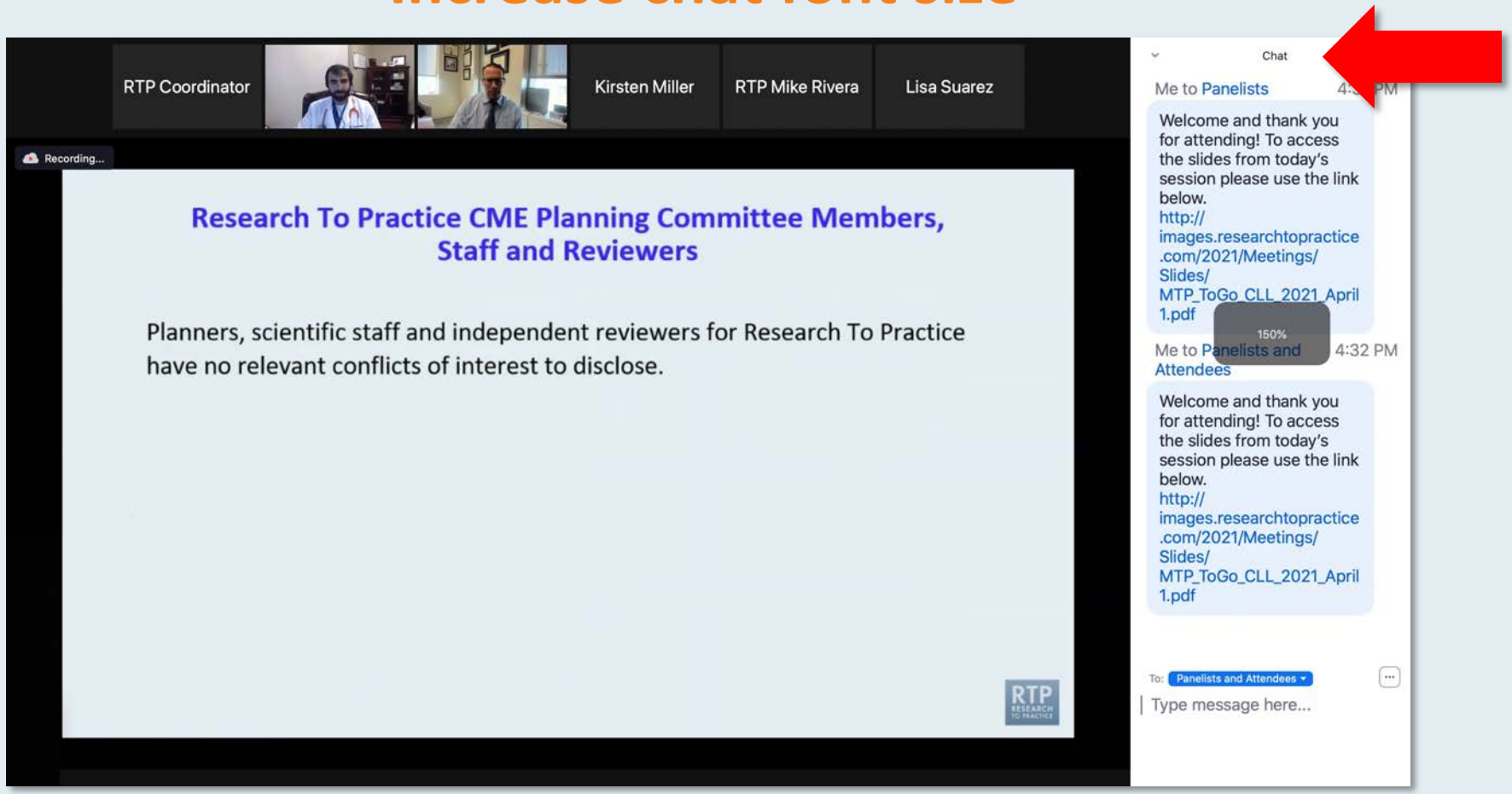
Familiarizing Yourself with the Zoom Interface

Increase chat font size



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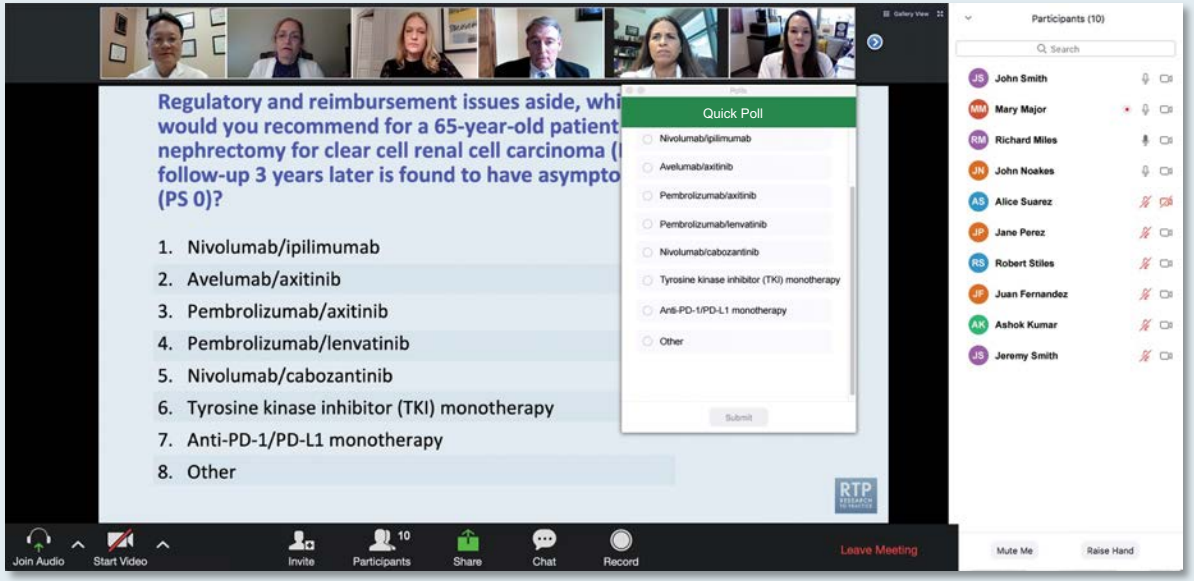
You may do this as many times as you need for readability.

Clinicians in the Audience, Please Complete the Pre- and Postmeeting Surveys



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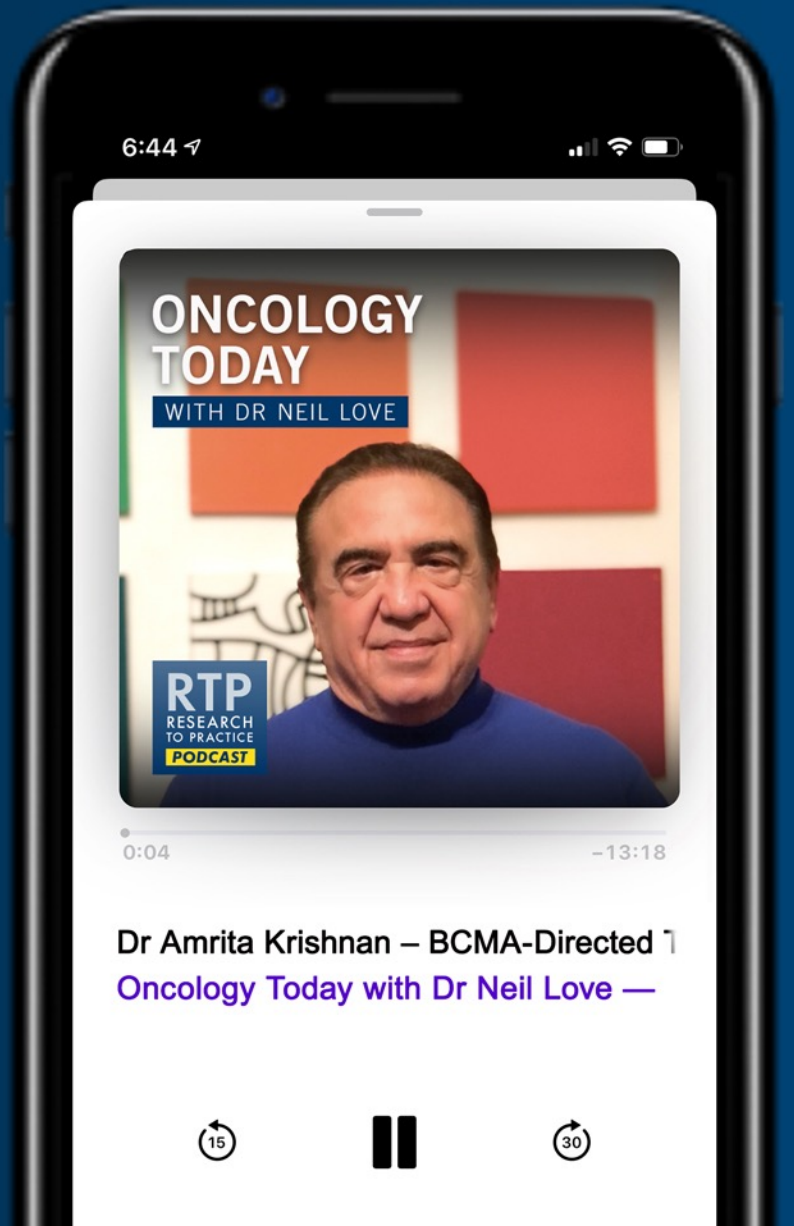

Emerging Role of Antibody-Drug Conjugates in the Management of Non-Small Cell Lung Cancer

A CME/MOC-Accredited Virtual Event

Thursday, December 1, 2022
5:00 PM – 6:00 PM ET

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Alexander I Spira, MD, PhD
Helena Yu, MD

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

What Clinicians Want to Know: Addressing Current Questions and Controversies in the Management of HER2-Positive Breast Cancer

Part 1 of a 2-Part CME Satellite Symposium Series Held in Conjunction with the 2022 San Antonio Breast Cancer Symposium®

Wednesday, December 7, 2022

7:15 PM – 9:15 PM CT (8:15 PM – 10:15 PM ET)

Faculty

Erika Hamilton, MD

Sara A Hurvitz, MD

Ian E Krop, MD, PhD

Shanu Modi, MD

Sara M Tolaney, MD, MPH

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

What Clinicians Want to Know: Addressing Current Questions and Controversies in the Management of ER-Positive Breast Cancer

Part 2 of a 2-Part CME Satellite Symposium Series Held in Conjunction with the 2022 San Antonio Breast Cancer Symposium®

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Matthew P Goetz, MD

Virginia Kaklamani, MD, DSc

Kevin Kalinsky, MD, MS

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Moderator

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RTP RESEARCH TO PRACTICE

Addressing Current Questions and Controversies in the Management of Chronic Lymphocytic Leukemia — What Clinicians Want to Know

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Lindsey Roeker, MD
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Sonali M Smith, MD

Moderator

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Moderator

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Thank you for joining us!

CME and MOC credit information will be emailed to each participant within 5 business days.

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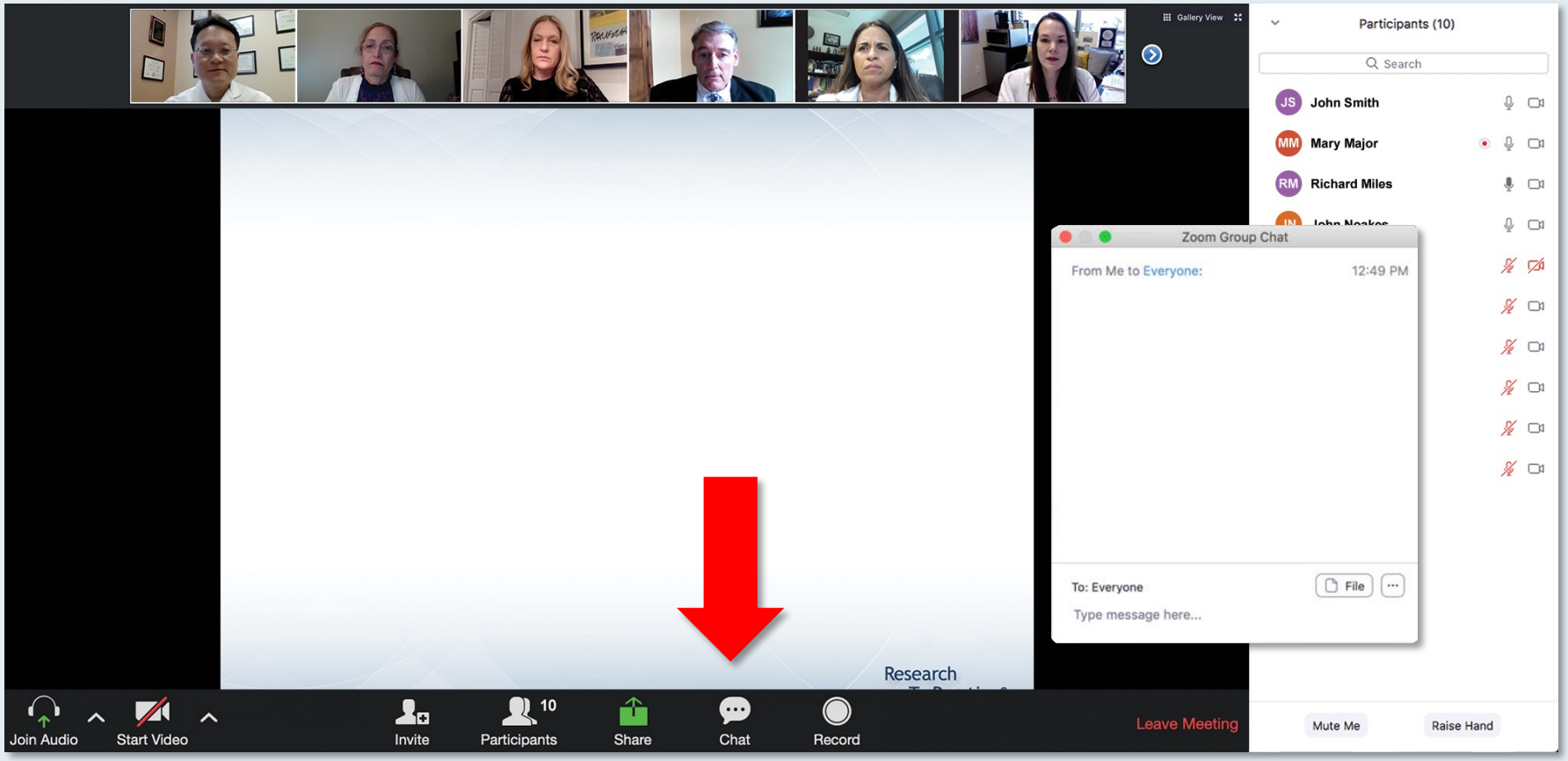

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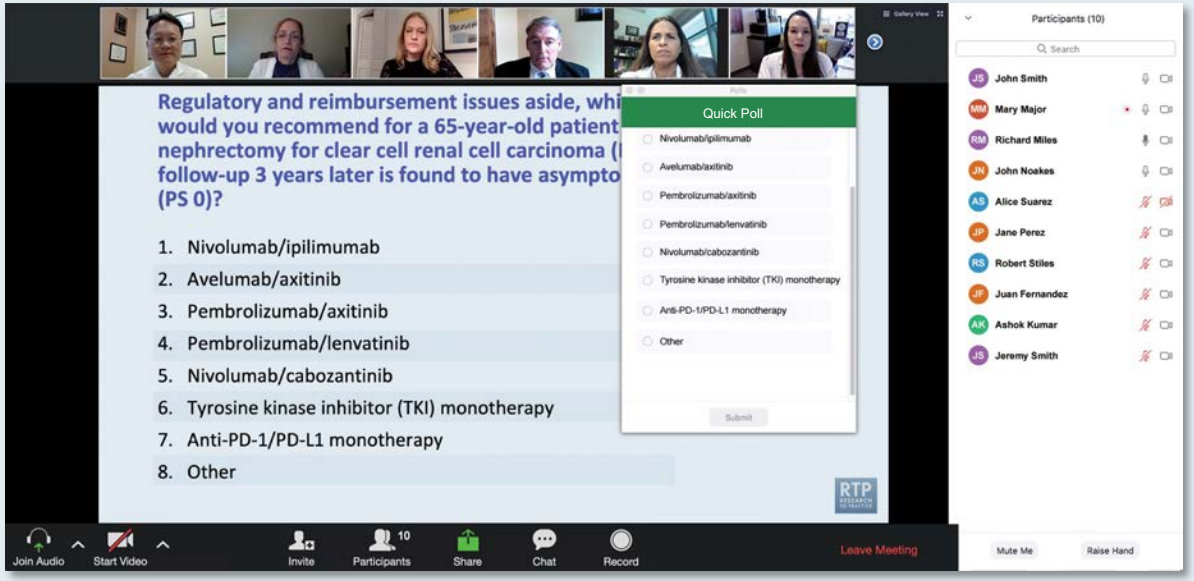

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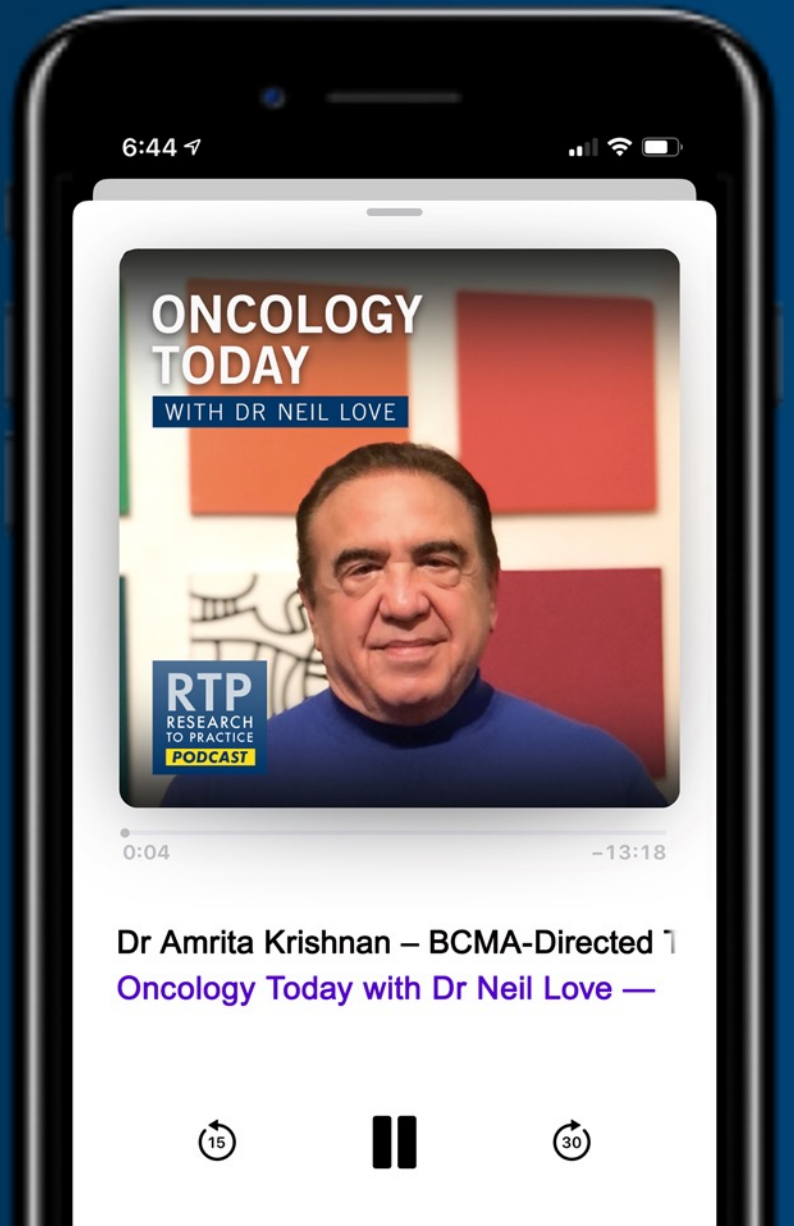

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Dr Berdeja — Disclosures

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Dr Callander — Disclosures

No relevant conflicts of interest to disclose.

Dr Rajkumar — Disclosures

No relevant conflicts of interest to disclose.

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Agenda

INTRODUCTION: Requiem for Belantamab Mafodotin? Dawn of a New Era

MODULE 1: CAR T-Cell Therapy

- Dr Berdeja: 72-year-old man with multiregimen-refractory MM receives idecabtagene vicleucel with Grade 1 CRS and persistent cytopenias
- Dr Berdeja: 65-year-old man with multiregimen-refractory MM receives idecabtagene vicleucel with a 20-month response
- Dr Callander: 57-year-old man with multiregimen-refractory MM received idecabtagene vicleucel in 2020 and is currently in CR

MODULE 2: Bispecific Antibodies

- Dr Callander: 63-year-old man with multiregimen-refractory MM receives the novel bispecific antibody WVT078 on a clinical trial
- Dr Berdeja: 74-year-old man with multiregimen-refractory MM receives teclistamab on a clinical trial

MODULE 3: ASH 2022 – Snapshot of the Future

MODULE 4: Ongoing Trials; Reported Data; Review Articles

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FDA Grants Accelerated Approval to Belantamab Mafodotin-blmf for Relapsed/Refractory Multiple Myeloma

Press Release: August 5, 2020

"The Food and Drug Administration granted accelerated approval to belantamab mafodotin-blmf for adult patients with relapsed or refractory multiple myeloma who have received at least 4 prior therapies, including an anti-CD38 monoclonal antibody, a proteasome inhibitor, and an immunomodulatory agent.

Belantamab mafodotin-blmf was evaluated in DREAMM-2 (NCT 03525678), an open-label, multicenter trial. Patients received either belantamab mafodotin-blmf, 2.5 mg/kg or 3.4 mg/kg intravenously, once every 3 weeks until disease progression or unacceptable toxicity.

Efficacy was based on overall response rate (ORR) and response duration, as evaluated by an independent review committee using the International Myeloma Working Group uniform response criteria. The ORR was 31% (97.5% CI: 21%, 43%). Seventy-three percent of responders had response durations ≥6 months. These results were observed in patients receiving the recommended dose of 2.5 mg/kg.

The prescribing information includes a Boxed Warning stating belantamab mafodotin-blmf causes changes in the corneal epithelium resulting in alterations in vision, including severe vision loss and corneal ulcer, and symptoms, such as blurred vision and dry eyes. Ophthalmic exams at baseline, prior to each dose, and promptly for worsening symptoms should be conducted."

https://www.fda.gov/drugs/resources-information-approved-drugs/fda-granted-accelerated-approval-belantamab-mafodotin-blmf-multiple-myeloma

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Phase III DREAMM-3 Trial of Belantamab Mafodotin Monotherapy versus Pomalidomide in Combination with Low-Dose Dexamethasone Does Not Meet Its Primary Endpoint

Press Release: November 7, 2022

The DREAMM-3 Phase III open-label, randomized, head-to-head superiority trial of belantamab mafodotin monotherapy versus pomalidomide in combination with low dose dexamethasone (PomDex) for patients with relapsed or refractory multiple myeloma did not meet its primary endpoint of progression-free survival (PFS).

“In the DREAMM-3 trial, the primary endpoint of PFS demonstrated a hazard ratio of 1.03 (95% CI: 0.72, 1.47). The observed median progression-free survival was longer for belantamab mafodotin vs PomDex (11.2 months vs 7 months).”

“Data from DREAMM-3 is in the process of being shared with health authorities. Discussions with health authorities are currently ongoing. Additional trials within the DREAMM (DRiving Excellence in Approaches to Multiple Myeloma) clinical trial programme will continue.”

“Data from the DREAMM-7 and DREAMM-8 phase III trials are anticipated in the first half of 2023.”

https://www.gsk.com/en-gb/media/press-releases/gsk-provides-update-on-dreamm-3-phase-iii-trial-for-blenrep/

Withdrawal of US Marketing Authorization for Belantamab Mafodotin-blmf for Relapsed/Refractory Multiple Myeloma

Press Release: November 22, 2022

"Today [the manufacturer] has initiated the process for withdrawal of the US marketing authorisation for belantamab mafodotin-blmf following the request of the US Food and Drug Administration (FDA). This request was based on the previously announced outcome of the DREAMM-3 Phase III confirmatory trial, which did not meet the requirements of the FDA Accelerated Approval regulations. Belantamab mafodotin is a monotherapy treatment for adult patients with relapsed or refractory multiple myeloma (RRMM) who have received at least four prior therapies including an anti-CD38 monoclonal antibody, a proteasome inhibitor, and an immunomodulatory agent.

As part of the company's efforts to ensure physicians and patients are supported during this important time, patients already enrolled in the belantamab mafodotin Risk Evaluation and Mitigation Strategy (REMS) programme will have the option to enroll in a compassionate use programme to continue to access treatment.

[The company] continues to believe, based on the totality of data available from the DREAMM (DRiving Excellence in Approaches to Multiple Myeloma) development programme, that the benefit-risk profile of belantamab mafodotin remains favourable in this hard-to-treat RRMM patient population. Patients responding to belantamab mafodotin experienced durable clinical benefit, and safety remains consistent with the known safety profile. Sabine Luik, Chief Medical Officer, said, 'We respect the Agency's approach to the accelerated approval regulations and associated process. Multiple myeloma is a challenging disease, with poor outcomes for patients whose disease has become resistant to standard-of-care treatments. We will continue the DREAMM clinical trial programme and work with the US FDA on a path forward for this important treatment option for patients with multiple myeloma.'"

https://www.gsk.com/en-gb/media/press-releases/gsk-provides-update-on-blenrep-us-marketing-authorisation/

Faculty Patients Who Received Belantamab Mafodotin

- Dr Berdeja: 84-year-old man with multiregimen-refractory MM receives belantamab mafodotin with resolution of visible plasmacytomas
- Dr Berdeja: 63-year-old man with multiregimen-refractory MM receives belantamab mafodotin experiences Grade 3 keratopathy that resolved after treatment held for 3 cycles
- Dr Callander: 62-year-old woman with multiregimen-refractory MM began treatment with belantamab mafodotin on the DREAMM-2 trial in 2018 and remains on therapy
- Dr Callander: 80-year-old man with multiregimen-refractory MM receives belantamab mafodotin with PR and able to travel

Patient with multiregimen-refractory MM who began treatment with belantamab mafodotin on the DREAMM-2 trial in 2018 and remains on therapy

Patient with multiregimen-refractory MM who enrolled on a trial with teclistamab as second-line therapy in 2021

October 25, 2022

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FDA Approves Teclistamab-cqyv for Relapsed or Refractory Multiple Myeloma

Press Release: October 25, 2022

“On October 25, 2022, the Food and Drug Administration granted accelerated approval to teclistamab-cqyv, the first bispecific B-cell maturation antigen (BCMA)-directed CD3 T-cell engager, for adult patients with relapsed or refractory multiple myeloma who have received at least four prior lines of therapy, including a proteasome inhibitor, an immunomodulatory agent, and an anti-CD38 monoclonal antibody.

Teclistamab-cqyv was evaluated in MajesTEC-1 (NCT03145181; NCT04557098), a single-arm, multi-cohort, open-label, multi-center study. The efficacy population consisted of 110 patients who had previously received at least 3 prior therapies, including a proteasome inhibitor, an immunomodulatory agent, and an anti-CD38 monoclonal antibody, and had not received prior BCMA-targeted therapy.

The prescribing information for teclistamab-cqyv has a Boxed Warning for life threatening or fatal cytokine release syndrome (CRS) and neurologic toxicity, including immune effector cell-associated neurotoxicity (ICANS)."

https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-teclistamab-cqyv-relapsed-or-refractory-multiple-myeloma

October 26, 2022

mSMART 3.0: Risk Stratification of Active MM

High-Risk Myeloma

- FISH
  - t(4;14)
  - t(14;16)
  - t(14;20)
  - Del 17p
  - 1q gain

- Double-Hit Myeloma = Any 2 high risk abnormalities
- Triple-Hit Myeloma = 3 or more high risk abnormalities

Standard-Risk Myeloma

All others including:

- Trisomies
- t(11;14)
- t(6;14)

MAYO CLINIC

Active Drugs in Multiple Myeloma

- Alkylators
- Steroids
- Anthracyclines

IMiDs
- Thalidomide
- Lenalidomide
- Pomalidomide

Proteasome Inhibitors
- Bortezomib
- Carfilzomib
- Ixazomib

Anti-SLAMF7 moAb
- Elotuzumab

Anti-CD38 moAbs
- Daratumumab
- Isatuximab
- Felzartamab (MOR202)
- TAK 079
- SAR 442085

Anti-BCMA antibody drug conjugate
- Belantamab

- Panobinostat (histone deacetylase inhibitor)
- Selinexor (XPO1 inhibitor)
- Venetoclax (BCL-2 inhibitor)

CELMoDs
- Iberdomide
- CC-92480

Anti-BCMA CAR-T
- Cilta-cel
- Ide-cel
- JCARH125

Anti-BCMA bispecifics
- Teclistamab
- AMG 701
- CC93269

Novel bispecifics
- Talquetamab (GPRC5D/CD3)
- Cevostamab (FcRH5/CD3)

Content courtesy of S Vincent Rajkumar, MD

moAB: monoclonal antibody

Rajkumar SV. 2022

MAYO CLINIC

BCMA directed Bispecific Antibodies in Relapsed Refractory Myeloma

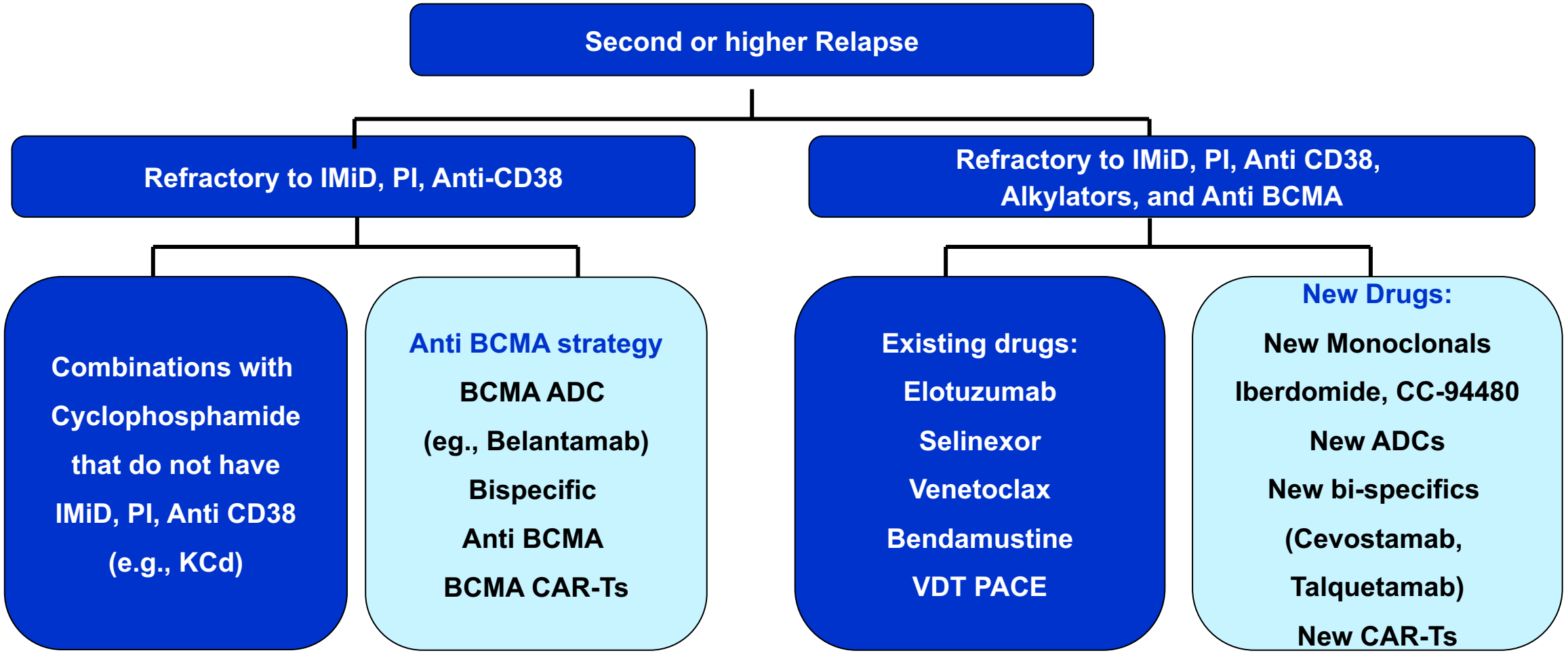
Bispecific Antibody	Target	ORR
Teclistamab[1]	BCMA	65%
REGN-5458[2]	BCMA	63%
Elranatamab[3]	BCMA	70%
TNB 383B[6]	BCMA	60%

1. Usmani. Lancet. 2021;398:665. 2. Madduri. ASH 2020. Abstr 291.
3. Bahlis. ASCO 2021. Abstr 8006. 4. Kumar S, ASH 2021

Content courtesy of S Vincent Rajkumar, MD

MAYO CLINIC

Myeloma: Second or higher relapse



Content courtesy of S Vincent Rajkumar, MD

Agenda

INTRODUCTION: Requiem for Belantamab Mafodotin? Dawn of a New Era

MODULE 1: CAR T-Cell Therapy

- Dr Berdeja: 72-year-old man with multiregimen-refractory MM receives idecabtagene vicleucel with Grade 1 CRS and persistent cytopenias
- Dr Berdeja: 65-year-old man with multiregimen-refractory MM receives idecabtagene vicleucel with a 20-month response
- Dr Callander: 57-year-old man with multiregimen-refractory MM received idecabtagene vicleucel in 2020 and is currently in CR

MODULE 2: Bispecific Antibodies

- Dr Callander: 63-year-old man with multiregimen-refractory MM receives the novel bispecific antibody WVT078 on a clinical trial
- Dr Berdeja: 74-year-old man with multiregimen-refractory MM receives teclistamab on a clinical trial

MODULE 3: ASH 2022 – Snapshot of the Future

MODULE 4: Ongoing Trials; Reported Data; Review Articles

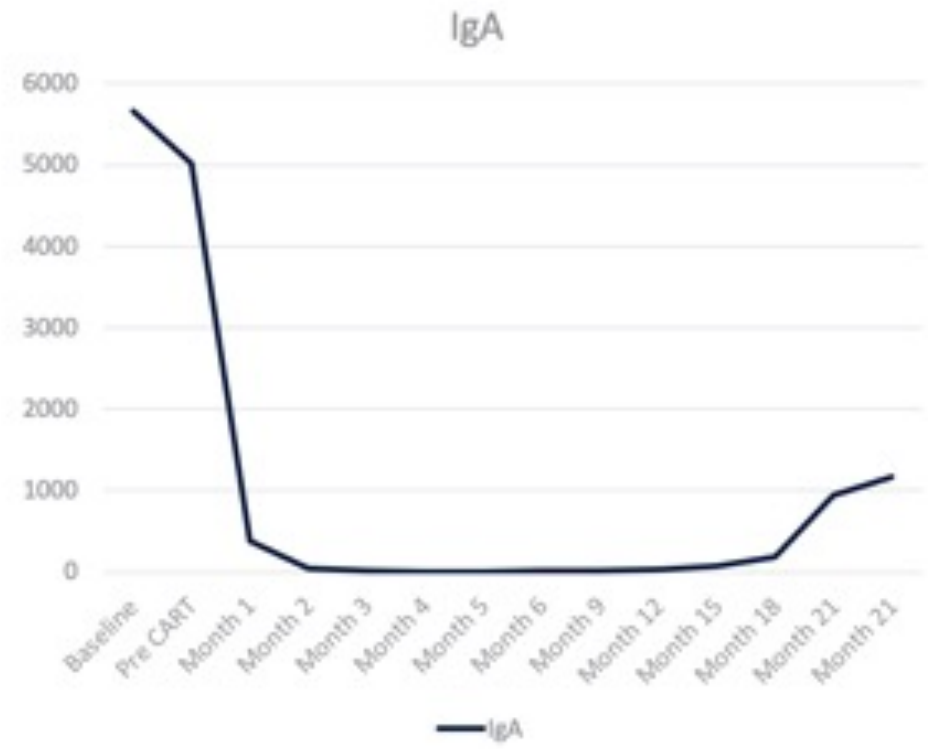
RTP RESEARCH TO PRACTICE

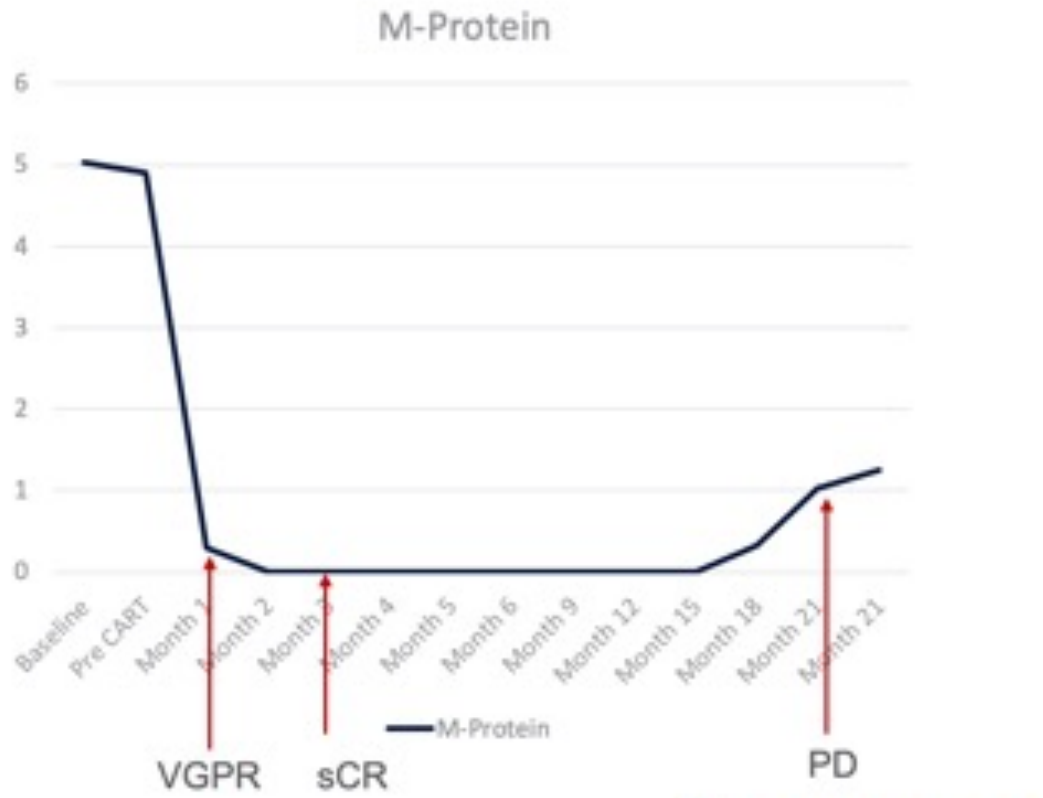
Case Presentation: 72-year-old man with multiregimen-refractory MM receives idecabtagene vicleucel with Grade 1 CRS and persistent cytopenias

Dr Jesús Berdeja (Nashville, Tennessee)

RTP
RESEARCH
TO PRACTICE

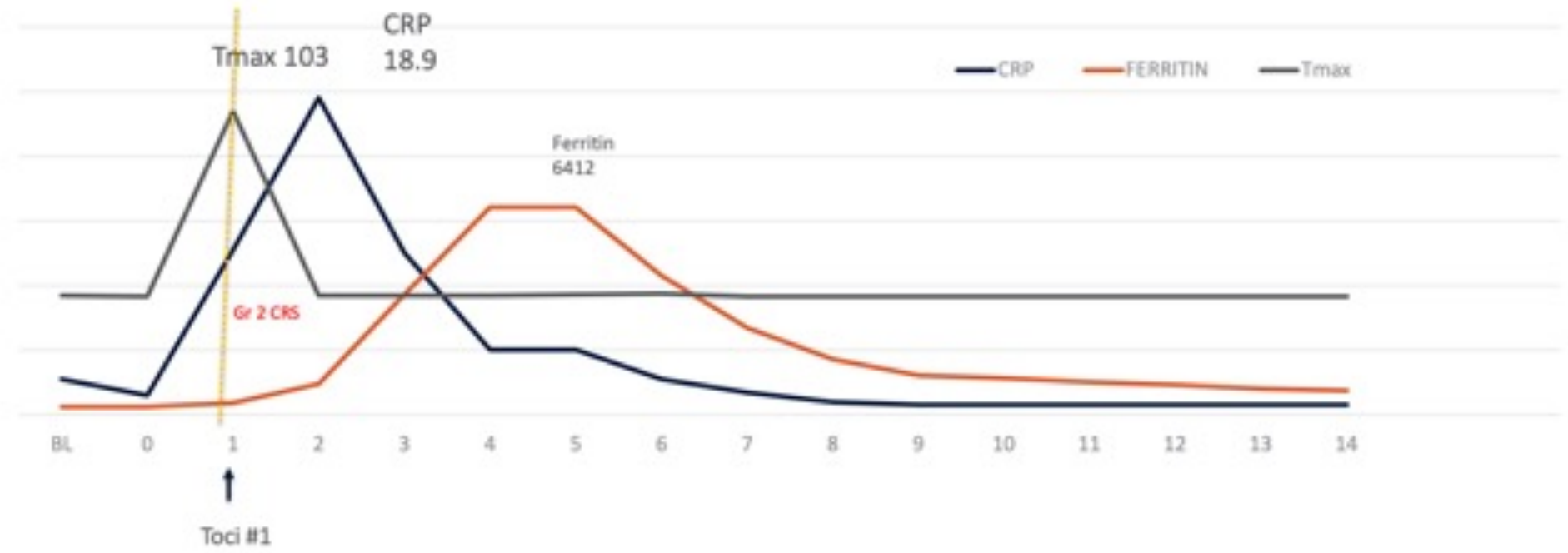
Response Assessment





SARAH CANNON

CRS: Temperature, CRP and ferritin



SARAH CANNON

RTP
RESEARCH
TO PRACTICE

Questions and Comments: Bridging therapy?

Dr Jesús Berdeja (Nashville, Tennessee)

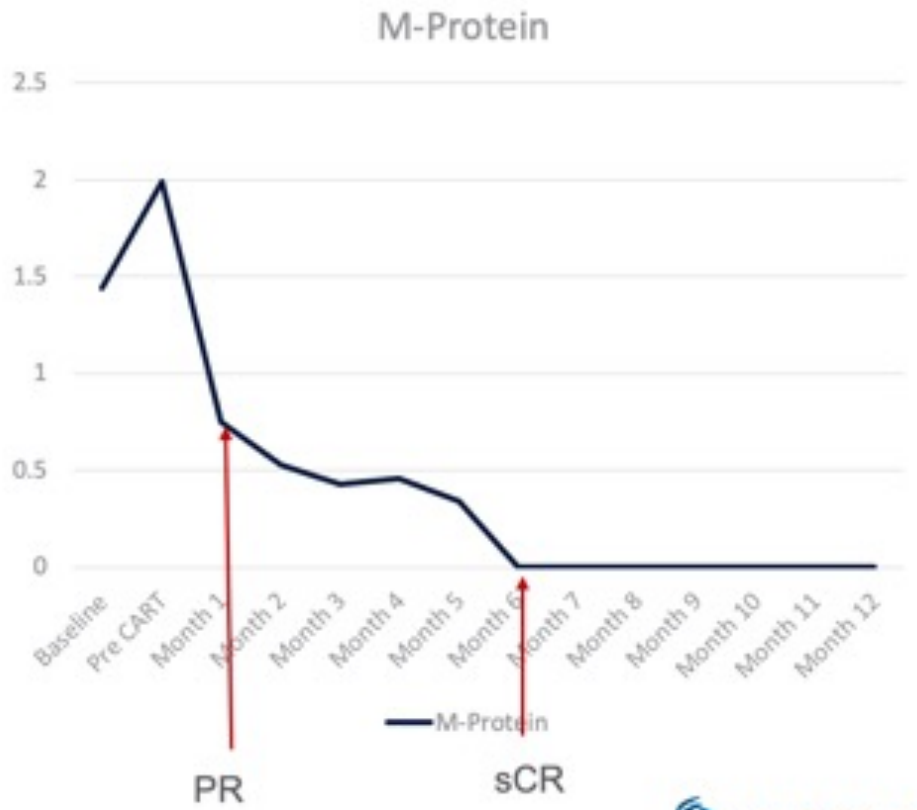
RTP RESEARCH TO PRACTICE

Case Presentation: 65-year-old man with multiregimen-refractory MM receives idecabtagene vicleucel with a 20-month response

Dr Jesús Berdeja (Nashville, Tennessee)

RTP
RESEARCH
TO PRACTICE

Response Assessment



SARAH CANNON

Questions and Comments: Cytopenias and CAR T-cell therapy

Dr Jesús Berdeja (Nashville, Tennessee)

RTP
RESEARCH
TO PRACTICE

Case Presentation: 57-year-old man with multiregimen-refractory MM received idecabtagene vicleucel in 2020 and is currently in CR

Dr Natalie Callander (Madison, Wisconsin)

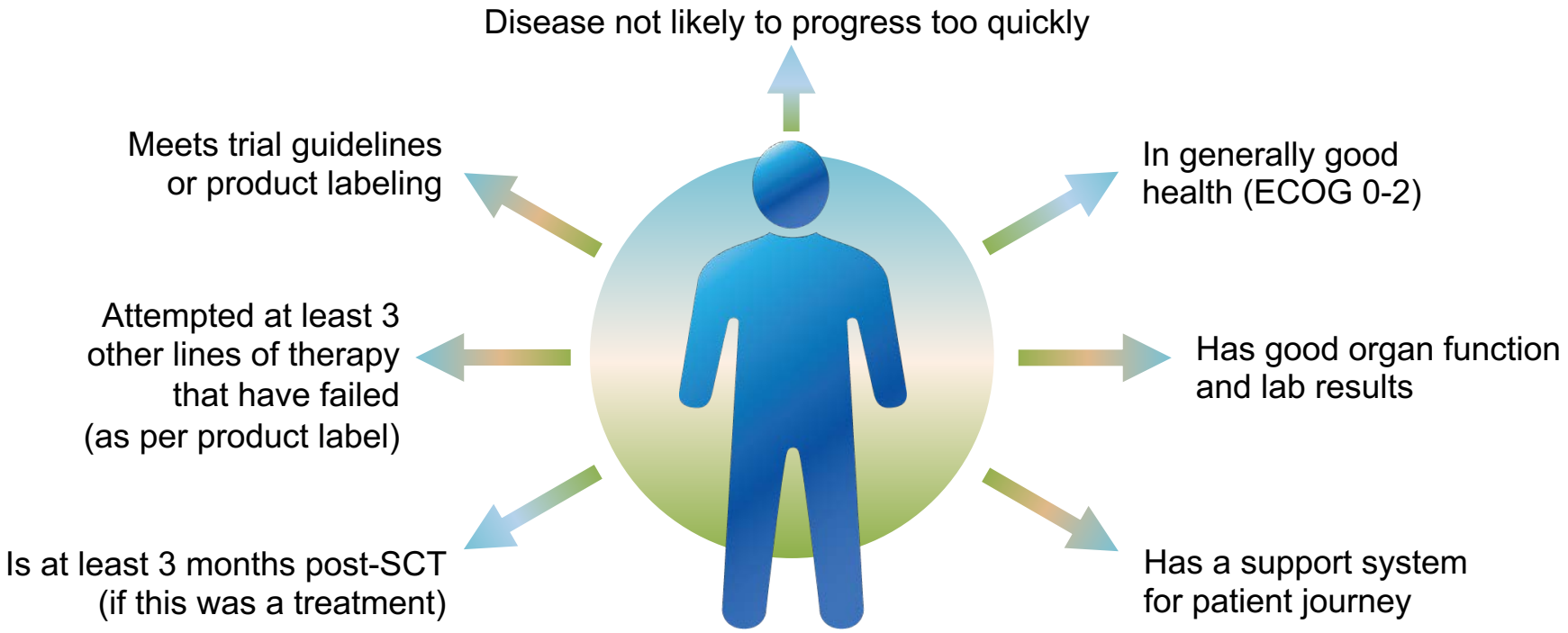
RTP
RESEARCH
TO PRACTICE

Questions and Comments: Timing and sequencing of BCMA-targeted therapies

Dr Natalie Callander (Madison, Wisconsin)

RTP RESEARCH TO PRACTICE

What Type of Patient Is Eligible for CAR T Therapy?



In general, more patients would be eligible for CAR T-cell therapy compared to stem cell transplantation

References: 1. Dave H, et al. *Curr Hematol Malig Rep.* 2019. doi.org/10.1007/s11899-019-00544-6. **2.** Beaupierre A, et al. *Clin J Oncol Nursing.* 2019;23(2):27-34. **3.** Perica K, et al. *Biol Blood Marrow Transplant.* 2018;24:1135-1141. **4.** Cohen AD. American Society of Clinical Oncology Educational Book 38 (May 23, 2018) e6-e15. doi: 10.1200/EDBK_200889.

Content courtesy of Elizabeth O'Donnell, MD

Logistical Considerations

How far is the closest treatment center and what CAR T products do they offer?

Can the patient travel or remain close to the center for extended periods of time (~4 weeks)?

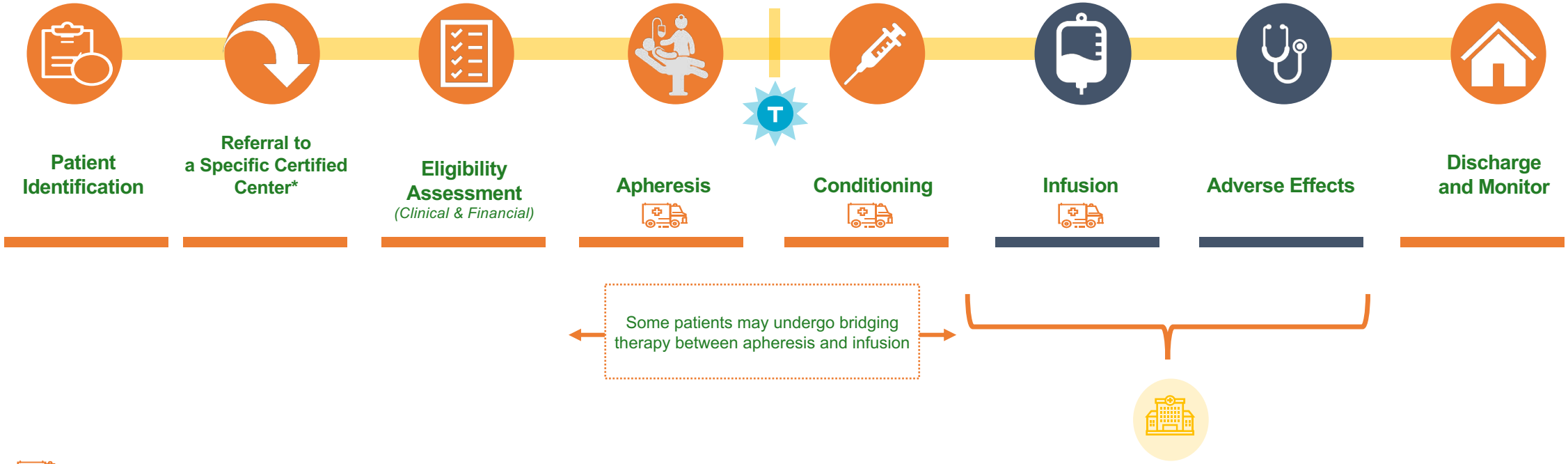
Does the patient have the ability to pay for treatment either through insurance coverage or other financing options?

When is the optimal time to harvest cells for best results?

References: 1. Dave H, et al. *Curr Hematol Malig Rep.* 2019. doi.org/10.1007/s11899-019-00544-6. **2.** Perica K, et al. *Biol Blood Marrow Transplant.* 2018;24:1135-1141. **3.** Beaupierre A, et al. *Clin J Oncol Nursing.* 2019;23(2):27-34.

Content courtesy of Elizabeth O'Donnell, MD

The Patient Journey Through CAR T Therapy Involves Coordination Between Referring Physician and Treatment Center



*Different CAR T centers may offer different CAR T products

Content courtesy of Elizabeth O'Donnell, MD

FDA-Approved CAR T-Cell Therapies for Relapsed or Refractory Multiple Myeloma

February 28, 2022: Ciltacabtagene autoleucel approved for the treatment of relapsed or refractory multiple myeloma in adult patients after 4 or more prior lines of therapy, including a proteasome inhibitor, an immunomodulatory agent and an anti-CD38 monoclonal antibody, based on the CARTITUDE-1 study.

March 26, 2021: Idecabtagene vicleucel approved for the treatment of relapsed or refractory multiple myeloma in adult patients after 4 or more prior lines of therapy, including an immunomodulatory agent, a proteasome inhibitor and an anti-CD38 monoclonal antibody. This is the first FDA-approved cell-based gene therapy for multiple myeloma, based on the KarMMa study.

https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-ciltacabtagene-autoleucel-relapsed-or-refractory-multiple-myeloma
https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-idecabtagene-vicleucel-multiple-myeloma

RTP RESEARCH TO PRACTICE

Topline Results from KarMMa-3: Idecabtagene Vicleucel Significantly Improves PFS for Patients with Relapsed and Refractory Multiple Myeloma

Press Release: August 10, 2022

Positive topline results were announced from KarMMa-3, a Phase III, global, randomized, multicenter, open-label study evaluating idecabtagene vicleucel compared to standard combination regimens for adults with multiple myeloma that is relapsed and refractory after 2 to 4 prior lines of therapy and refractory to the last regimen.

"KarMMa-3 is the first randomized clinical trial to evaluate a CAR T cell therapy in multiple myeloma. Results of a pre-specified interim analysis conducted through an independent review committee showed that KarMMa-3 met its primary endpoint of demonstrating a statistically significant improvement in progression-free survival. Treatment with idecabtagene vicleucel also showed an improvement in the key secondary endpoint of overall response rate compared to standard regimens. Follow-up for overall survival, a key secondary endpoint, remains ongoing.

Safety results in the trial were consistent with the well-established and predictable safety profile of idecabtagene vicleucel previously demonstrated in the pivotal KarMMa trial. No new safety signals were reported in this study."

https://news.bms.com/news/corporate-financial/2022/Bristol-Myers-Squibb-and-2seventy-bio-Announce-Topline-Results-from-KarMMa-3-Trial-Showing-Abecma-idecabtagene-vicleucel-Significantly-Improves-Progression-Free-Survival-Versus-Standard-Regimens-in-Relapsed-and-Refractory-Multiple-Myeloma/default.aspx

RTP RESEARCH TO PRACTICE

Key Ongoing Studies of BCMA-Directed CAR T-Cell Therapy with Ide-cel and Cilta-cel

Study	Phase	N	Setting	Treatments
CARTITUDE-4	III	419	Relapsed and lenalidomide-refractory	• Pomalidomide/bortezomib/dexamethasone or daralutamide/pomalidomide/dexamethasone • Cilta-cel
CARTITUDE-5	III	650	NDMM, with no ASCT planned	• VRd → cilta-cel • VRd → lenalidomide/dexamethasone
CARTITUDE-6	III	750	NDMM, ASCT eligible	• DVRd → cilta-cel • DVRd → ASCT
KarMMa-4	I	13	NDMM, high risk	• Ide-cel → lenalidomide maintenance
KarMMa-2	II	235	R/R MM, high risk NDMM	• Ide-cel • Ide-cel + lenalidomide

Ide-cel = idecabtagene vicleucel; cilta-cel = ciltacabtagene autoleucel; NDMM = newly diagnosed multiple myeloma; ASCT = autologous stem cell transplant; VRd = bortezomib/lenalidomide/dexamethasone; DVRd = daratumumab/VRd; R/R = relapsed/refractory

www.clinicaltrials.gov. Accessed August 2022.

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Dr Natalie Callander (Madison, Wisconsin)

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Patient Comments: Coping with panic attacks; experience with a bispecific antibody; looking toward the future

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Case Presentation: 74-year-old man with multiregimen-refractory MM receives teclistamab on a clinical trial

Dr Jesús Berdeja (Nashville, Tennessee)

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Patient Comments: Clinical trial participation; isolation during and after COVID-19

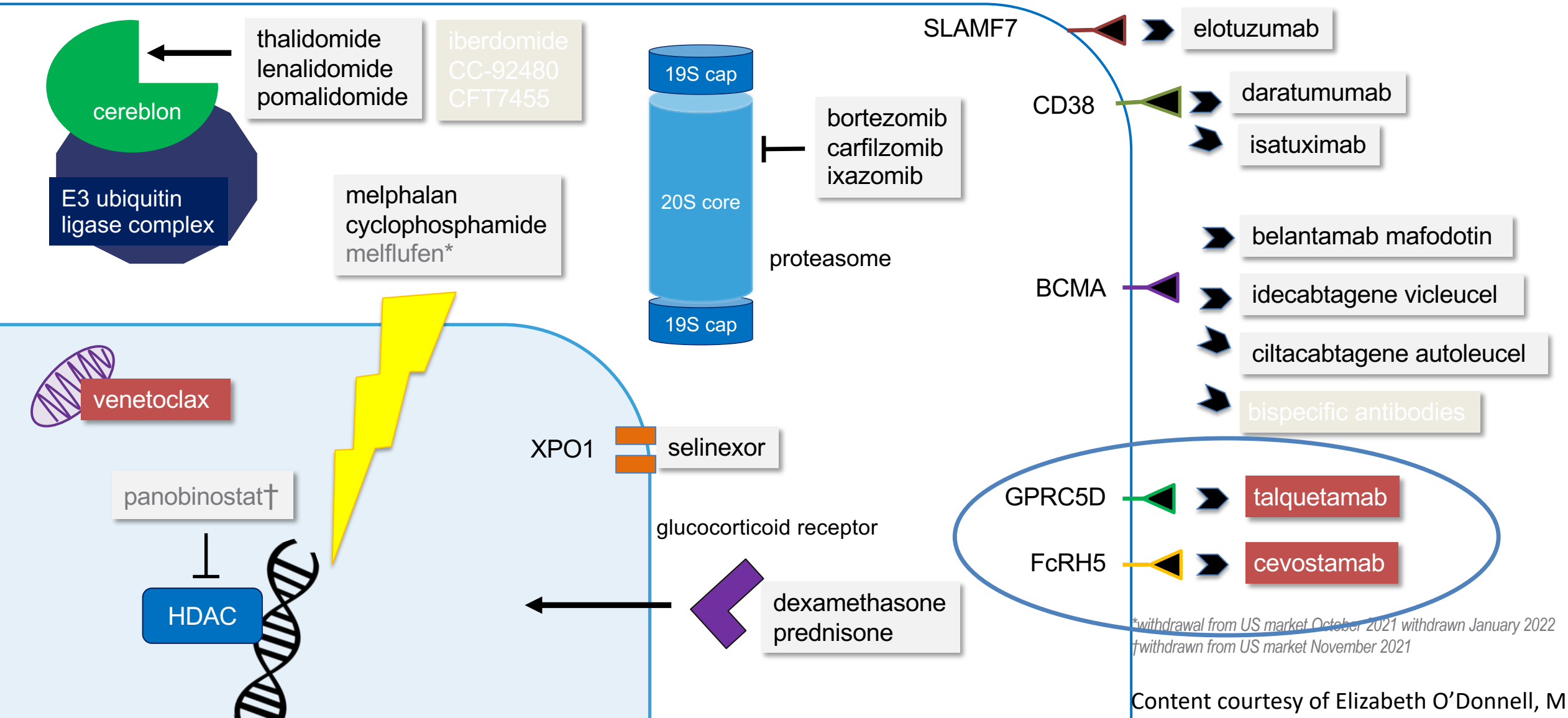
BCMA x CD3 Bispecific Antibodies: Summary

Therapy	Characteristics	N	Population	Safety	Response	DOR/PFS
Teclistamab[1]	▪ Bispecific ▪ IV/SC (RP2D: 1500µg/kg SC) ▪ Weekly and every other week in f/u	157	▪ At SC cohorts: ▪ Median of 5PL ▪ 79% triple refractory ▪ 38% penta refractory	▪ At RP2D: ▪ CRS 70% G1-2 ▪ Neurotox 1% (G1) ▪ Infections 50%	At RP2D, ORR: 65% with 40% sCR/CR	No mature data
AMG701[2]	▪ BiTE modified ▪ IV ▪ Weekly	82	▪ Median of 6PL ▪ 62% triple refractory	▪ CRS 55%, G3-4: 9% ▪ No ICANS ▪ 20% cytopenias	83% ORR at the top dose level and 50% VGPR	No mature data
REGN5458[3]	▪ Bispecific ▪ IV ▪ Weekly and every other week C4->	49	▪ Median of 5PL ▪ 100% triple refractory ▪ 57% penta refractory	▪ CRS 39%, no G3-4 ▪ ICANS 12% ▪ cytopenias 47% and infections 18%	62.5% at 96 mg and 95% of responders were VGPR. Some CR in lower dose levels	Preliminary median DOR: 6m
TNB-383B[4]	▪ Triple chain anti-BCMA bispecific ▪ IV fixed doses ▪ Every 3 weeks	58	▪ Median of 6PL ▪ 64% triple refractory ▪ 34% penta refractory	▪ CRS 45% and no G3-4 ▪ No ICANS ▪ Cytopenias 21% and infections 14%	80% (13% CR) at the dose levels 40-60 mg	No mature data
PF-3135[5]	▪ Bispecific ▪ SC and weekly ▪ RP2D: 1000 µg/kg	30	▪ Median of 8PL ▪ 87% triple refractory ▪ 23% prior BCMA-based therapy	▪ CRS 73% and no G3-4 ▪ ICANS 20% ▪ ISR 50%	83% ORR at RP2D	No mature data

1. Usmani SZ et al. Lancet 2021. 2. Harrison SJ, et al. Presented at ASH 2020. Abstract 181. 3. Madduri D, et al. Presented at ASH 2020. Abstract 291. 4. Rodriguez C, et al. Presented at ASH 2020. Abstract 293.5. Bahlis NJ, et al. Presented at ASCO 2021. Abstract 8006.

Content courtesy of Elizabeth O'Donnell, MD

Emerging drugs for multiple myeloma: bispecific antibodies targeting GPRC5D or FcRH5



*withdrawal from US market October 2021 withdrawn January 2022
†withdrawn from US market November 2021

Content courtesy of Elizabeth O'Donnell, MD

ASCO 2022;Abstract 8007.

Teclistamab, a B-Cell Maturation Antigen (BCMA) x CD3 Bispecific Antibody, in Patients With Relapsed/Refractory Multiple Myeloma (RRMM): Updated Efficacy and Safety Results From MajesTEC-1

Ajay K Nooka (anooka@emory.edu)[1], Philippe Moreau[2], Saad Z Usmani[3], Alfred L Garfall[4], Niels WCJ van de Donk[5], Jesús San-Miguel[6], Albert Oriol[7], Ajai Chari[8], Lionel Karlin[9], Maria-Victoria Mateos[10], Rakesh Popat[11], Joaquín Martínez-López[12], Surbhi Sidana[13], Danielle Trancucci[14], Raluca Verona[15], Suzette Girgis[15], Clarissa Uhlar[15], Tara Stephenson[15], Arnob Banerjee[15], Amrita Krishnan[16]

[1]Winship Cancer Institute, Emory University, Atlanta, GA, USA; [2]University Hospital Hôtel-Dieu, Nantes, France; [3]Memorial Sloan Kettering Cancer Cent NY, USA; [4]Abramson Cancer Center, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA; [5]Amsterdam University Medical Universiteit Amsterdam, Cancer Center Amsterdam, Amsterdam, Netherlands; [6]University of Navarra, Pamplona, Spain; [7]Hospital Germans Trias I Pu Spain; [8]Mount Sinai School of Medicine, New York, NY, USA; [9]Centre Hospitalier Lyon Sud, France; [10]University Hospital of Salamanca/IBSAL/CIC, Salar [11]University College London Hospitals, NHS Foundation Trust, London, UK; [12]Hematología Hospital 12 de Octubre, Madrid, Spain; [13]Stanford Universit Medicine, Stanford, CA, USA; [14]Janssen Research & Development, Raritan, NJ, USA; [15]Janssen Research & Development, Spring House, PA, USA; [16]City Comprehensive Cancer Center, Duarte, CA, USA

Presented at the 2022 American Society of Clinical Oncology (ASCO) Annual Meeting; June 3-7, 2022; Chicago, IL

N Engl J Med 2022 June 5;[Online ahead of print].

The NEW ENGLAND JOURNAL of MEDICINE

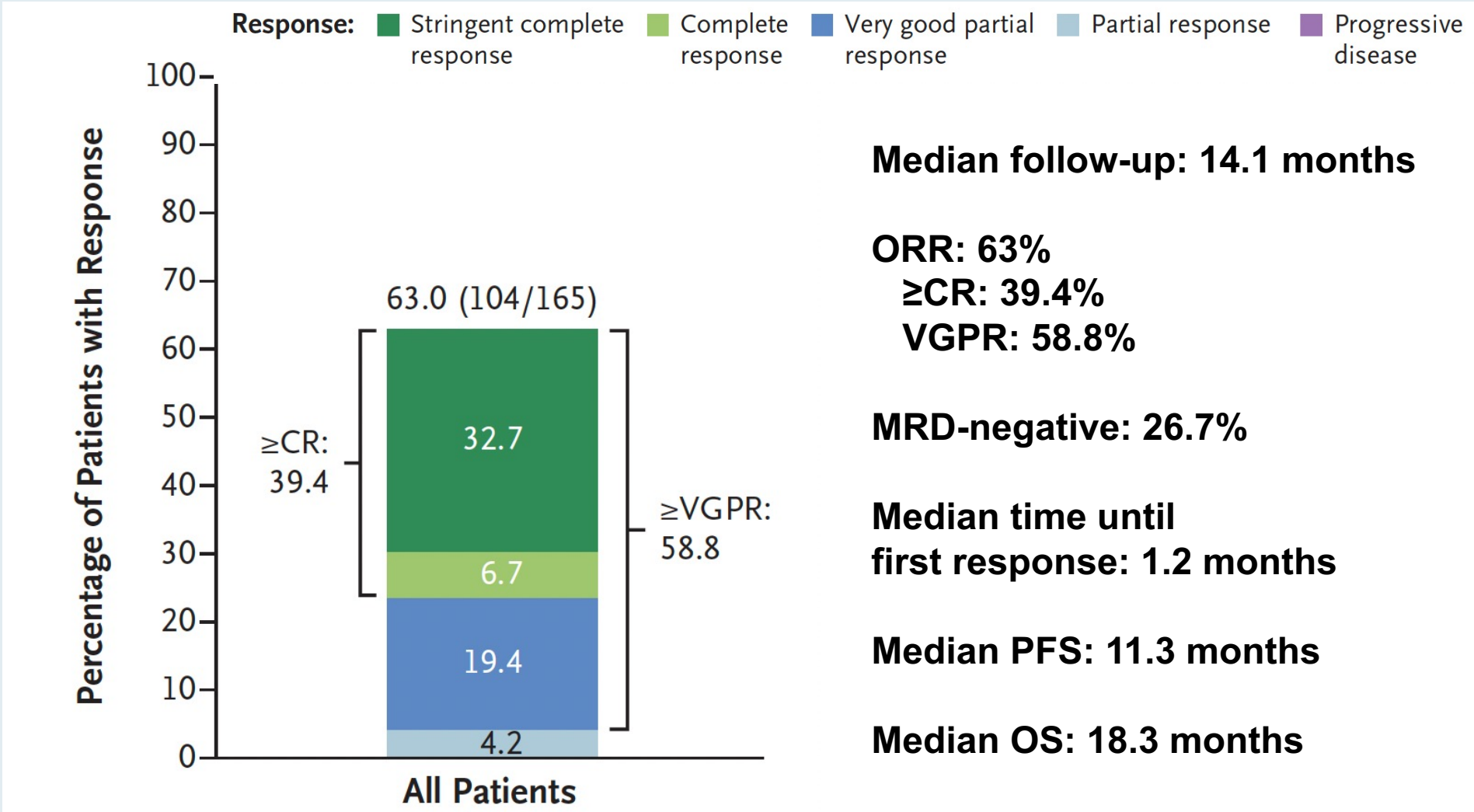
ORIGINAL ARTICLE

Teclistamab in Relapsed or Refractory Multiple Myeloma

P. Moreau, A.L. Garfall, N.W.C.J. van de Donk, H. Nahi, J.F. San-Miguel, A. Oriol, A.K. Nooka, T. Martin, L. Rosinol, A. Chari, L. Karlin, L. Benboubker, M.-V. Mateos, N. Bahlis, R. Popat, B. Besemer, J. Martínez-López, S. Sidana, M. Delforge, L. Pei, D. Trancucci, R. Verona, S. Girgis, S.X.W. Lin, Y. Olyslager, M. Jaffe, C. Uhlar, T. Stephenson, R. Van Rampelbergh, A. Banerjee, J.D. Goldberg, R. Kobos, A. Krishnan, and S.Z. Usmani

RTP RESEARCH TO PRACTICE

MajesTEC-1: Response and Survival



Median follow-up: 14.1 months

ORR: 63%
≥CR: 39.4%
VGPR: 58.8%

MRD-negative: 26.7%

Median time until first response: 1.2 months

Median PFS: 11.3 months

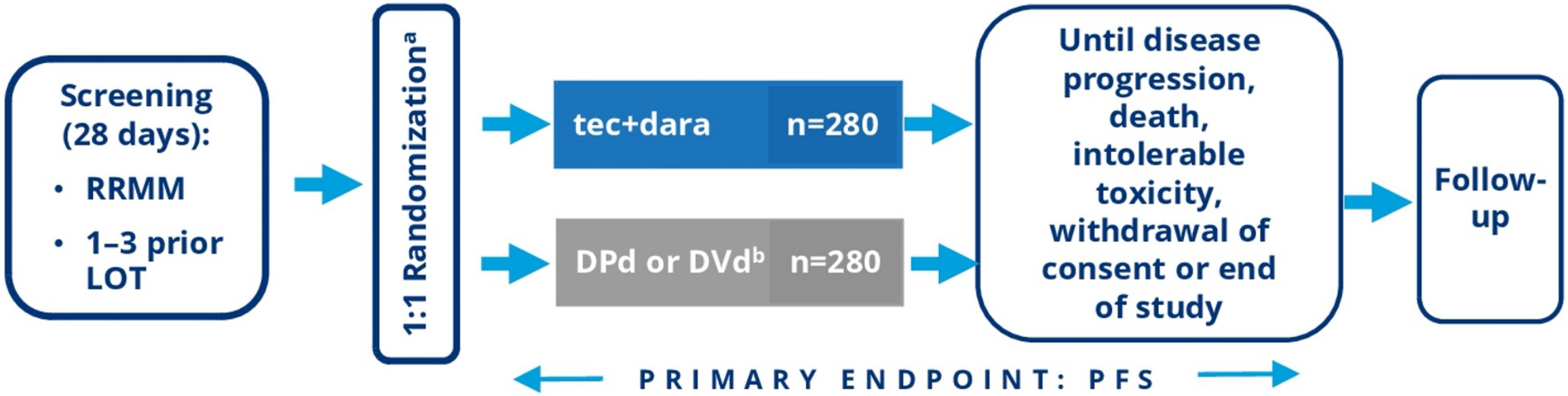
Median OS: 18.3 months

ORR = overall response rate; MRD = minimal residual disease

Moreau P et al. *N Engl J Med* 2022 June 5;[Online ahead of print].

RTP RESEARCH TO PRACTICE

MajesTEC-3 Ongoing Phase III Study Design



Key Eligibility Criteria

- Received 1-3 prior lines of therapy, including PI and lenalidomide
  - Patients with only 1 prior line of therapy must be lenalidomide refractory
- No prior BCMA-directed therapy and/or not refractory to anti-CD38 mAb

RRMM = relapsed/refractory multiple myeloma; PI = proteasome inhibitor; tec = teclistamab; dara = daratumumab; DPd = dara/pomalidomide/dexamethasone; DVd = bortezomib/dexamethasone; mAb = monoclonal antibody

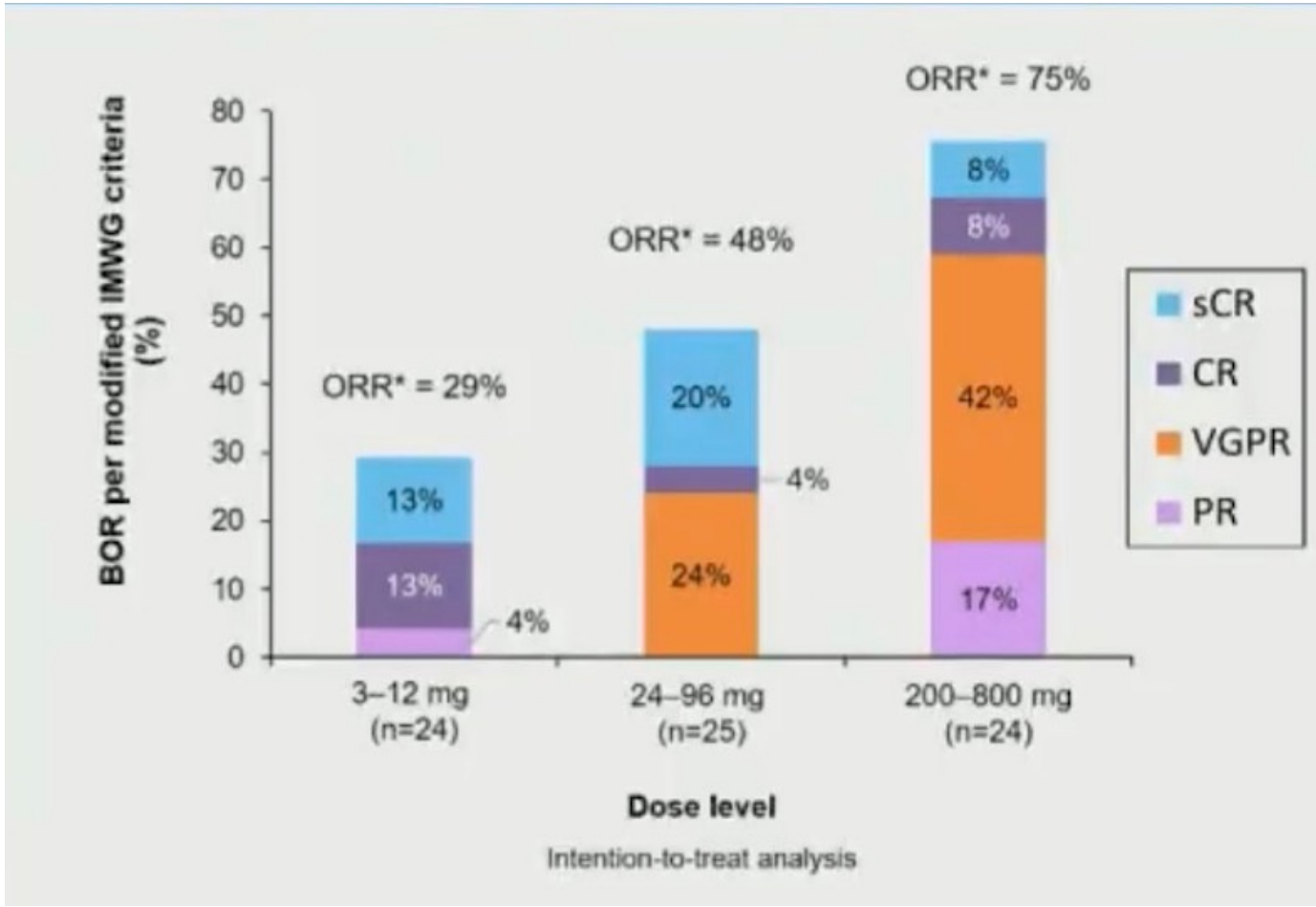
Mateos MV et al. ASCO 2022;Abstract TPS8072.

LINKER-MM1 — Early, Deep, and Durable Responses, and Low Rates of Cytokine Release Syndrome with REGN5458, a BCMA x CD3 Bispecific Antibody, in a Phase 1/2 Study in Patients with Relapsed/Refractory Multiple Myeloma

Zonder JA et al.

International Myeloma Society Meeting 2022;Abstract OAB-056.

LINKER-MM1: Phase I Efficacy with REGN5458

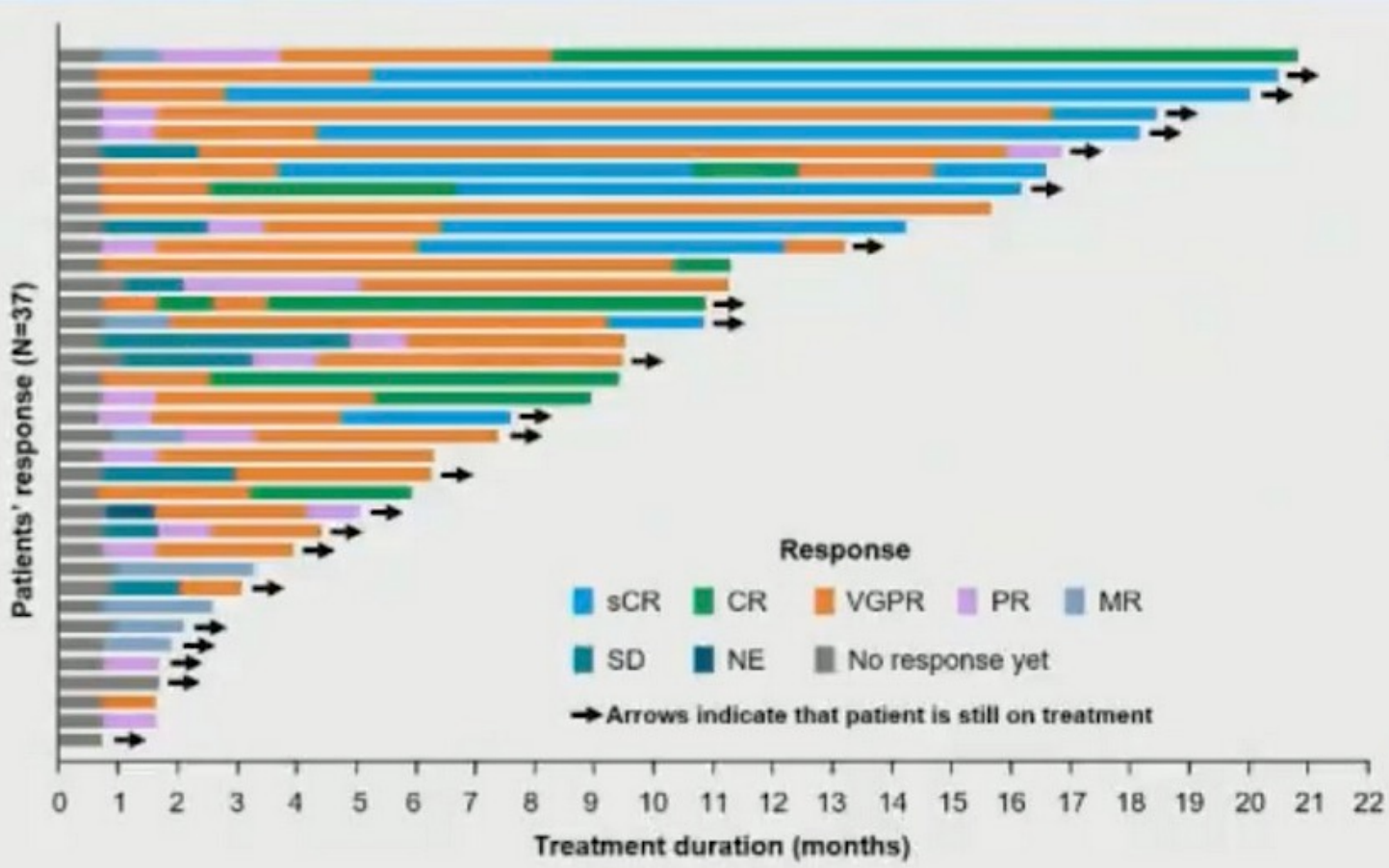


- Responses have been observed across all dose levels, with a trend for higher response rates at higher doses
  - 51% ORR among all enrolled patients*
- 75% ORR and 58% ≥VGPR with REGN5458 200–800 mg
- Among all responders, 86% achieved ≥VGPR, 43% ≥CR
- Among CR/sCR with available MRD data:
  - 4/10 MRD negative at 10^{-5}

ORR = overall response rate

Zonder JA et al. International Myeloma Society Meeting 2022;Abstract OAB-056.

LINKER-MM1: Duration of Response with REGN5458



- Responses occurred early, were durable, and deepened with time
  - Median time to response is <1 month
  - 70% of responses occurred within the first 2 months
- Estimated*,† median DOR was not reached
  - Probability† of responders being in response at 8 months was 90.2% (95% CI: 72.6, 96.7)
- The longest responses are ongoing for 19+ months at the latest data cut-off

Zonder JA et al. International Myeloma Society Meeting 2022;Abstract OAB-056.

RTP RESEARCH TO PRACTICE

Other BCMA x CD3 Bispecific Antibodies: Summary

Therapy	Characteristics	N	Population	Safety	Response
AMG 701[2]	▪ BiTE® modified ▪ IV ▪ Weekly	82	▪ Median of 6 PL ▪ 62% triple refractory	▪ CRS 55%, G3-4: 9% ▪ No ICANS ▪ 20% cytopenias	83% ORR at the top dose level and 50% VGPR
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PL = prior lines of therapy; SC = subcutaneous; ISR = injection site reaction

1. Usmani SZ et al. *Lancet* 2021. 2. Harrison SJ et al. ASH 2020;Abstract 181. 3. Madduri D et al. ASH 2020;Abstract 291. 4. Rodriguez C et al. ASH 2020;Abstract 293.5. Bahlis NJ et al. ASCO 2021;Abstract 8006.

Content courtesy of Noopur Raje, MD

Select Ongoing Phase III Trials of BCMA-Directed Bispecific Antibodies

Study	N	Description
MajesTEC-4	1,000	Teclistamab in combination with lenalidomide versus lenalidomide alone in participants with NDMM as maintenance therapy after ASCT
MajesTEC-7	1,030	Teclistamab in combination with daratumumab SC and lenalidomide versus daratumumab SC, lenalidomide and dexamethasone in participants with NDMM who are either ineligible or not intended for ASCT as initial therapy
MajesTEC-3	630	Teclistamab in combination with daratumumab SC versus daratumumab SC, pomalidomide and dexamethasone or daratumumab SC, bortezomib and dexamethasone in RRMM
MajesTEC-9	590	Teclistamab monotherapy versus pomalidomide, bortezomib, dexamethasone (PVd) or carfilzomib, dexamethasone in participants with RRMM who have received 1 to 3 prior lines of therapy, including an anti-CD38 monoclonal antibody and lenalidomide
MagnetisMM-7	366	Elranatamab versus lenalidomide in patients with NDMM who are minimal residual disease-positive after undergoing ASCT
MagnetisMM-5	589	Elranatamab monotherapy and elranatamab + daratumumab versus daratumumab + pomalidomide + dexamethasone in participants with RRMM

NDMM = newly diagnosed multiple myeloma; ASCT = autologous stem cell transplant; RRMM = relapsed/refractory multiple myeloma

www.clinicaltrials.gov. Accessed October 2022.

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Cortes-Salva D et al.

ASH 2022;Abstract 97.

KarMMa-2 Cohort 2a: Efficacy and Safety of Idecabtagene Vicleucel in Clinical High-Risk Multiple Myeloma Patients with Early Relapse after Frontline Autologous Stem Cell Transplantation

Usmani S et al.

ASH 2022;Abstract 361.

Early and Sustained Undetectable Measurable Residual Disease (MRD) after Idecabtagene Vicleucel (ide-cel) Defines a Subset of Multiple Myeloma (MM) Patients in Karmma Achieving Prolonged Survival

Paiva B et al.

ASH 2022;Abstract 868.

Clinical Outcomes and Salvage Therapies in Patients with Relapsed/Refractory Multiple Myeloma Following Progression on BCMA-Targeted CAR-T Therapy

Reyes KR et al.
ASH 2022;Abstract 250.

Differences in Single Cells between BCMA-Targeting CAR T-Cell Therapy Responders and Non-Responders Reveals Initial Resistance and Acquired Resistance Are Driven By Different Factors

Samur MK et al.
ASH 2022;Abstract 869.

ISB 2001, a First-in-Class Trispecific BCMA and CD38 T Cell Engager Designed to Overcome Mechanisms of Escape from Treatments for Multiple Myeloma By Targeting Two Antigens

Pihlgren M et al.

ASH 2022;Abstract 353.

Clinical Activity of BMS-986393 (CC-95266), a G Protein–Coupled Receptor Class C Group 5 Member D (GPRC5D)–Targeted Chimeric Antigen Receptor (CAR) T Cell Therapy, in Patients with Relapsed and/or Refractory (R/R) Multiple Myeloma (MM): First Results from a Phase 1, Multicenter, Open-Label Study

Bal S et al.

ASH 2022;Abstract 364.

Phase I Open-Label Single-Arm Study of BCMA/CD19 Dual-Targeting FasTCAR-T Cells (GC012F) As First-Line Therapy for Transplant-Eligible Newly Diagnosed High-Risk Multiple Myeloma

Du J et al.

ASH 2022;Abstract 366.

Agenda

INTRODUCTION: Requiem for Belantamab Mafodotin? Dawn of a New Era

MODULE 1: CAR T-Cell Therapy

- Dr Berdeja: 72-year-old man with multiregimen-refractory MM receives idecabtagene vicleucel with Grade 1 CRS and persistent cytopenias
- Dr Berdeja: 65-year-old man with multiregimen-refractory MM receives idecabtagene vicleucel with a 20-month response
- Dr Callander: 57-year-old man with multiregimen-refractory MM received idecabtagene vicleucel in 2020 and is currently in CR

MODULE 2: Bispecific Antibodies

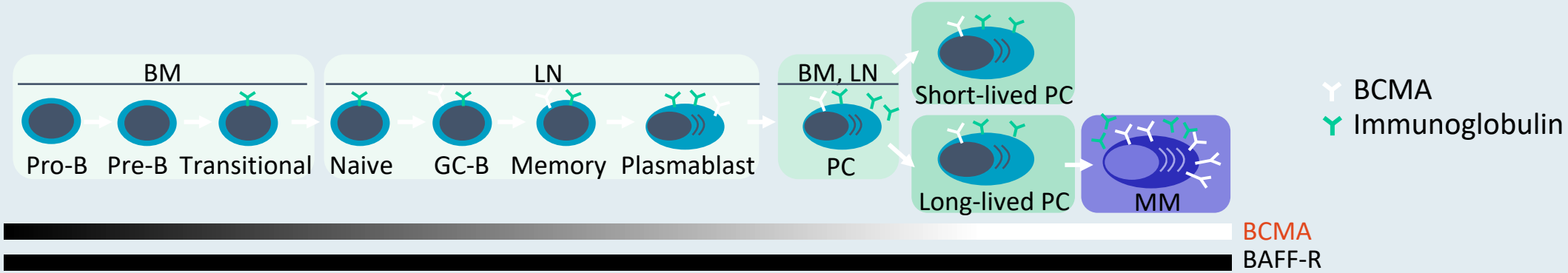
- Dr Callander: 63-year-old man with multiregimen-refractory MM receives the novel bispecific antibody WVT078 on a clinical trial
- Dr Berdeja: 74-year-old man with multiregimen-refractory MM receives teclistamab on a clinical trial

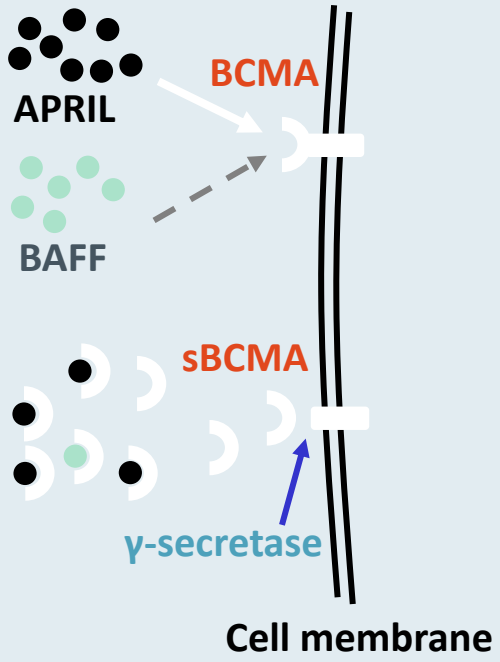
MODULE 3: ASH 2022 – Snapshot of the Future

MODULE 4: Ongoing Trials; Reported Data; Review Articles

CAR T-Cell Therapy

BCMA as a Target in Myeloma Treatment





- **BCMA: antigen expressed specifically on PCs and myeloma cells**
- **Higher expression on myeloma cells than normal PCs**
- **Not expressed in other tissues**

- **Cell-surface receptor in TNF superfamily**
- **Receptor for APRIL and BAFF**
- **Key role in B-cell maturation and differentiation**
- **Promotes myeloma cell growth, chemotherapy resistance, immunosuppression in bone marrow microenvironment**

Cho S-F et al. *Front Immunol* 2018;9:1821. Moreaux J et al. *Blood* 2004;103(8):3148-57. Sanchez E at al. *Br J Haematol* 2012;158(6):727-38.

Content courtesy of Jesús G Berdeja, MD

RTP RESEARCH TO PRACTICE

Select Clinical Trials of BCMA-Directed CAR T-Cell Therapy for Multiagent-Refractory Multiple Myeloma: Efficacy Summary

	KarMMa (N = 128)	CARTITUDE-1 (N = 97)	CRB-402 (N = 72)
Phase	II	Ib/II	I/II
Product	Idecabtagene vicleucel	Ciltacabtagene autoleucel	bb21217
Median prior lines of therapy	6	6	6
Overall response rate	73%	98%	69%
Complete response	33%	sCR: 83%	sCR/CR: 36%
MRD-negative	26%	92%	67%
Median PFS	8.6 months	Not reached	Not applicable
Median OS	24.8 months	Not reached	Not applicable

sCR = stringent complete response; MRD = minimal residual disease; PFS = progression-free survival; OS = overall survival

Anderson LD et al. ASCO 2021;Abstract 8016. Usmani SZ et al ASCO 2022;Abstract 8028. Martin T et al. *J Clin Oncol* 2022 June 4;[Online ahead of print]. Raje N et al. ASH 2021;Abstract 548. Mateos M-V et al. 2022 ASCO Educational Book.

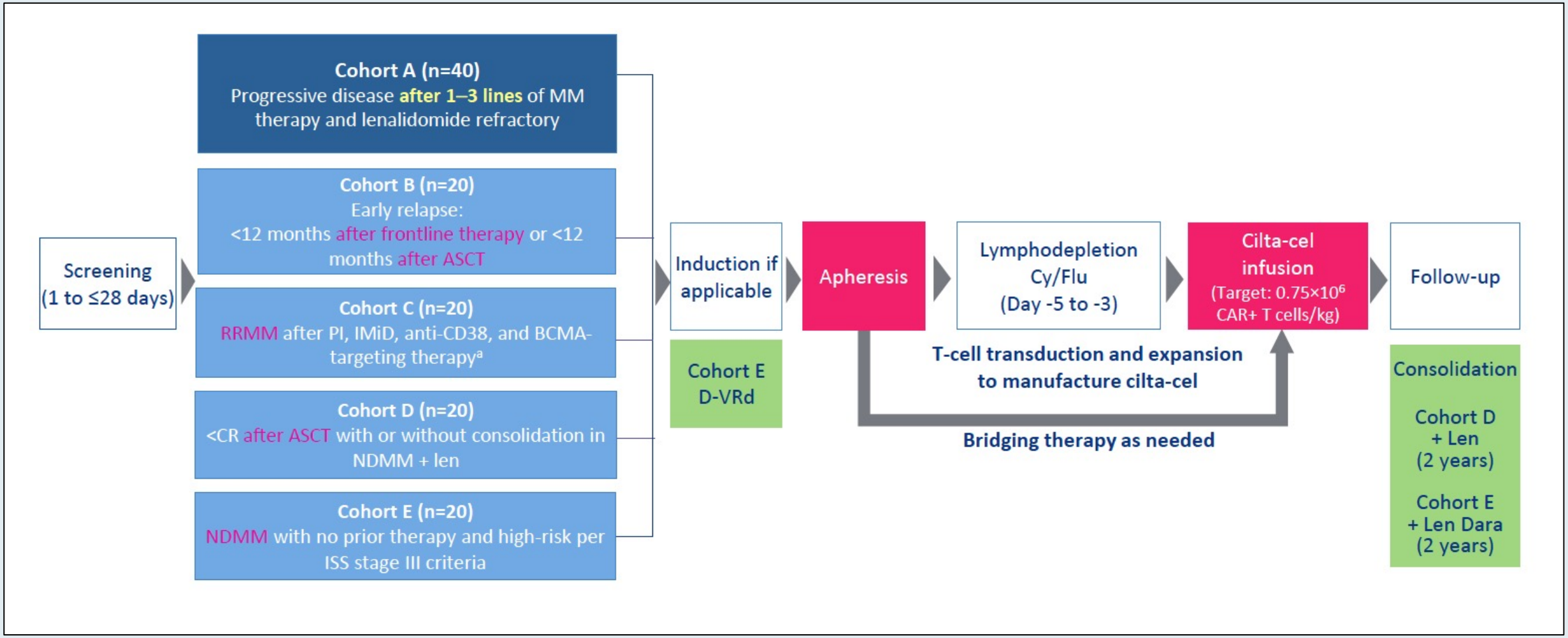
Select Clinical Trials of BCMA-Directed CAR T-Cell Therapy for Multiagent-Refractory Multiple Myeloma: CRS and Neurotoxicity

	KarMMa (N = 128)	CARTITUDE-1 (N = 97)	CRB-402 (N = 72)
Product	Idecabtagene vicleucel	Ciltacabtagene autoleucel	bb21217
Median prior lines of therapy	6	6	6
CRS	Grade 3: 4%	Grade 3/4: 4%	Grade 3/4: 1%
Neurotoxicity	Grade 3: 3%	Grade 3/4: 11%	Grade 3/4: 4%

CRS = cytokine release syndrome

Anderson LD et al. ASCO 2021;Abstract 8016. Usmani SZ et al ASCO 2022;Abstract 8028. Martin T et al. *J Clin Oncol* 2022 June 4;[Online ahead of print]. Raje N et al. ASH 2021;Abstract 548. Mateos M-V et al. 2022 ASCO Educational Book.

CARTITUDE-2 Multicohort Overall Trial Design



ASCT = autologous stem cell transplant; RRMM = relapsed/refractory multiple myeloma (MM); NDMM = newly diagnosed MM; D-VRd = daratumumab/bortezomib/lenalidomide/dexamethasone; cilta-cel = ciltacabtagene autoleucel; len = lenalidomide; dara = daratumumab

Agha M et al. EHA 2021;Abstract S190.

ASCO 2022; Abstract 8020.

Biological Correlative Analyses and Updated Clinical Data of Ciltacabtagene Autoleucel, a BCMA-Directed CAR-T Cell Therapy, in Lenalidomide-Refractory Patients With Progressive Multiple Myeloma After 1–3 Prior Lines of Therapy: CARTITUDE-2, Cohort A

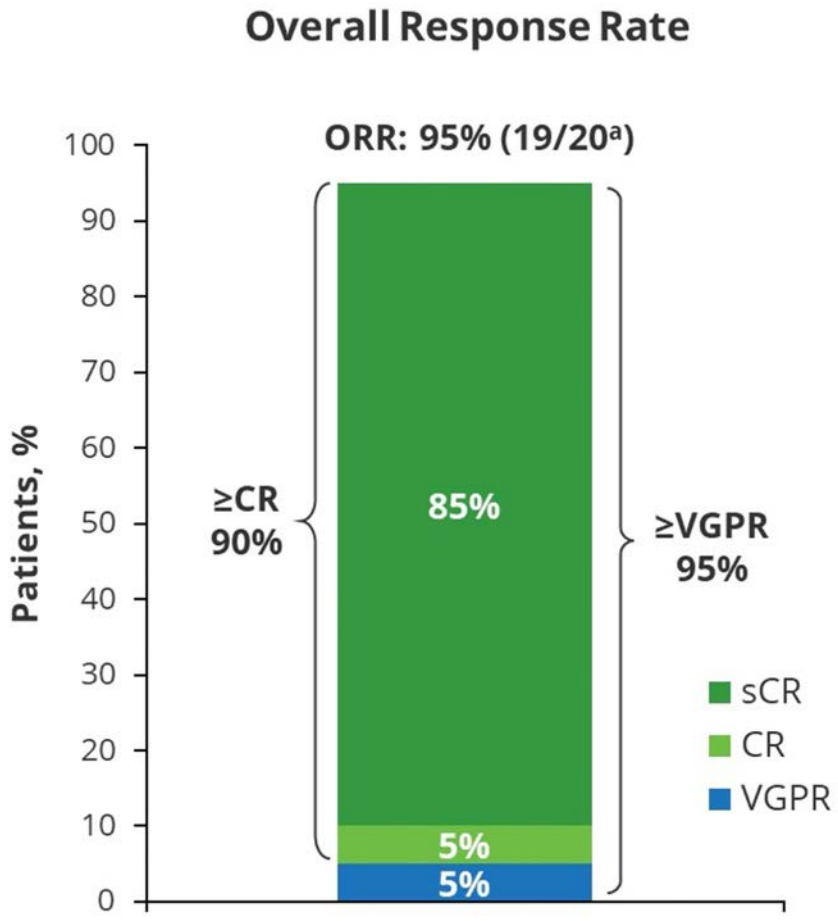
Hermann Einsele[1], Adam Cohen[2], Michel Delforge[3], Jens Hillengass[4], Hartmut Goldschmidt[5], Katja Weisel[6], Marc-Steffen Raab[7], Christoph Scheid[8], Jordan M Schecter[9], Kevin De Braganca[9], Helen Varsos[9], Tzu-Min Yeh[9], Pankaj Mistry[10], Tito Roccia[9], Christina Corsale[9], Muhammad Akram[11], Lida Pacaud[11], Tonia Nesheiwat[11], Mounzer Agha[12], Yael Cohen[13]

[1]Universitätsklinikum Würzburg, Medizinische Klinik und Poliklinik II, Würzburg, Germany; [2]Abramson Cancer Center, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA; [3]University Hospitals (UZ) Leuven, Leuven, Belgium; [4]Roswell Park Comprehensive Cancer Center, Buffalo, NY, USA; [5]University Hospital Heidelberg and National Center of Tumor Diseases, Heidelberg, Germany; [6]University Medical Center Hamburg-Eppendorf, Hamburg, Germany; [7]University Hospital Heidelberg and Clinical Cooperation Unit Molecular Hematology/Oncology, German Cancer Research Center, Heidelberg, Germany; [8]University of Cologne, Cologne, Germany; [9]Janssen Research & Development, Raritan, NJ, USA; [10]Janssen Research & Development, High Wycombe, UK; [11]Legend Biotech USA, Piscataway, NJ, USA; [12]UPMC Hillman Cancer Center, Pittsburgh, PA, USA; [13]Tel-Aviv Sourasky (Ichilov) Medical Center, and Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel

Presented at the 2022 American Society of Clinical Oncology (ASCO) Annual Meeting; June 3-7, 2022; Chicago, IL, USA & Virtual.

RTP RESEARCH TO PRACTICE

CARTITUDE-2 Cohort A: Ciltacabtagene Autoleucel for Lenalidomide-Refractory MM After 1 to 3 Prior Lines of Therapy



AEs ≥20%, n (%)	N=20	
	Any Grade	Grade 3/4
Hematologic		
Neutropenia	19 (95)	19 (95)
Thrombocytopenia	16 (80)	7 (35)
Anaemia	15 (75)	9 (45)
Lymphopenia	14 (70)	14 (70)
Leukopenia	11 (55)	11 (55)
CAR-T–related AEs		
CRS	19 (95)	2 (10)
Neurotoxicity	6 (30)	1 (5)
ICANS	3 (15)	0
Other	3 (15)[a]	1 (5)

CR = complete response; VGPR = very good partial response; sCR = stringent CR; CRS = cytokine release syndrome; ICANS = immune effector cell-associated neurotoxicity

Einsele H et al. ASCO 2022;Abstract 8020.

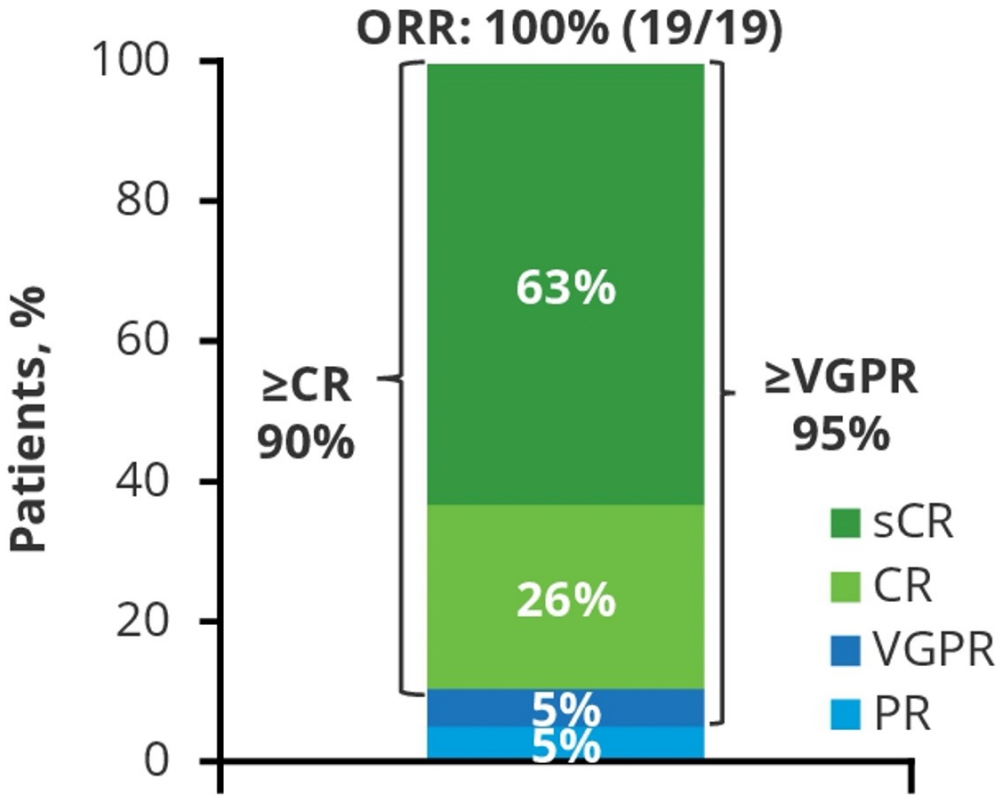
RTP RESEARCH TO PRACTICE

ASCO 2022 | Abstract 8029

Biological Correlative Analyses and Updated Clinical Data of Ciltacabtagene Autoleucel, a BCMA-Directed CAR-T Cell Therapy, in Patients with Multiple Myeloma and Early Relapse After Initial Therapy: CARTITUDE-2, Cohort B

Niels WCJ van de Donk[1] (n.vandedonk@amsterdamumc.nl), Mounzer Agha[2], Adam Cohen[3], Yael Cohen[4], Sébastien Anguille[5], Tessa Kerre[6], Wilfried Roeloffzen[7], Jordan M Schecter[8], Kevin De Braganca[8], Helen Varsos[8], Pankaj Mistry[9], Tito Roccia[8], Enrique Zudaire[10], Christina Corsale[8], Muhammad Akram[11], Dong Geng[11], Tonia Nesheiwat[11], Lida Pacaud[11], Pieter Sonneveld[12], Sonja Zweegman[1]

CARTITUDE-2 Cohort B: Ciltacabtagene Autoleucel for Patients with Multiple Myeloma and Early Relapse After Initial Therapy



AEs ≥20%, n (%)	N=19	
	Any Grade	Grade 3/4
Hematologic		
Neutropenia	18 (95)	17 (90)
Anemia	11 (58)	9 (47)
Thrombocytopenia	11 (58)	5 (26)
Lymphopenia	6 (32)	6 (32)
Leukopenia	5 (26)	5 (26)
CAR-T–related AEs		
CRS	16 (84)	1 (5)
Neurotoxicity	5 (26)	1 (5)
ICANS	1 (5)	0
Other	4 (21)	1 (5)
Parkinsonism	1 (5)	1 (5)

van de Donk NWCJ et al. ASCO 2022;Abstract 8029.

CAR T-Cell-Associated Toxicities: Acute and Late Phase

Acute Phase (Days 0-30)

- Cytokine release syndrome (CRS)
- Immune effector cell-associated neurotoxicity syndrome (ICANS)
- Cytopenias
- B-cell aplasia and hypogammaglobulinemia
- Tumor lysis syndrome (rare and likely varies by disease burden)

Late Phase (Days 30+)

- Persistent cytopenias
- B-cell aplasia and hypogammaglobulinemia
- T-cell deficiency
- Residual effects of acute toxicity
- Delayed CRS and ICANS are rare but can occur
- Impairment to QoL – fatigue, memory issues not yet well described

Content courtesy of Jesús G Berdeja, MD

RTP RESEARCH TO PRACTICE

Cytokine Release Syndrome Associated with CAR T-Cell Therapy for Multiple Myeloma

- Potentially severe or life-threatening reactions, with the most common manifestations being pyrexia, hypotension, tachycardia, chills, hypoxia, fatigue and headache
- Grade 3 or higher events may include hypotension, hypoxia, hyperbilirubinemia, hypofibrinogenemia, acute respiratory distress syndrome, atrial fibrillation, hepatocellular injury, metabolic acidosis, pulmonary edema, multiple organ dysfunction syndrome and hemophagocytic lymphohistiocytosis/macrophage activation syndrome
- Occurs in approximately 85% to 95% of patients (Grade ≥3: 5%-9%)
- Time to onset: 1 to 7 days (range 1-23 days)
- Duration: 4 to 7 days (range 1-63 days)
- Manage with tocilizumab or tocilizumab and corticosteroids

www.carvyktihcp.com/safety; www.abecmahcp.com/safety/

RTP RESEARCH TO PRACTICE

ICANS (Immune Effector Cell-Associated Neurotoxicity Syndrome) Associated with CAR T-Cell Therapy for MM

- Potentially severe or life-threatening neurotoxicity, including encephalopathy, tremor, aphasia and delirium
- Occurs in about 25% of patients (Grade ≥3: 4%-5%)
- Time to onset: 2 to 8 days (range 1-42 days)
- Duration: 6 to 8 days (range 1-578 days)
- Resolved in 77% to 92% of patients
- Manage with supportive care and corticosteroids as needed

www.carvyktihcp.com/safety; www.abecmahcp.com/safety/

Bispecific Antibodies

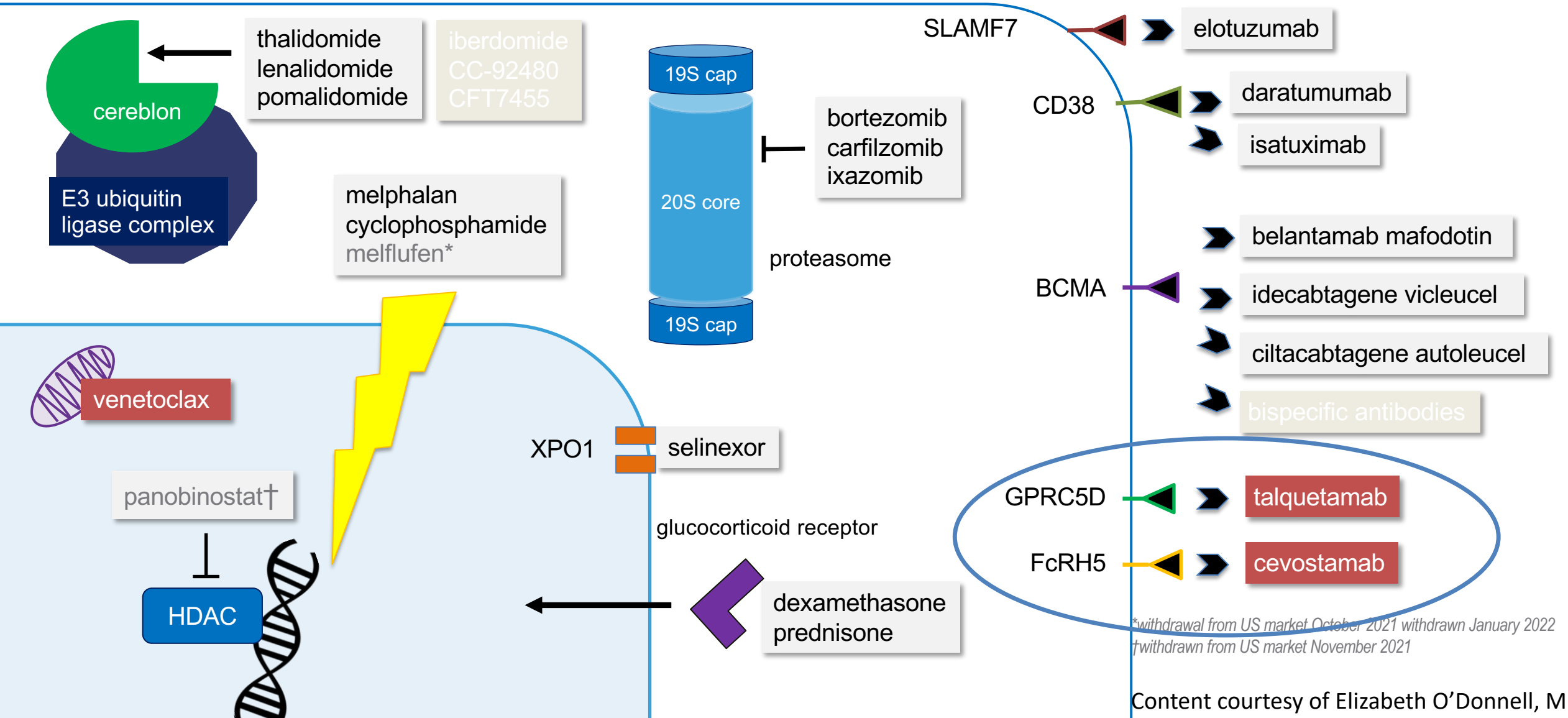
BCMA x CD3 Bispecific Antibodies: Summary

Therapy	Characteristics	N	Population	Safety	Response	DOR/PFS
Teclistamab[1]	▪ Bispecific ▪ IV/SC (RP2D: 1500µg/kg SC) ▪ Weekly and every other week in f/u	157	▪ At SC cohorts: ▪ Median of 5PL ▪ 79% triple refractory ▪ 38% penta refractory	▪ At RP2D: ▪ CRS 70% G1-2 ▪ Neurotox 1% (G1) ▪ Infections 50%	At RP2D, ORR: 65% with 40% sCR/CR	No mature data
AMG701[2]	▪ BiTE modified ▪ IV ▪ Weekly	82	▪ Median of 6PL ▪ 62% triple refractory	▪ CRS 55%, G3-4: 9% ▪ No ICANS ▪ 20% cytopenias	83% ORR at the top dose level and 50% VGPR	No mature data
REGN5458[3]	▪ Bispecific ▪ IV ▪ Weekly and every other week C4->	49	▪ Median of 5PL ▪ 100% triple refractory ▪ 57% penta refractory	▪ CRS 39%, no G3-4 ▪ ICANS 12% ▪ cytopenias 47% and infections 18%	62.5% at 96 mg and 95% of responders were VGPR. Some CR in lower dose levels	Preliminary median DOR: 6m
TNB-383B[4]	▪ Triple chain anti-BCMA bispecific ▪ IV fixed doses ▪ Every 3 weeks	58	▪ Median of 6PL ▪ 64% triple refractory ▪ 34% penta refractory	▪ CRS 45% and no G3-4 ▪ No ICANS ▪ Cytopenias 21% and infections 14%	80% (13% CR) at the dose levels 40-60 mg	No mature data
PF-3135[5]	▪ Bispecific ▪ SC and weekly ▪ RP2D: 1000 µg/kg	30	▪ Median of 8PL ▪ 87% triple refractory ▪ 23% prior BCMA-based therapy	▪ CRS 73% and no G3-4 ▪ ICANS 20% ▪ ISR 50%	83% ORR at RP2D	No mature data

1. Usmani SZ et al. Lancet 2021. 2. Harrison SJ, et al. Presented at ASH 2020. Abstract 181. 3. Madduri D, et al. Presented at ASH 2020. Abstract 291. 4. Rodriguez C, et al. Presented at ASH 2020. Abstract 293.5. Bahlis NJ, et al. Presented at ASCO 2021. Abstract 8006.

Content courtesy of Elizabeth O'Donnell, MD

Emerging drugs for multiple myeloma: bispecific antibodies targeting GPRC5D or FcRH5



*withdrawal from US market October 2021 withdrawn January 2022
†withdrawn from US market November 2021

Content courtesy of Elizabeth O'Donnell, MD

Novel Bispecific Antibodies

Therapy	Characteristics	N	Population	Safety	Response	DOR/PFS
Talquetamab[1]	▪ G protein-coupled receptor family C group 5 member D (GPRC5D) x CD3 bispecific antibody ▪ IV or SC admin	184, 30 at RP2D (405 µg/kg)	▪ Median of 6PL (6PL at RP2D) ▪ 76% triple refractory ▪ 28% penta refractory	▪ Infections in 37% of SC and RP2D patients; G3-4 3% at RP2D ▪ Neurotoxicity in 4 SC patients; 2 (7%) at RP2D ▪ CRS 73%, G3-4 2% at RP2D	At RP2D: 70% ORR with ≥ VGPR 60%	No mature data
Cevostamab (BFCR4350A)[2]	▪ FcRH5/CD3 bispecific T-cell engager ▪ Q3W IV infusions	53	▪ Median of 6PL ▪ 72% triple refractory ▪ 45% penta refractory	▪ Thrombocytopenia 32%, G3-4 25% ▪ CRS 76%, G3-4 2% ▪ Neurotoxicity 28%, no G3-4	ORR in ≥3.6/20-mg cohorts: 53% (18/34) in all pts 63% (5/8) in pts with prior anti-BCMA	No mature data

1. Berdeja JG, et al. ASCO 2021. Abstract 8008. 2. Cohen A, et al. ASH 2020. Abstract 292.

Content courtesy of Elizabeth O'Donnell, MD

ASCO 2022;Abstract 8007.

Teclistamab, a B-Cell Maturation Antigen (BCMA) x CD3 Bispecific Antibody, in Patients With Relapsed/Refractory Multiple Myeloma (RRMM): Updated Efficacy and Safety Results From MajesTEC-1

Ajay K Nooka (anooka@emory.edu)[1], Philippe Moreau[2], Saad Z Usmani[3], Alfred L Garfall[4], Niels WCJ van de Donk[5], Jesús San-Miguel[6], Albert Oriol[7], Ajai Chari[8], Lionel Karlin[9], Maria-Victoria Mateos[10], Rakesh Popat[11], Joaquín Martínez-López[12], Surbhi Sidana[13], Danielle Trancucci[14], Raluca Verona[15], Suzette Girgis[15], Clarissa Uhlar[15], Tara Stephenson[15], Arnob Banerjee[15], Amrita Krishnan[16]

[1]Winship Cancer Institute, Emory University, Atlanta, GA, USA; [2]University Hospital Hôtel-Dieu, Nantes, France; [3]Memorial Sloan Kettering Cancer Cent NY, USA; [4]Abramson Cancer Center, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA; [5]Amsterdam University Medical Universiteit Amsterdam, Cancer Center Amsterdam, Amsterdam, Netherlands; [6]University of Navarra, Pamplona, Spain; [7]Hospital Germans Trias I Pu Spain; [8]Mount Sinai School of Medicine, New York, NY, USA; [9]Centre Hospitalier Lyon Sud, France; [10]University Hospital of Salamanca/IBSAL/CIC, Salar [11]University College London Hospitals, NHS Foundation Trust, London, UK; [12]Hematología Hospital 12 de Octubre, Madrid, Spain; [13]Stanford Universit Medicine, Stanford, CA, USA; [14]Janssen Research & Development, Raritan, NJ, USA; [15]Janssen Research & Development, Spring House, PA, USA; [16]City Comprehensive Cancer Center, Duarte, CA, USA

Presented at the 2022 American Society of Clinical Oncology (ASCO) Annual Meeting; June 3-7, 2022; Chicago, IL

N Engl J Med 2022 June 5;[Online ahead of print].

The NEW ENGLAND JOURNAL of MEDICINE

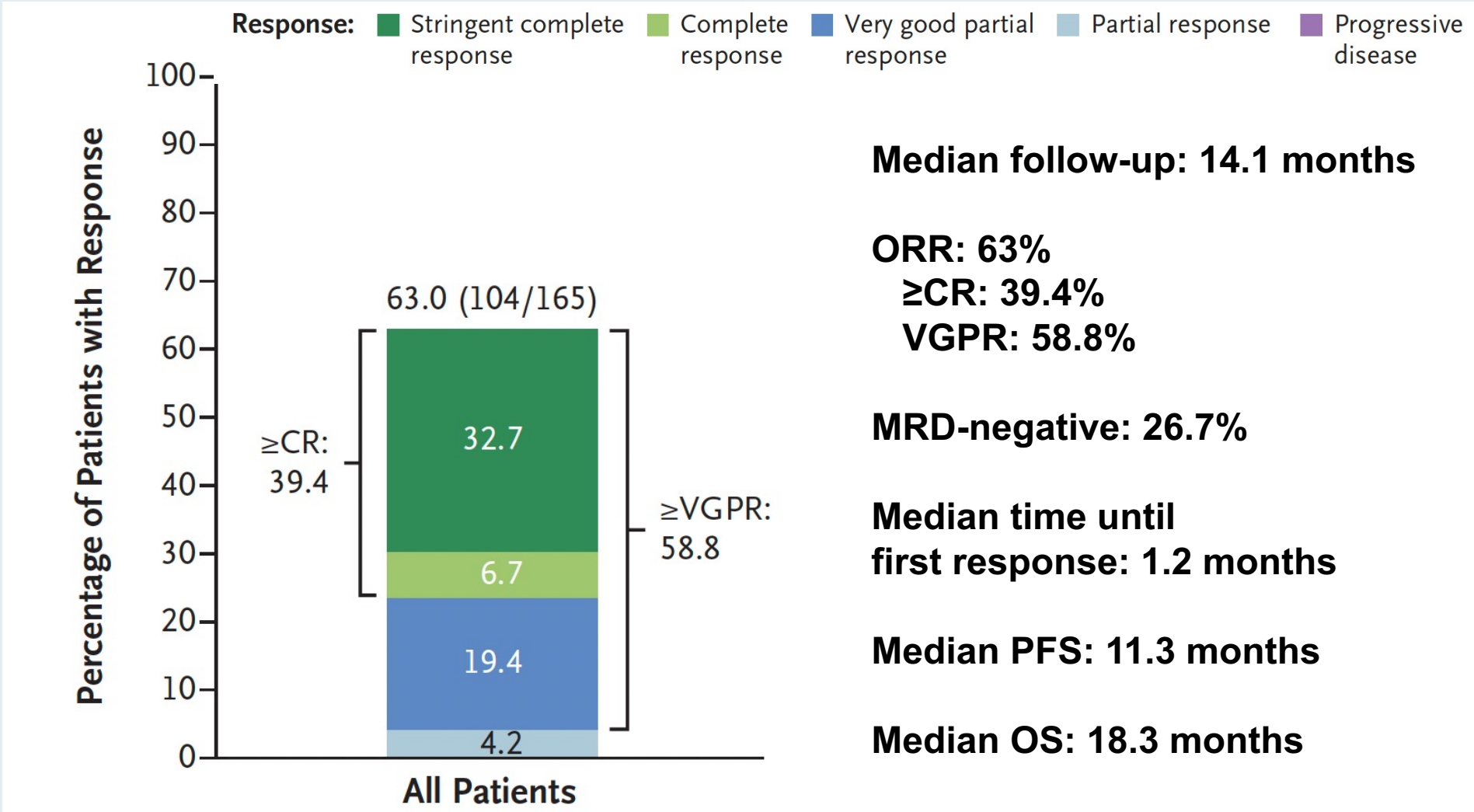
ORIGINAL ARTICLE

Teclistamab in Relapsed or Refractory Multiple Myeloma

P. Moreau, A.L. Garfall, N.W.C.J. van de Donk, H. Nahi, J.F. San-Miguel, A. Oriol, A.K. Nooka, T. Martin, L. Rosinol, A. Chari, L. Karlin, L. Benboubker, M.-V. Mateos, N. Bahlis, R. Popat, B. Besemer, J. Martínez-López, S. Sidana, M. Delforge, L. Pei, D. Trancucci, R. Verona, S. Girgis, S.X.W. Lin, Y. Olyslager, M. Jaffe, C. Uhlar, T. Stephenson, R. Van Rampelbergh, A. Banerjee, J.D. Goldberg, R. Kobos, A. Krishnan, and S.Z. Usmani

RTP RESEARCH TO PRACTICE

MajesTEC-1: Response and Survival



Median follow-up: 14.1 months

ORR: 63%
≥CR: 39.4%
VGPR: 58.8%

MRD-negative: 26.7%

Median time until first response: 1.2 months

Median PFS: 11.3 months

Median OS: 18.3 months

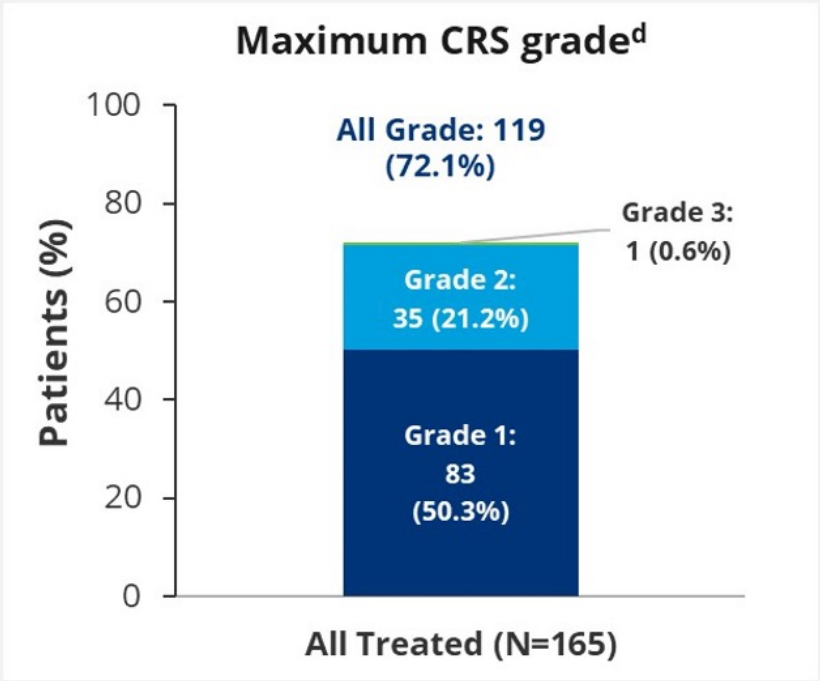
ORR = overall response rate; MRD = minimal residual disease

Moreau P et al. *N Engl J Med* 2022 June 5;[Online ahead of print].

RTP RESEARCH TO PRACTICE

MajesTEC-1: Cytokine Release Syndrome

Parameter	N=165
Patients with CRS, n (%)	119 (72.1)
Patients with ≥2 CRS events	55 (33.3)
Time to onset[a] (days), median (range)	2 (1–6)
Duration (days), median (range)	2 (1–9)
Received supportive measures[a] for CRS, n (%)	110 (66.7)
Tocilizumab[b]	60 (36.4)
Low-flow oxygen by nasal cannula[c]	21 (12.7)
Corticosteroids	14 (8.5)
Single vasopressor	1 (0.6)



- Most CRS events were confined to step-up and first full treatment doses
- All CRS events were grade 1/2, except for 1 transient-grade 3 CRS event that occurred in the context of concurrent pneumonia (resolved in 2 days)
- All CRS events fully resolved without treatment discontinuation or dose reduction

Nooka AK et al. ASCO 2022;Abstract 8007.

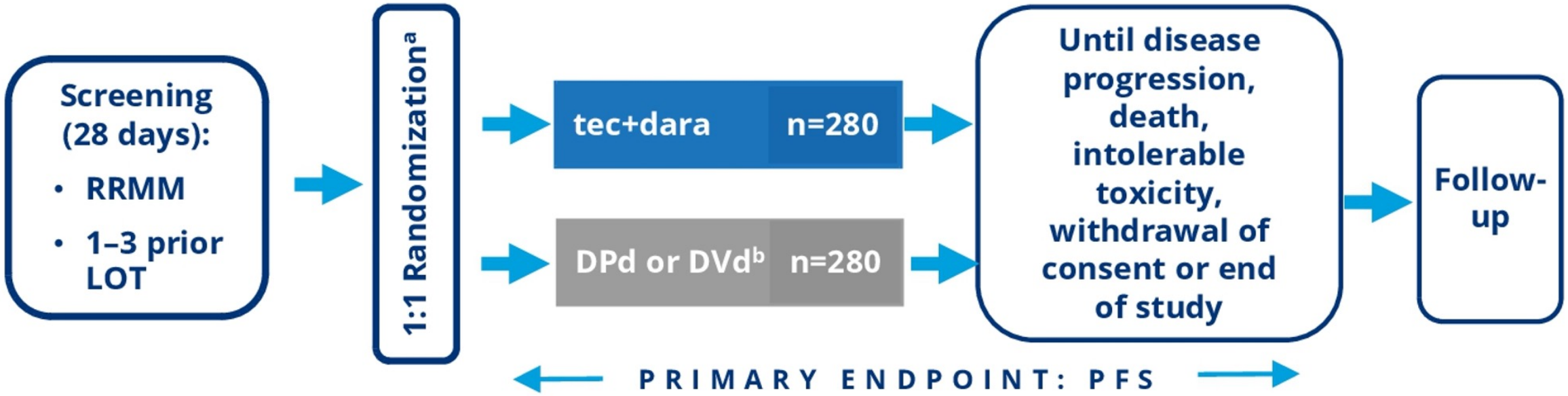
MajesTEC-1: Neurotoxic Events

Parameter	N=165
Neurotoxic event[a], n (%)	**24 (14.5)**
Headache	**14 (8.5)**
ICANS[b]	**5 (3.0)**
Dysgeusia	**2 (1.2)**
Lethargy	**2 (1.2)**
Tremor	**2 (1.2)**
Grade ≥3 events, n (%)	**1 (0.6)**
Time to onset, median (range) days	**3.0 (1–13)**
Duration, median (range) days	**7.0 (1–291)**
Received supportive measures for neurotoxic events[c], n (%)	**14 (8.5)**
Tocilizumab	**3 (1.8)**
Dexamethasone	**3 (1.8)**
Levetiracetam	**2 (1.2)**
Gabapentin	**1 (0.6)**

- The overall incidence of neurotoxic events was low
- All neurotoxic events were grade 1/2, except for 1 grade 4 seizure (in the context of bacterial meningitis during cycle 7)
- 5 patients (3.0%) had a total of 9 ICANS events
  - 7 events were concurrent with CRS
  - All ICANS events were grade 1/2 and fully resolved
- There were no treatment discontinuations or dose reductions due to neurotoxic events, including ICANS

Nooka AK et al. ASCO 2022;Abstract 8007.

MajesTEC-3 Ongoing Phase III Study Design



Key Eligibility Criteria

- Received 1-3 prior lines of therapy, including PI and lenalidomide
  - Patients with only 1 prior line of therapy must be lenalidomide refractory
- No prior BCMA-directed therapy and/or not refractory to anti-CD38 mAb

RRMM = relapsed/refractory multiple myeloma; PI = proteasome inhibitor; tec = teclistamab; dara = daratumumab; DPd = dara/pomalidomide/dexamethasone; DVd = bortezomib/dexamethasone; mAb = monoclonal antibody

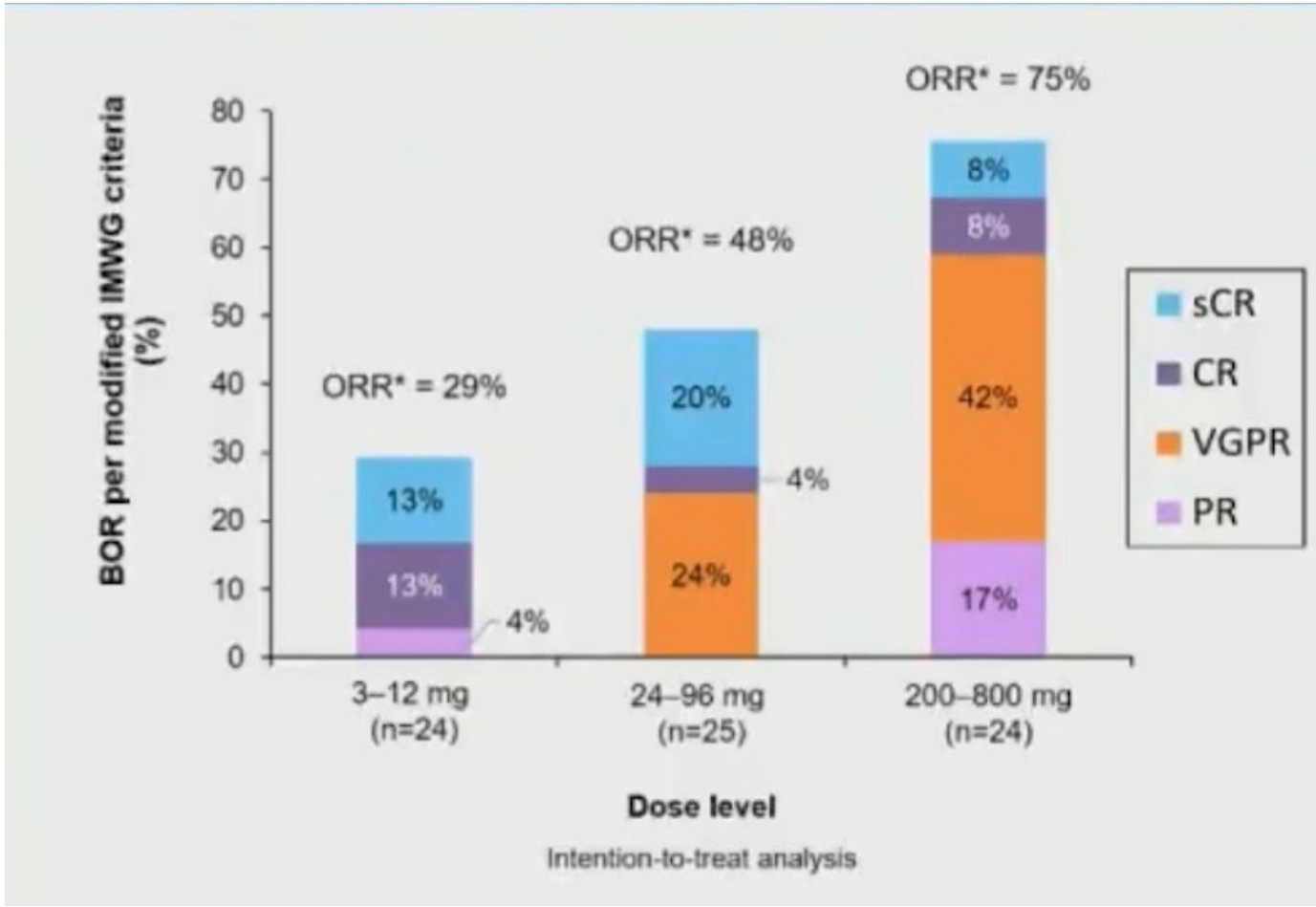
Mateos MV et al. ASCO 2022;Abstract TPS8072.

LINKER-MM1 — Early, Deep, and Durable Responses, and Low Rates of Cytokine Release Syndrome with REGN5458, a BCMA x CD3 Bispecific Antibody, in a Phase 1/2 Study in Patients with Relapsed/Refractory Multiple Myeloma

Zonder JA et al.

International Myeloma Society Meeting 2022;Abstract OAB-056.

LINKER-MM1: Phase I Efficacy with REGN5458

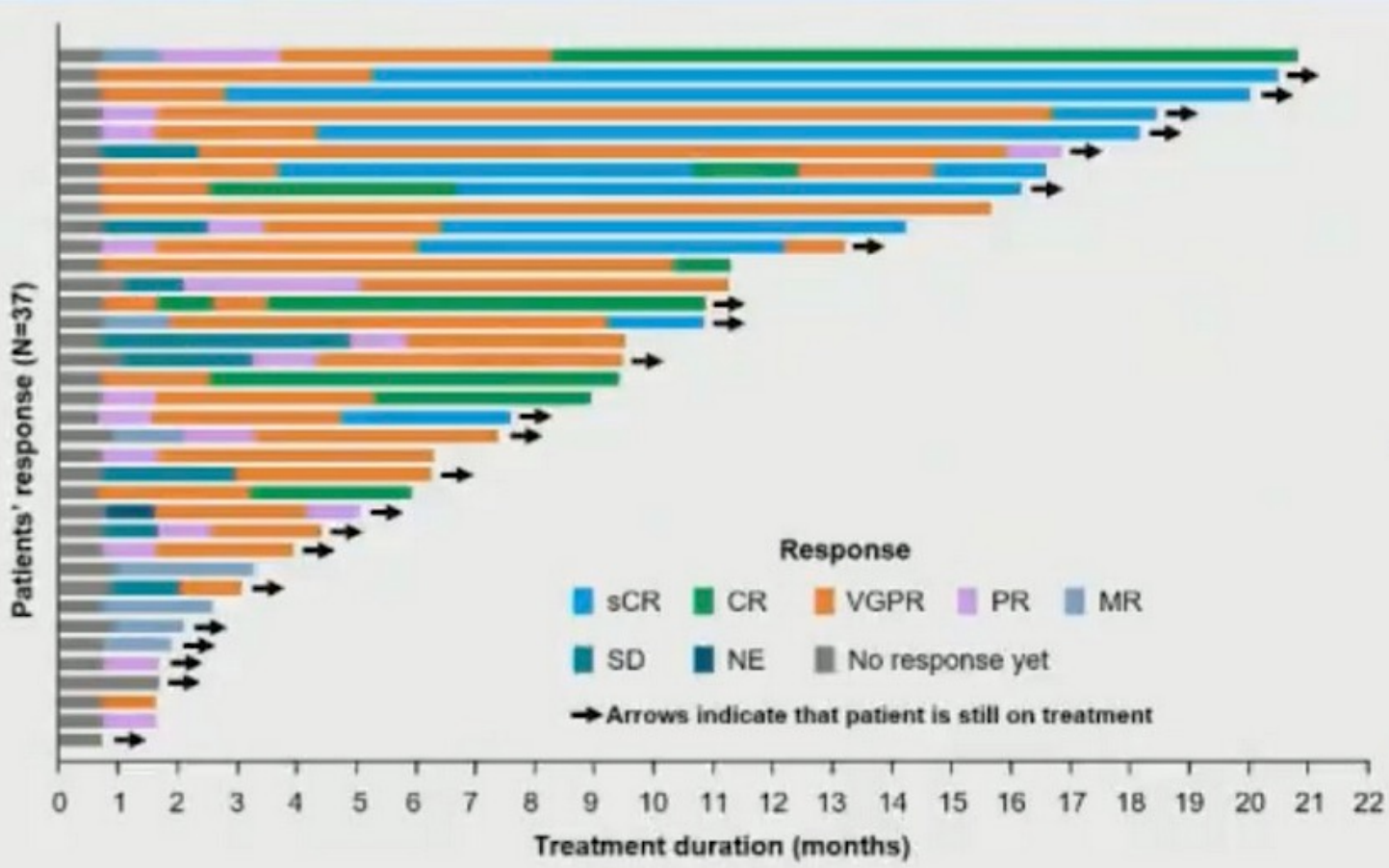


- Responses have been observed across all dose levels, with a trend for higher response rates at higher doses
  - 51% ORR among all enrolled patients*
- 75% ORR and 58% ≥VGPR with REGN5458 200–800 mg
- Among all responders, 86% achieved ≥VGPR, 43% ≥CR
- Among CR/sCR with available MRD data:
  - 4/10 MRD negative at 10^{-5}

ORR = overall response rate

Zonder JA et al. International Myeloma Society Meeting 2022;Abstract OAB-056.

LINKER-MM1: Duration of Response with REGN5458



- Responses occurred early, were durable, and deepened with time
  - Median time to response is <1 month
  - 70% of responses occurred within the first 2 months
- Estimated*,† median DOR was not reached
  - Probability† of responders being in response at 8 months was 90.2% (95% CI: 72.6, 96.7)
- The longest responses are ongoing for 19+ months at the latest data cut-off

Zonder JA et al. International Myeloma Society Meeting 2022;Abstract OAB-056.

RTP RESEARCH TO PRACTICE

LINKER-MM1: Safety with REGN5458

	Total (N=73)		
	Any grade	Grade 3	Grade 4
All treatment-emergent adverse events (TEAEs) n (%)			
Any	73 (100)	31 (42)	24 (33)
Hematologic TEAEs, *in ≥20% of patients (any grade)* **n (%)**			
Anemia	23 (32)	17 (23)	0
Lymphopenia	17 (23)	7 (10)	7 (10)
Neutropenia	17 (23)	5 (7)	11 (15)
Thrombocytopenia	15 (21)	6 (8)	4 (5)
Non-hematologic TEAEs, *in ≥20% of patients (any grade)* **n (%)**			
Fatigue	33 (45)	2 (3)	0
CRS	28 (38)	0	0
Pyrexia	26 (36)	3 (4)	0
Nausea	24 (33)	0	0
Dyspnea	19 (26)	0	0
Diarrhea	18 (25)	2 (3)	0
Back pain	18 (25)	4 (5)	0
Vomiting	18 (25)	0	0
Pneumonia	17 (23)	8 (11)	0
Chills	16 (22)	1 (1)	0
Cough	16 (22)	0	0
Headache	15 (21)	2 (3)	0

Dose-limiting toxicity (DLT)

- DLTs were reported in 2 patients
  - DL4 (24 mg) and DL6 (96 mg)
- Maximum-tolerated dose not reached

Potential ICANS events

- No Grade 3 ICANS events reported
- Grade 2 events occurred in 3 patients (4%)

Deaths

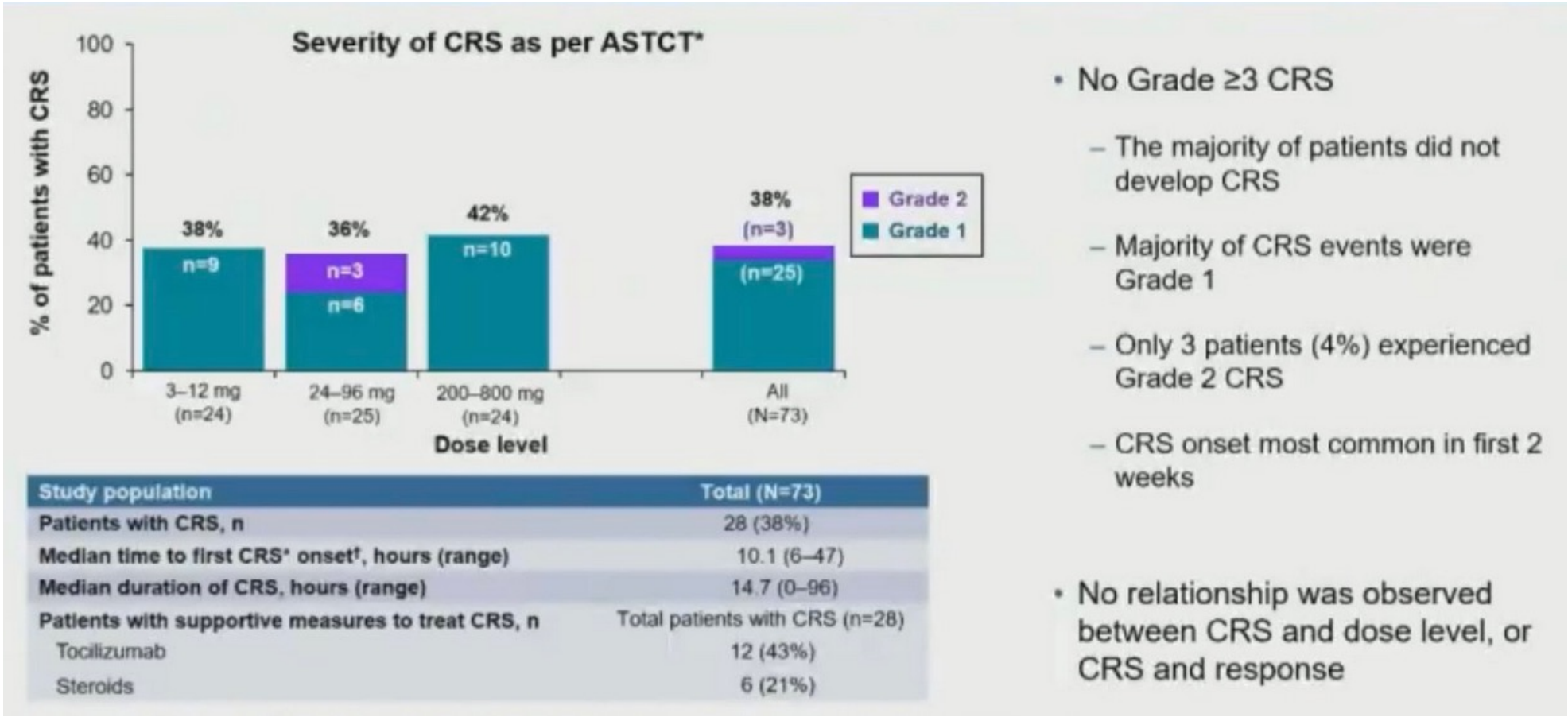
- 5 (7%) Grade 5 AEs were reported [sepsis (n=3); COVID (n=1); pneumonia (n=1)]
- All Grade 5 events were not related to study treatment

Pharmacokinetics

- REGN5458 serum concentration increased with dose, approximately dose proportionally

Zonder JA et al. International Myeloma Society Meeting 2022;Abstract OAB-056.

LINKER-MM1: Cytokine Release Syndrome with REGN5458



Study population	Total (N=73)
Patients with CRS, n	28 (38%)
Median time to first CRS* onset†, hours (range)	10.1 (6–47)
Median duration of CRS, hours (range)	14.7 (0–96)
Patients with supportive measures to treat CRS, n	Total patients with CRS (n=28)
Tocilizumab	12 (43%)
Steroids	6 (21%)

- No Grade ≥3 CRS
  - The majority of patients did not develop CRS
  - Majority of CRS events were Grade 1
  - Only 3 patients (4%) experienced Grade 2 CRS
  - CRS onset most common in first 2 weeks
- No relationship was observed between CRS and dose level, or CRS and response

ASTCT = American Society for Transplantation and Cellular Therapy

Zonder JA et al. International Myeloma Society Meeting 2022;Abstract OAB-056.

Other BCMA x CD3 Bispecific Antibodies: Summary

Therapy	Characteristics	N	Population	Safety	Response
AMG 701[2]	▪ BiTE® modified ▪ IV ▪ Weekly	82	▪ Median of 6 PL ▪ 62% triple refractory	▪ CRS 55%, G3-4: 9% ▪ No ICANS ▪ 20% cytopenias	83% ORR at the top dose level and 50% VGPR
TNB-383B[4]	▪ Triple chain anti-BCMA bispecific ▪ IV fixed doses ▪ Every 3 weeks	58	▪ Median of 6 PL ▪ 64% triple refractory ▪ 34% penta refractory	▪ CRS 45% and no G3-4 ▪ No ICANS ▪ Cytopenias 21% and infections 14%	80% (13% CR) at the dose levels 40-60 mg
Elranatamab (PF-3135[5])	▪ Bispecific ▪ SC and weekly ▪ RP2D: 1,000 µg/kg	30	▪ Median of 8 PL ▪ 87% triple refractory ▪ 23% prior BCMA-based therapy	▪ CRS 73% and no G3-4 ▪ ICANS 20% ▪ ISR 50%	83% ORR at RP2D

PL = prior lines of therapy; SC = subcutaneous; ISR = injection site reaction

1. Usmani SZ et al. *Lancet* 2021. 2. Harrison SJ et al. ASH 2020;Abstract 181. 3. Madduri D et al. ASH 2020;Abstract 291. 4. Rodriguez C et al. ASH 2020;Abstract 293.5. Bahlis NJ et al. ASCO 2021;Abstract 8006.

Content courtesy of Noopur Raje, MD

Select Ongoing Phase III Trials of BCMA-Directed Bispecific Antibodies

Study	N	Description
MajesTEC-4	1,000	Teclistamab in combination with lenalidomide versus lenalidomide alone in participants with NDMM as maintenance therapy after ASCT
MajesTEC-7	1,030	Teclistamab in combination with daratumumab SC and lenalidomide versus daratumumab SC, lenalidomide and dexamethasone in participants with NDMM who are either ineligible or not intended for ASCT as initial therapy
MajesTEC-3	630	Teclistamab in combination with daratumumab SC versus daratumumab SC, pomalidomide and dexamethasone or daratumumab SC, bortezomib and dexamethasone in RRMM
MajesTEC-9	590	Teclistamab monotherapy versus pomalidomide, bortezomib, dexamethasone (PVd) or carfilzomib, dexamethasone in participants with RRMM who have received 1 to 3 prior lines of therapy, including an anti-CD38 monoclonal antibody and lenalidomide
MagnetisMM-7	366	Elranatamab versus lenalidomide in patients with NDMM who are minimal residual disease-positive after undergoing ASCT
MagnetisMM-5	589	Elranatamab monotherapy and elranatamab + daratumumab versus daratumumab + pomalidomide + dexamethasone in participants with RRMM

NDMM = newly diagnosed multiple myeloma; ASCT = autologous stem cell transplant; RRMM = relapsed/refractory multiple myeloma

www.clinicaltrials.gov. Accessed October 2022.

Belantamab Mafodotin

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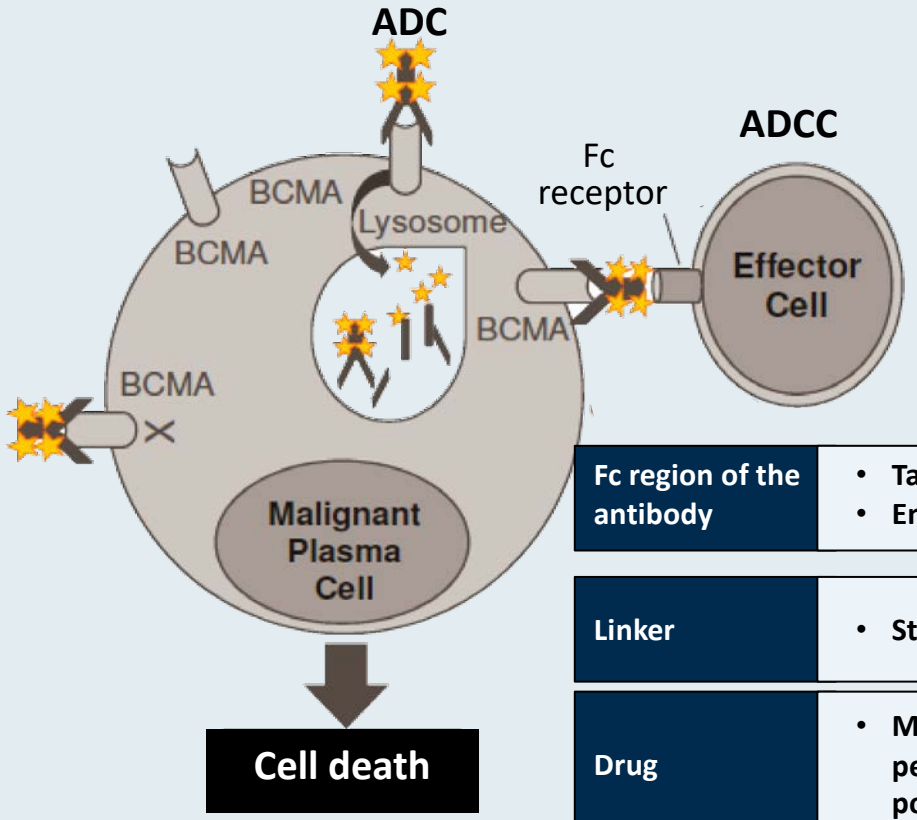
Belantamab Mafodotin: Anti-BCMA Antibody-Drug Conjugate

- B-cell maturation factor (BCMA) expression is restricted to B cells at later stages of differentiation and is required for survival of plasma cells
- BCMA is broadly expressed at variable levels on malignant plasma cells
- Belantamab mafodotin is a humanized, afucosylated IgG1 anti-BCMA antibody conjugated to microtubule disrupting agent MMAF via a stable, protease-resistant maleimidocaproyl linker



Fc region of the antibody	• **Target specific** • **Enhanced ADCC**
Linker	• **Stable in circulation**
Drug	• **MMAF (non cell permeable, highly potent auristatin)**

Mechanisms of action:
- ADC mechanism
- ADCC mechanism
- Immunogenic cell death
- BCMA receptor signaling inhibition

ADC = antibody-drug conjugate; ADCC = antibody-dependent cell-mediated cytotoxicity

Tai YT et al. *Blood* 2014;123(20):3128-38.

Safety and Efficacy of Belantamab Mafodotin in Combination with Rd in Newly Diagnosed, Transplant Ineligible Multiple Myeloma Patients: A Phase 1/2 Study by the Hellenic Society of Hematology

Terpos E et al.

EHA 2022;Abstract S178.

BelaRd: Results Summary from a Phase I/II Study of Belantamab Mafodotin with Lenalidomide/Dexamethasone for Newly Diagnosed, Transplant-Ineligible MM

Clinical response, n	All patients	Cohort 1 Belamaf 2.5 mg/kg	Cohort 2 Belamaf 1.9 mg/kg	Cohort 3 Belamaf 1.4 mg/kg
Evaluable patients	28	9	9	10
Overall response rate	27 (96.4%)	9 (100.0%)	9 (100.0%)	9 (90%)
CR	4 (14.3%)	2 (22.2%)	2 (22.2%)	—
VGPR	10 (35.7%)	4 (44.4%)	2 (22.2%)	4 (40%)
Select Grade 3/4 AEs	**N = 36**	**n = 12**	**n = 12**	**n = 12**
Leukopenia	2 (5.6%)	2 (16.7%)	—	—
Neutropenia	2 (5.6%)	1 (8.3%)	—	1 (8.3%)
Keratopathy	—	—	—	—
Ocular symptoms	—	—	—	—
Visual acuity reduced	5 (13.9%)	3 (25%)	1 (8.3%)	—

CR = complete response; VGPR = very good partial response; AEs = adverse events

Terpos E et al. EHA 2022;Abstract S178.

DREAMM-9: Phase I Study of Belantamab Mafodotin plus Standard of Care in Patients with Transplant-Ineligible Newly Diagnosed Multiple Myeloma

Usmani SZ et al.

EHA 2022;Abstract P942.

DREAMM-9: Efficacy and Safety Summary with Belantamab Mafodotin and Standard Therapy (VRd) for Newly Diagnosed MM

Clinical response, n	Cohort 1 Belamaf 1.9 mg/kg q3 or 4wk, every cycle of VRd n = 12	Cohort 2 Belamaf 1.4 mg/kg q6 or 8wk, every other cycle of VRd n = 12	Cohort 3 Belamaf 1.9 mg/kg q6 or 8wk, every other cycle of VRd n = 12	Cohort 4 Belamaf 1.0 mg/kg q3 or 4wk, every cycle of VRd n = 15	Cohort 5 Belamaf 1.4 mg/kg q3 or 4wk, every cycle of VRd n = 13
ORR	12 (100%)	11 (92%)	12 (100%)	12 (80%)	12 (92%)
sCR	6 (50%)	1 (8%)	0	3 (20%)	2 (15%)
CR	3 (25%)	0	2 (17%)	2 (13%)	1 (8%)
VGPR	3 (25%)	9 (75%)	7 (58%)	5 (33%)	8 (62%)
Adverse events	**n = 12**	**n = 12**	**n = 12**	**n = 14**	**n = 13**
Grade 3/4 corneal exam findings	9 (75%)	4 (33%)	3 (25%)	7 (50%)	5 (39%)
Grade 3/4 visual acuity changes	10 (83%)	7 (58%)	4 (33%)	3 (21%)	6 (46%)

VRd = bortezomib/lenalidomide/dexamethasone; ORR = overall response rate; CR = complete response; sCR = stringent CR; VGPR = very good partial response

Usmani SZ et al. EHA 2022;Abstract P942.

2022 ASCO® ANNUAL MEETING

Abstract 8019

Synergistic Effects of Low-dose Belantamab Mafodotin in Combination with a Gamma-Secretase Inhibitor (Nirogacestat) in Patients with Relapsed/Refractory Multiple Myeloma (RRMM): DREAMM-5 Study

Poster No. 443

Speaker: Sagar Lonial, MD, FACP

Acknowledgments

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Longer Term Outcomes With Single-Agent Belantamab Mafodotin in Patients With Relapsed or Refractory Multiple Myeloma: 13-Month Follow-Up From the Pivotal DREAMM-2 Study

Sagar Lonial, MD [1]; Hans C. Lee, MD[2]; Ashraf Badros, MD [3]; Suzanne Trudel, MD[4]; Ajay K. Nooka, MD [1]; Ajai Chari, MD [5]; Al-Ola Abdallah, MD[6]; Natalie Callander, MD[7]; Douglas Sborov, MD[8]; Attaya Suvannasankha, MD[9]; Katja Weisel, MD[10]; Peter M. Voorhees, MD[11]; Lynsey Womersley, MSc[12]; January Baron, MS[13]; Trisha Piontek, BSN[13]; Eric Lewis, MD[14]; Joanna Opalinska, MD[13]; Ira Gupta, MD[13]; and Adam D. Cohen, MD[15]

Cancer 2021;127(22):4198-212.

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DREAMM-2: Single-Agent Belantamab Mafodotin Efficacy Outcomes

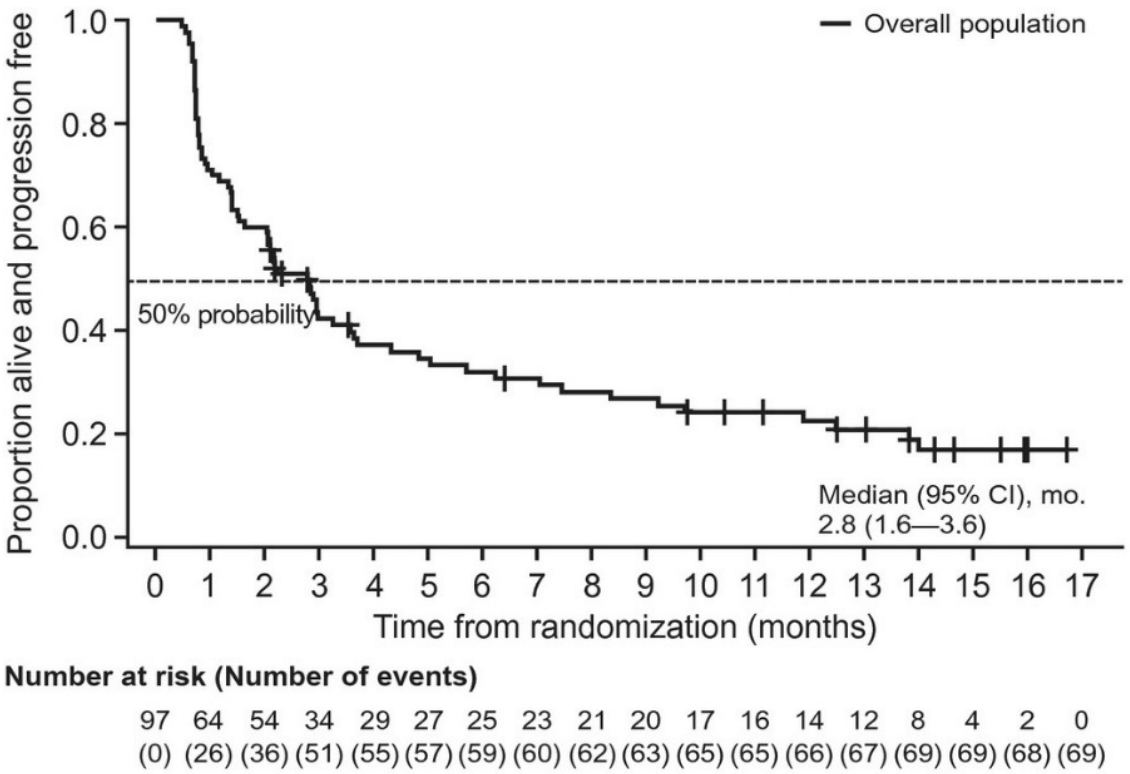
	Patients with 3-6 prior therapies (n = 47)	Patients with ≥7 prior therapies (n = 50)
ORR, % (97.5% CI)	32 (21.7-43.6)	30 (16.5-46.6)
Median DoR (95% CI estimates), months	11.0 (4.2-NR)	13.1 (4.0-NR)
Probability of DoR ≥6 months, % (95% CI estimates)	63 (31-83)	73 (44-89)
Median PFS (95% CI estimates), months	2.8 (1.6-3.6)	2.2 (1.2-3.6)
Probability of PFS at 6 months, % (95% CI estimates)	35 (20-50)	30 (17-43)

ORR = overall response rate; CI = confidence interval; DoR = duration of response; NR = not reached; PFS = progression-free survival

Lonial S et al. *Cancer* 2021;127(22):4198-212; ASH 2020;Abstract 1417.

DREAMM-2: Longitudinal Outcomes

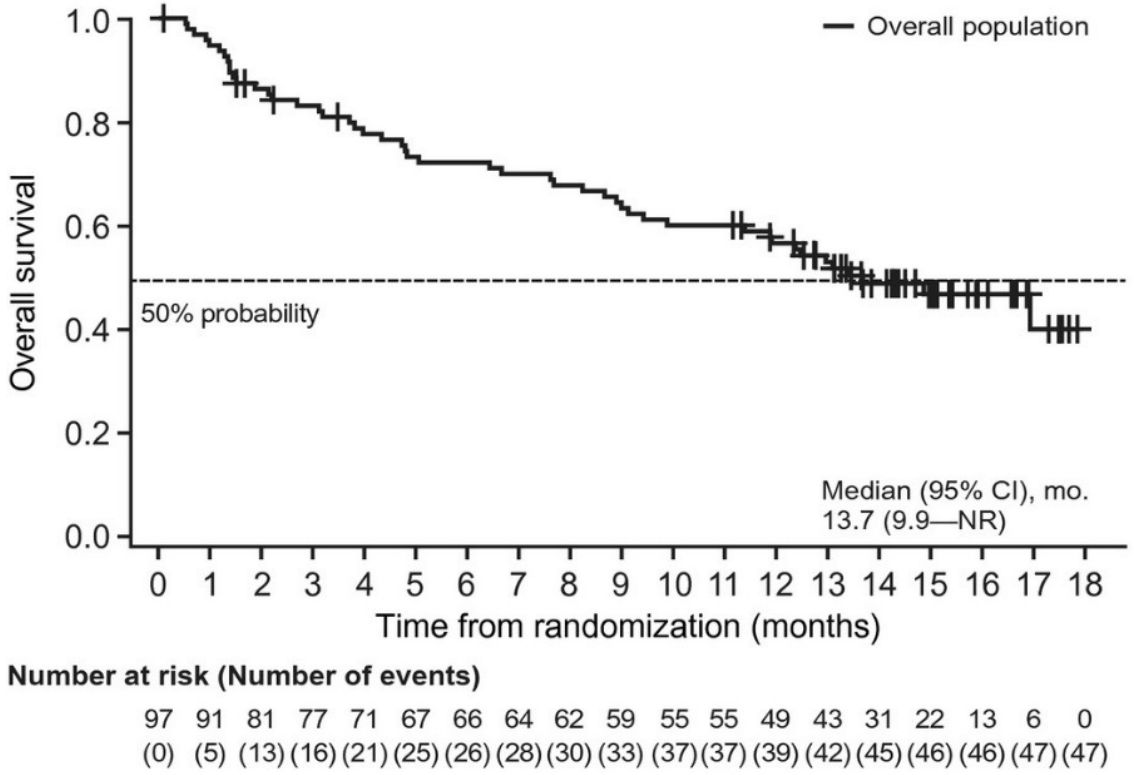
Progression-Free Survival



Number at risk (Number of events)

97	64	54	34	29	27	25	23	21	20	17	16	14	12	8	4	2	0
(0)	(26)	(36)	(51)	(55)	(57)	(59)	(60)	(62)	(63)	(65)	(65)	(66)	(67)	(69)	(69)	(68)	(69)

Overall Survival (OS)



Number at risk (Number of events)

97	91	81	77	71	67	66	64	62	59	55	55	49	43	31	22	13	6	0
(0)	(5)	(13)	(16)	(21)	(25)	(26)	(28)	(30)	(33)	(37)	(37)	(39)	(42)	(45)	(46)	(46)	(47)	(47)

Expected median OS in triple class-refractory myeloma: 8.6 months

Lonial S et al. *Cancer* 2021;127(22):4198-212.

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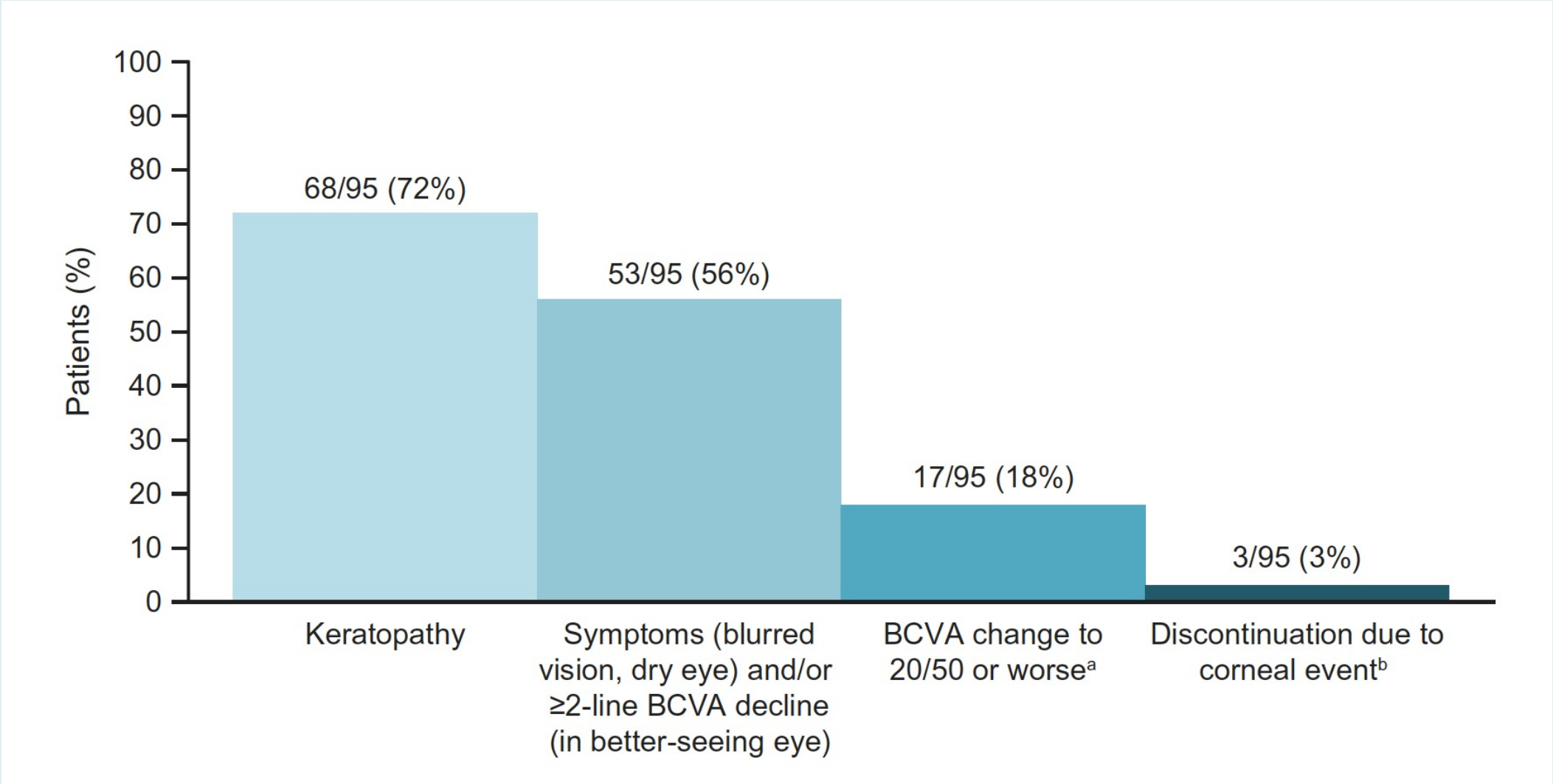
DREAMM-2: Frequency of Corneal and Vision-Related Events



BCVA = best corrected visual acuity

Lonial S et al. *Cancer* 2021;127(22):4198-212.

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Corneal Events: Mitigation Strategy

- Not corticosteroid eye drops — not beneficial for prophylaxis or treatment
- Lubricating eye drops ≥4 times per day throughout duration of the treatment period
- No contact lens use during treatment period
- Eye examination with BCVA assessment and slit lamp examination with fluorescein staining prior to each planned dose
- Dose delays and dose reductions per recommendations

Lonial S et al. *Blood Cancer J* 2021;11:103.

Belantamab Mafodotin Dose Modifications for Corneal Toxicity

	Exam findings per KVA scale	Recommended dose modifications
Grade 1	Corneal exam: Mild superficial keratopathy	Continue treatment at the current dose
	Change in BCVA: Decline from baseline of 1 line on the Snellen visual acuity chart	
Grade 2	Corneal exam: Moderate superficial keratopathy	Withhold treatment until improvement in both corneal examination findings and changes in BCVA to Grade 1 or better, and resume at same dose
	Change in BCVA: Decline from baseline of 2 or 3 lines (and Snellen visual acuity not worse than 20/200)	
Grade 3	Corneal exam: Severe superficial keratopathy	Withhold treatment until improvement in both corneal examination findings and changes in BCVA to Grade 1 or better, and resume at a reduced dose
	Change in BCVA: Decline from baseline by more than 3 lines (and Snellen visual acuity not worse than 20/200)	
Grade 4	Corneal exam: Corneal epithelial defect	Consider treatment discontinuation. Based on a benefit-risk ratio assessment, if continuing belantamab mafodotin is considered, treatment may be resumed at a reduced dose after the event has improved to Grade 1 or better
	Change in BCVA: Snellen visual acuity worse than 20/200	

Farooq AV et al. *Ophthalmol Ther* 2020;9(4):889-911; Lonial S et al. *Blood Cancer J* 2021;11:103.

Summary of Select Clinical Trials of Belantamab Mafodotin (Belamaf) Combination Approaches for R/R Multiple Myeloma

Trial	Characteristics	ORR	Safety
DREAMM-6 (NCT03544281)	• Phase I/II • Arm A: Belamaf + len/dex (n = 45) • Arm B: Belamaf + bor/dex (n = 18)	• Arm A: Highest ORR of 75% with the 1.9 mg/kg q4wk dose • Arm B: 78%	Arm A Grade ≥3 AEs: • Thrombocytopenia – 3 (7%) • Keratopathy – 15 (33%) Arm B Grade ≥3 AEs: • Thrombocytopenia – 12 (67%) • Keratopathy – 11 (61%)
DREAMM-4 (NCT03848845)	▪ Phase I/II (N = 34) ▪ Belamaf + pembrolizumab ▪ Dose escalation: Belamaf 2.5 mg/kg and 3.4 mg/kg	• 47% at RP2D of 2.5 mg/kg	All grades: • Thrombocytopenia – 12 (35%) • Keratopathy – 26 (76%)
ALGONQUIN (NCT03715478)	▪ Phase I/II (N = 56) ▪ Belamaf + pom/dex	• ≥PR/VGPR 89%/72% across all dosing cohorts	Grade ≥3 TEAEs: • Thrombocytopenia – 19 (34%) • Keratopathy – 39 (70%)

ORR = overall response rate; len = lenalidomide; dex = dexamethasone; AEs = adverse events; RP2D = recommended Phase II dose; pom = pomalidomide; PR = partial response; VGPR = very good partial response; TEAEs = treatment-emergent AEs

Popat R et al. ASH 2020;Abstract 1419; Quach H et al. ASCO 2022;Abstract 8017; Lonial S et al. SOHO 2022;Abstract MM-459; Suvannasankha A et al. EHA 2022;Abstract P940; Trudel S et al. ASH 2021;Abstract 2736.

Ongoing Phase III Trials of Belantamab Mafodotin for R/R MM

Study	N	Setting	Treatment arms	Estimated primary completion
DREAMM-3 (NCT04162210)	380	≥2 prior lines of treatment, including ≥2 consecutive cycles of both lenalidomide and a proteasome inhibitor (separately or in combination)	• Belantamab mafodotin • Pomalidomide/low-dose dexamethasone	June 2022
DREAMM-8 (NCT04484623)	450	≥1 prior line of treatment, including a lenalidomide-containing regimen	• Belantamab mafodotin + pomalidomide/dexamethasone • Bortezomib + pomalidomide/dexamethasone	March 2023
DREAMM-7 (NCT04246047)	575	≥1 prior line of treatment	• Belantamab mafodotin + bortezomib/dexamethasone • Daratumumab + bortezomib/dexamethasone	April 2023

www.clinicaltrials.gov. Accessed August 2022.

RTP RESEARCH TO PRACTICE

Emerging Role of Antibody-Drug Conjugates in the Management of Non-Small Cell Lung Cancer

A CME/MOC-Accredited Virtual Event

Thursday, December 1, 2022
5:00 PM – 6:00 PM ET

Faculty

Alexander I Spira, MD, PhD
Helena Yu, MD

Moderator

Neil Love, MD

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Thank you for joining us!

CME and MOC credit information will be emailed to each participant within 5 business days.

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