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# MEETING SUMMARY AUTUMN 2021 MEETINGS IN MULTIPLE MYELOMA IMW | SOHO | SOHO ITALY

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HIGHLIGHTS FROM LYMPHOMA & MYELOMA CONNECT NOVEMBER 2021



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**Dr. Claudio Cerchione** has no conflicts of interest to declare.

# NEWLY DIAGNOSED MULTIPLE MYELOMA

OS AND PFS BY TREATMENT DURATION WITH DARATUMUMAB + LENALIDOMIDE / DEXAMETHASONE IN TRANSPLANT-INELIGIBLE NDMM: PHASE 3 MAIA STUDY

> Moreau P, et al. IMW 2021. Abstract #OAB-001. Oral presentation

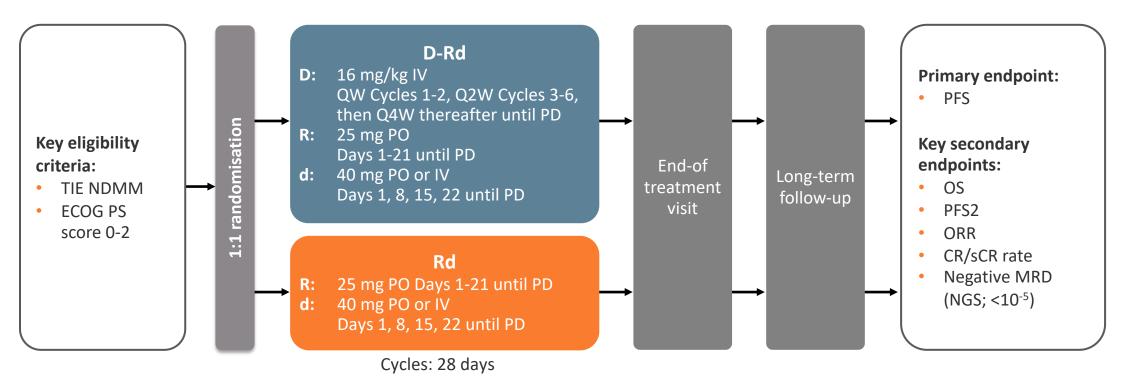
NDMM, newly diagnosed multiple myeloma; OS, overall survival; PFS, progression-free survival

# **STUDY DESIGN**

## MAIA: A MULTICENTRE, RANDOMISED, OPEN-LABEL PHASE 3 STUDY



• D-Rd versus Rd alone in transplant-ineligible patients with NDMM



 Updated efficacy and safety data after almost 5 years of median follow-up from the prespecified interim OS analysis

CR, complete response; CrCl, creatinine clearance; d, dexamethasone; D, daratumumab; ECOG PS, Eastern Cooperative Oncology Group performance status; IV, intravenous; MRD, minimal residual disease; NDMM, newly diagnosed multiple myeloma; NGS, next-generation sequencing; ORR, overall response rate; OS, overall survival; PD, progressive disease; PFS, progression-free survival; PFS2, PFS on next line of therapy; PO, oral; QW, once weekly; Q2W, once every 2 weeks; Q4W, once every 4 weeks; R, lenalidomide; sCR, stringent CR; TIE, transplant-ineligible Moreau P, et al. IMW 2021. Abstract #OAB-001; Clinicaltrials.gov NCT02252172

# RESULTS



### Efficacy

- At a 56.2-month median follow-up, a D-Rd vs Rd showed a significant improvement in OS and clinically meaningful improvement in PFS
- Adding D to Rd led to a **32% reduction in the risk of death** 
  - Median OS was not reached in either arm (HR 0.68; 95% CI, 0.53-0.86; p=0.0013)
  - Estimated 5-year OS: 66.3% with D-Rd and 53.1% with Rd
- Median PFS was not reached with D-Rd vs 34.4 months with Rd (HR 0.53; 95% CI, 0.43-0.66; p=0.2480)
  - D-Rd showed a greater PFS benefit vs Rd among patients treated for ≥18 months than those treated for shorter durations

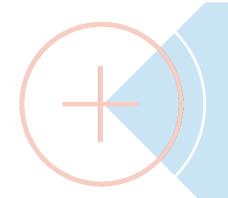
## Safety

- No new safety concerns with longer follow-up
- Most common grade 3/4 treatment-emergent adverse event: neutropenia (D-Rd, 54.1%; Rd, 37.0%)

# AUTHOR'S CONCLUSIONS AND CLINICAL INTERPRETATION



After ~5 years of follow-up, D-Rd vs Rd showed a clinically meaningful PFS and significant OS improvement



The favourable benefit-risk profile **supports the frontline use of D-Rd** in transplant-ineligible patients with NDMM

D, daratumumab; d, dexamethasone; NDMM, newly diagnosed multiple myeloma; OS, overall survival; PFS, progression-free survival; R, lenalidomide Moreau P, et al. IMW 2021. Abstract #OAB-001

# DARA-KRD, ASCT AND MRD RESPONSE-ADAPTED TREATMENT DURATION AND CESSATION IN NDMM

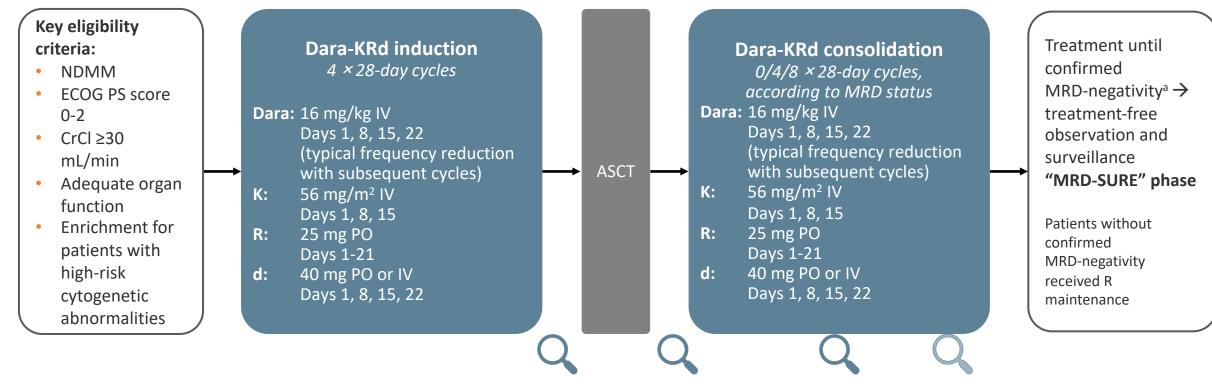
## Costa L, et al. IMW 2021. Abstract #OAB-051. Oral presentation

ASCT, autologous transplantation; Dara-KRd, daratumumab, carfilzomib, lenalidomide, dexamethasone; MRD, minimal residual disease; NDMM, newly diagnosed multiple myeloma

# **STUDY DESIGN**



10



MRD was evaluated by NGS at end of induction, post-ASCT, and during each 4-cycle block of Dara-KRd consolidation

## • Primary endpoint: MRD negativity

#### <sup>a</sup>2 consecutive MRD <10<sup>-5</sup>

ASCT, autologous transplantation; CrCl, creatinine clearance; d, dexamethasone; Dara, daratumumab; Dara-KRd, daratumumab, carfilzomib, lenalidomide, dexamethasone; ECOG PS, Eastern Cooperative Oncology Group performance status; IV, intravenous; K, carfilzomib; MRD, minimal residual disease; NDMM, newly diagnosed multiple myeloma; NGS, next-generation sequencing; PO, oral; R, lenalidomide Costa L, et al. IMW 2021. Abstract #OAB-051

# RESULTS



### Efficacy

- 123 patients included
  - 37% had 1 and 20% had
     2+ high-risk cytogenetic abnormalities
  - Median age was 60 years (36-79)
- Median follow-up was 25.1 months

%	Total	0 HRCA	1 HRCA	2+ HRCA
MRD negative	80	78	82	79
Post induction	38			
Post ASCT	65			
Post Dara-KRd consolidation	80			
Confirmed MRD negative, entered MRD-SURE	71			
MRD <10 <sup>-6</sup>	65	62	73	58

### **Safety**

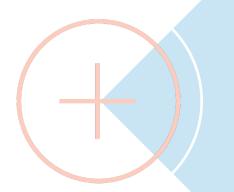
• Most common severe adverse events were **pneumonia** and **venous thromboembolism** 

ASCT, autologous transplantation; Dara-KRd, daratumumab, carfilzomib, lenalidomide, dexamethasone; HRCA, high-risk cytogenetic abnormalities; MRD, minimal residual disease Costa L, et al. IMW 2021. Abstract #OAB-051

# AUTHOR'S CONCLUSIONS AND CLINICAL INTERPRETATION



Monoclonal antibody-based quadruplet therapy, ASCT and MRD response-adapted consolidation therapy leads to **high rate of MRD-negativity in NDMM** 



For most patients with NDMM, **MRD**directed adaptive treatment offers the prospect of confirmed deep responses and investigation of **MRD surveillance as an** alternative to indefinite maintenance

ASCT, autologous transplantation; MRD, minimal residual disease; NDMM, newly diagnosed multiple myeloma Costa L, et al. IMW 2021. Abstract #OAB-051

# RELAPSED/REFRACTORY MULTIPLE MYELOMA

# UPDATED RESULTS FROM CARTITUDE-1: CILTA-CEL, A BCMA-DIRECTED CAR-T THERAPY, IN RRMM

## Jagannath S, et al. IMW 2021. Abstract #OAB-024. Oral presentation

BCMA, B-cell maturation antigen; CAR-T, chimeric antigen receptor T-cell; cilta-cel, ciltacabtagene autoleucel; RRMM, relapsed/refractory multiple myeloma

# **BACKGROUND AND STUDY DESIGN**



## CARTITUDE-1: PHASE 1B/2 STUDY OF CILTA-CEL IN RRMM

- Ciltacabtagene autoleucel (cilta-cel) is a CAR-T cell therapy with two BCMA-targeting single-domain antibodies
  - Eligible patients received ≥3 prior regimens
     (or PI and IMiD refractory) and received an anti-CD38 antibody
- CARTITUDE-1 primary objectives:
  - Phase 1b: safety and RP2D
  - Phase 2: efficacy
- Results after median follow-up of 18 months
- Heavily pre-treated patients (N=97)
  - Median of 6 prior lines of therapy



BCMA, B-cell maturation antigen; CAR, chimeric antigen receptor; cilta-cel, ciltacabtagene autoleucel; Cy, cyclophosphamide; Flu, fludarabine; IMiD, immunomodulatory drug; MM, multiple myeloma; PD, pharmacodynamic; PI, proteasome inhibitor; PK, pharmacokinetic; RP2D, recommended phase 2 dose; RRMM, relapsed/refractory multiple myeloma Jagannath S, et al. IMW 2021. Abstract #OAB-024; Clinicaltrials.gov NCT03548207

# RESULTS





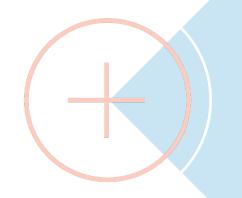
### Safety

- Most common grade 3/4 haematologic AEs: neutropenia (95%), anaemia (68%), leukopenia (61%)
- 95% of patients had CRS (4% grade 3/4) and resolved in all but one (grade 5 CRS/haemophagocytic lymphohistiocytosis)
  - Median time to onset was 7 days and the median duration was 4 days
- Neurotoxicity occurred in 21% of patients (10% grade ≥3)
- 21 deaths on study; 10 due to disease progression, 6 treatment-related, 5 due to AEs unrelated to treatment

AE, adverse event; CR, complete response; CRS, cytokine release syndrome; MRD, minimal residual disease; ORR, overall response rate; OS, overall survival; PFS, progression-free survival; PR, partial response; sCR, stringent complete response; VGPR, very good PR Jagannath S, et al. IMW 2021. Abstract #OAB-024

# AUTHOR'S CONCLUSIONS AND CLINICAL INTERPRETATION





A single infusion of cilta-cel yielded early, deep, and durable responses in heavily pretreated patients with RRMM, with manageable safety



Cilta-cel is being investigated in earlier lines of therapy and in outpatient settings

Cilta-cel, ciltacabtagene autoleucel; RRMM, relapsed/refractory multiple myeloma Jagannath S, et al. IMW 2021. Abstract #OAB-024

# IBER IN COMBINATION WITH DEX AND DARA, BORT, CFZ IN PATIENTS WITH RRMM

Lonial S, et al. IMW 2021. Abstract #OAB-013. Oral presentation

BORT, bortezomib; CFZ, carfilzomib; DARA, daratumumab; DEX, dexamethasone; Iber, iberdomide; RRMM, relapsed/refractory multiple myeloma

## **STUDY DESIGN**



## CC-220-MM-001: PHASE 1/2 STUDY OF IberDd VS IberVd VS IberKd IN RRMM

- Study evaluating the MTD, RP2D, safety, and preliminary efficacy of the oral CELMoD lber
- Eligibility
  - - ≥2 (IberDd and IberKd cohorts) or ≥1 prior regimens (IberVd cohort), containing lenalidomide or pomalidomide, and a proteasome inhibitor
  - Progression ≤60 days from last therapy
- Treatment

### IberDd cohort - 28-day cycles

Escalating doses of Iber on Day 1-21
Weekly DARA at Cycle 1-2; biweekly DARA at Cycle 3-6; DARA on Day 1 at Cycle ≥7

• Weekly DEX

### IberKd cohort - 28-day cycles

Escalating doses of Iber on Day 1-21
Weekly CFZ
Weekly DEX

### IberVd cohort - 21-day cycles

Escalating doses of Iber on Day 1-14
BORT twice a week for the first 2 weeks of Cycle 1-8, and weekly for the first 2 weeks of Cycle ≥9
Weekly DEX

BORT, bortezomib; CELMoD, cereblon E3 ligase modulator; CFZ, carfilzomib; DARA, daratumumab; DEX, dexamethasone; Iber, iberdomide ; IberDd, iberdomide + daratumumab + dexamethasone; IberVd, iberdomide + bortezomib + dexamethasone; IberKd, iberdomide + carfilzomib + dexamethasone; MTD, maximum tolerated dose; RP2D, recommended phase 2 dose; RRMM, relapsed/refractory multiple myeloma

## RESULTS



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	IberDd	IberVd	IberKd	Efficacy	IberDd	IberVd	lberKd
Patients treated, n	43	25	9	ORR, %	46	56	50
Median age, years	67	64	61	≥VGPR, %	24	28	38
Median time since diagnosis, years	7.4	7.1	6.7	Median time to response, weeks	4.1	3.6	4.1
Extramedullary plasmacytomas, n (%)	7 (16)	4 (16)	2 (22)	Median DoR, weeks	NR	35.7	NR
Median follow-up, months	4.17	4.86	5.03	RP2D of Iber	1.6	NE	NE
Patients on treatment, n (%)	22 (51)	6 (24)	5 (56)				
Median number of cycles received	4	6	5				

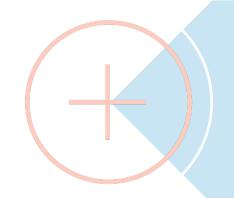
#### Haematological grade 3/4 TEAEs of interest

- IberDd: neutropenia (67%), leukopenia (23%), anaemia (21%), and febrile neutropenia (5%)
- IberVd: neutropenia (28%) and thrombocytopenia (24%)
- IberKd: lymphopenia (44%) and neutropenia (33%)
- Neutropenia was manageable with G-CSF

DoR, duration of response; G-CSF, granulocyte colony-stimulating factor; Iber, iberdomide; IberDd, iberdomide + daratumumab + dexamethasone; IberVd, iberdomide + bortezomib + dexamethasone; IberKd, iberdomide + carfilzomib + dexamethasone; NE, not evaluated; NR, not reached; ORR, overall response rate; RP2D, recommended phase 2 dose; TEAE, treatment-emergent adverse event; VGPR, very good partial response Lonial S, et al. IMW 2021. Abstract #OAB-013

# AUTHOR'S CONCLUSIONS AND CLINICAL INTERPRETATION





IberDd, IberVd, and IberKd showed a tolerable safety profile and promising efficacy in heavily pretreated RRMM

These results **support further development** of Iber-based regimens in MM, including Phase 3 combination studies

Iber, iberdomide; IberDd, iberdomide + daratumumab + dexamethasone; IberVd, iberdomide + bortezomib + dexamethasone; IberKd, iberdomide + carfilzomib + dexamethasone; MM, multiple myeloma; RRMM, relapsed/refractory multiple myeloma Lonial S, et al. IMW 2021. Abstract #OAB-013

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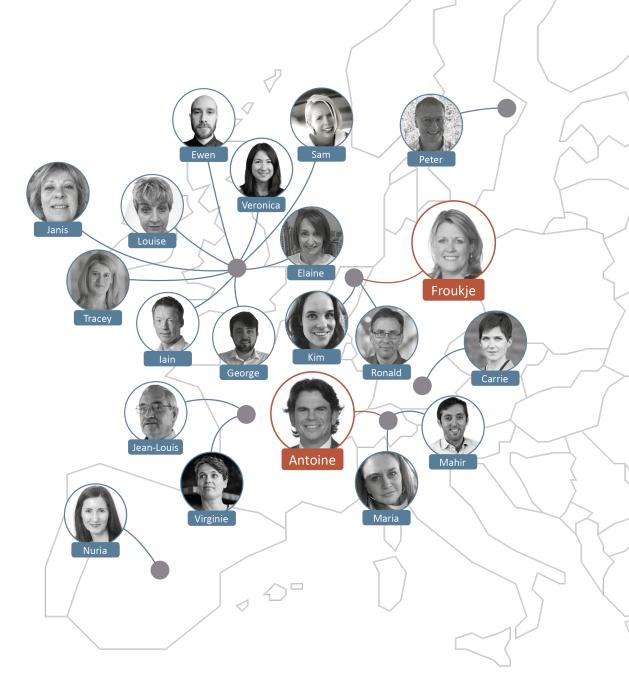
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