

# Updated Results of a Phase 1 First-in-Human Study of Cemsidomide (CFT7455), a Novel MonoDAC<sup>®</sup> Degradar, with Dexamethasone in Patients with Relapsed/Refractory Multiple Myeloma

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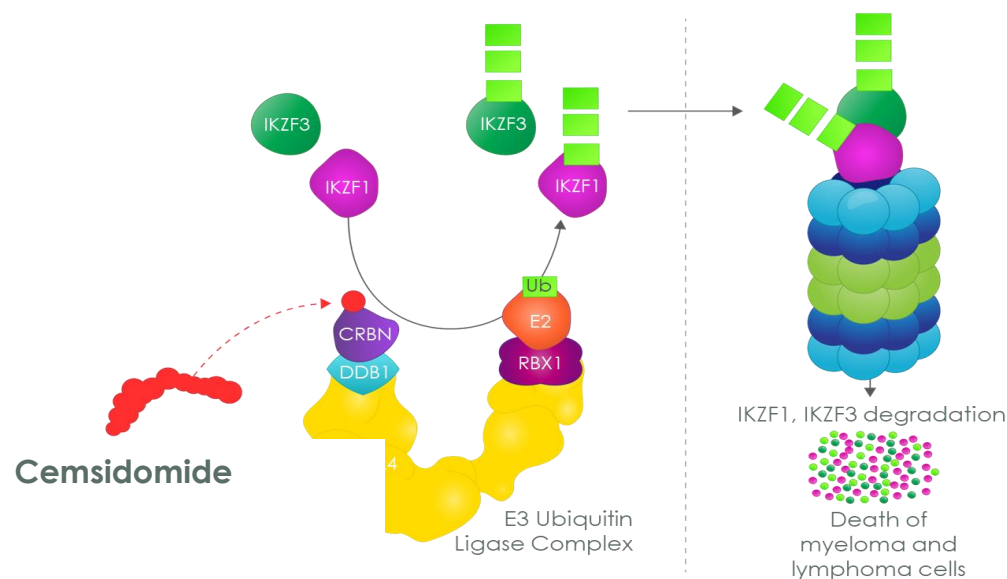
# Disclosures

- Research funding: BMS, Janssen, Arcellx, Carsgen, Sanofi, Caribou, Gracell, Menarini, C4 Therapeutics
- Advisory Board: BMS, Janssen, Arcellx, Sanofi, GSK, Menarini, Genentech, Karyopharm, Pfizer, Kite, AstraZeneca
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# Cemsidomide (CFT7455) Background

- Cemsidomide is a novel, potent, cereblon-based IKZF1/3 MonoDAC<sup>®</sup> degrader with:
  - Catalytic activity enabling rapid and deep target degradation
  - High binding affinity to overcome resistance due to low cereblon levels
  - Pharmacologic profile to promote tumor residence time and sustained IKZF1/3 degradation

## Mechanism of Action for Cemsidomide



- Cemsidomide binds to cereblon to facilitate the recruitment and ubiquitination of IKZF1 and IKZF3, leading to the proteasomal degradation of both proteins

## IKZF1/3 Degradation Induces:

- Multiple myeloma cell death
- Stimulation of the immune system
  - Activates fully differentiated T-cells, preventing T-cell exhaustion
  - Promotes secretion of key immune stimulating cytokines (e.g., IL-2)
- On-target neutropenia
  - Disrupts hematopoietic stem cell differentiation

IKZF 1/3, Ikaros zinc finger protein 1/3

# CFT7455-1101 Study Design: Arm B2 in RRMM

- Open-label, multicenter, phase 1/2 clinical trial with dose escalation and expansion phases (NCT04756726)
- Dose escalation phase, with a starting oral dose of 50 µg MWF 14 days on/14 days off, following a Bayesian logistic regression model until determination of the MTD and/or RP2D
  - Escalation cohorts enrolled 3-6 patients; following determination of safety by SRC, additional patients were eligible to enroll at the dose deemed safe
    - G-CSF and transfusions were not allowed in cycle 1 for dose escalation subjects
    - Once a dose was declared safe, additional patients at each dose level were allowed G-CSF use at any timepoint

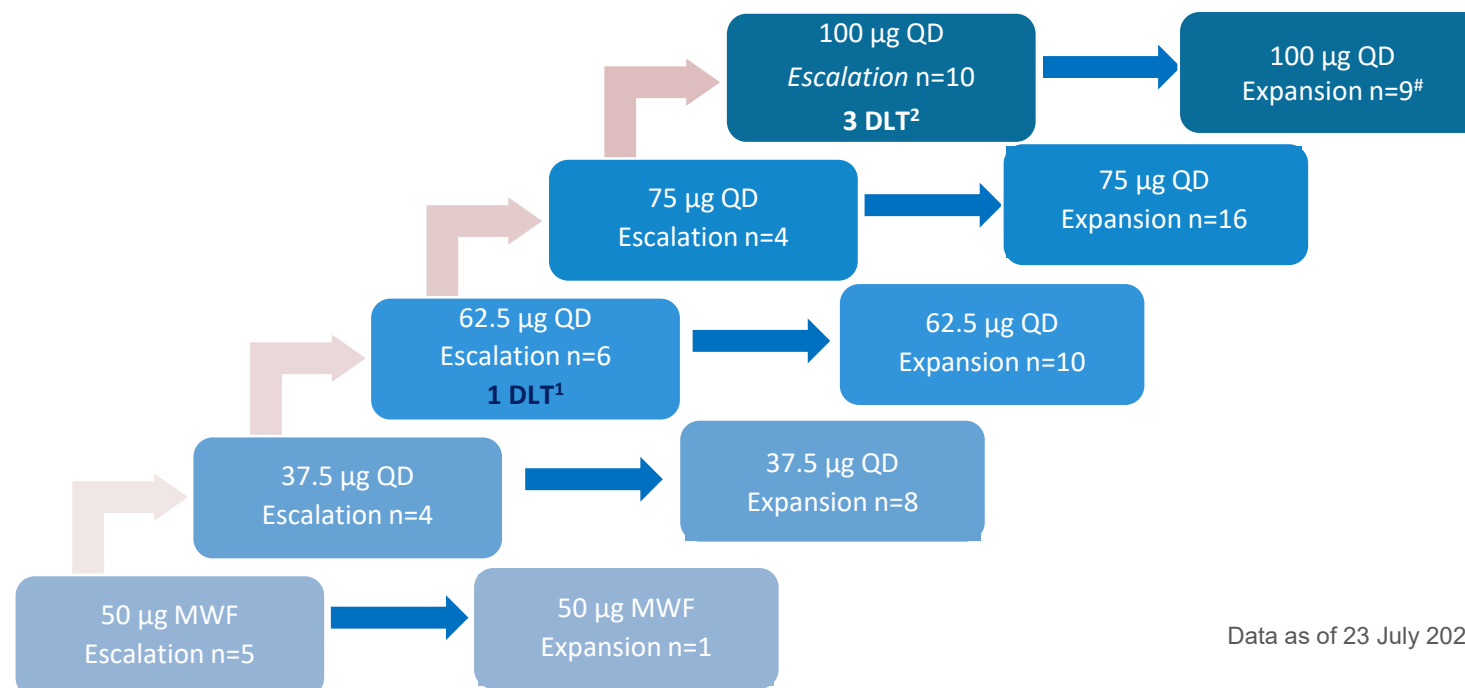
## KEY INCLUSION CRITERIA

- Adults with MM, R/R to at least 3 prior lines of therapy that have included lenalidomide, pomalidomide, a proteasome inhibitor, a glucocorticoid, and an anti-CD38 monoclonal antibody
- Nonresponsive to or progressed within 60 days of prior therapy
- Creatinine clearance  $\geq 40$  mL/min
- ECOG  $\leq 2$

## Phase 1 Study Endpoints

- **Primary:** assess safety, tolerability and define the RP2D/MTD
- **Secondary:** assess PK, PD, and preliminary anti-tumor activity

## Phase 1 Dose Escalation Cemsidomide 14/14 + Dex\*



Data as of 23 July 2025

\*Cemsidomide administered as 14 days on/14 days off in a 28-day cycle; Dex was dosed on days 1, 8, 15, and 22 at doses of 40 mg orally for patients  $\leq 75$  years old and 20 mg orally for patients  $> 75$  years old;

#1 patient in the 100 µg QD expansion did not complete C1 as of data cut-off and is not included in the safety analysis set

¹DLT in the 62.5 µg QD was due to grade 4 neutropenia lasting  $> 7$  days; ² Three patients in the 100 µg QD escalation had 5 DLT events (G4 neutropenia, G3 pneumonia in 2 subjects, G3 ALT increase, G3 febrile neutropenia)

Dex, dexamethasone; ECOG, Eastern Cooperative Oncology Group; G-CSF, granulocyte colony stimulating factor; MM, multiple myeloma; MTD, maximum tolerated dose; MWF, Monday Wednesday Friday; PD, pharmacodynamics; PK, pharmacokinetics; QD, once daily; RP2D, recommended phase 2 dose; R/R, relapsed/refractory; SRC, safety review committee; 14/14, 14 days on/14 days off.

# Baseline Characteristics and Prior Therapies

## Heavily Pretreated RRMM Patient Population

Characteristics	Safety Population (N=72)
<b>Age, median (range)</b>	67 (39-90 years)
<b>Male, n (%)</b>	43 (60)
<b>Time since initial diagnosis, median (range)</b>	7 (2-22 years)
<b>ECOG performance status, n (%)</b>	
0	17 (24)
1	52 (72)
2	3 (4)
<b>Asian</b>	1 (1)
<b>Black or African American, n (%)</b>	14 (19)
<b>White, n (%)</b>	50 (69)
<b>Other, n (%)</b>	7 (10)
<b>Revised ISS at screening, n (%)</b>	
Stage 1	24 (33)
Stage 2	29 (40)
Stage 3	9 (13)
Missing	10 (14)
<b>Presence of EMD, n (%)</b>	23 (32)

Characteristics	Safety Population (N=72)
<b>Prior therapies, median (range)</b>	7 (3-22)
3L, n (%)	3 (4)
4L, n (%)	11 (15)
≥ 5L, n (%)	58 (81)
<b>Prior stem cell transplant, n (%)</b>	43 (60)
<b>Prior lenalidomide, n (%)</b>	72 (100)
<b>Prior pomalidomide, n (%)</b>	71 (99)
<b>Prior anti-CD38 mAb, n (%)</b>	72 (100)
<b>Prior CAR-T therapy, n (%)</b>	36 (50)
<b>Prior T-cell engager therapy, n (%)</b>	39 (54)
<b>Prior CAR T or T-cell engager therapy, n (%)</b>	54 (75)
<b>Prior CAR T and T-cell engager therapy, n (%)</b>	21 (29)
<b>Prior BCMA therapy, n (%)</b>	54 (75)
<b>Prior GPRC5D therapy, n (%)</b>	34 (47)
<b>Triple-class exposed*, n (%)</b>	72 (100)
<b>Penta-class exposed†, n (%)</b>	57 (79)

\*Defined as exposed to ≥1 immunomodulatory agent, ≥ 1 proteasome inhibitor, and 1 anti-CD38 monoclonal antibody; †Defined as exposed to ≥2 immunomodulatory agents, ≥ 2 proteasome inhibitors, and 1 anti-CD38 monoclonal antibody. Data as of 23 July 2025.

BCMA, B cell maturation antigen; CAR-T, chimeric antigen receptor T cell; ECOG, Eastern Cooperative Oncology Group; EMD, extramedullary disease; mAb, monoclonal antibody; GPRC5D, G protein-coupled receptor class C group 5 member D; RRMM, relapsed/refractory multiple myeloma.

# Patient Disposition

## Majority of Discontinuations Were Due to Progressive Disease

Patient Disposition, n (%)	Safety Population (N=72)
Ongoing	20 (28)
Discontinued	52 (72)
Progressive disease	39 (54)
Withdrawal of consent	8 (11)
Adverse event	1 (1)*
Death	1 (1)#
Physician Decision	1 (1)
Other	1 (1)†

- At the time of data cutoff, treatment was ongoing for 20 patients (28%)
- The primary reason for discontinuation was progressive disease for 39 patients (54%)

\*A patient in the 75 µg cohort had end of treatment reason updated from discontinued due to adverse event to disease progression after data cut off

#Death in a patient in the 62.5 µg cohort was due to subdural hematoma (related to a fall), unrelated to cemsidomide

†A patient in the 50 µg MWF cohort was transferred to hospice, did not meet IMWG definition of progressive disease

Data as of 23 July 2025

# Overview of AEs Across Dose Levels

Cemsidomide 14/14 + Dex Was Well Tolerated Over the Range of Doses Tested

Adverse Events, n (%)	50 µg MWF (N=6)	37.5 µg QD (N=12)	62.5 µg QD (N=16)	75 µg QD (N=20)	100 µg QD (N=18)	Total (N=72)
<b>TEAEs</b>	6 (100)	12 (100)	16 (100)	20 (100)	18 (100)	72 (100)
<b>TEAEs possibly related to cemsidomide</b>	3 (50)	11 (92)	12 (75)	14 (70)	14 (78)	54 (75)
<b>TESAEs</b>	3 (50)	6 (50)	6 (38)	7 (35)	8 (44)	30 (42)
<b>TESAEs possibly related to cemsidomide</b>	0	4 (33)	3 (19)	5 (25)	4 (22)	16 (22)
<b>Any grade ≥3 TEAEs</b>	5 (83)	8 (67)	11 (69)	18 (90)	14 (78)	56 (78)
<b>Any grade ≥3 TEAEs possibly related to cemsidomide</b>	3 (50)	8 (67)	8 (50)	12 (60)	11 (61)	42 (58)
<b>TEAEs leading to discontinuation</b>	0	0	0	1 (5)*	0	1 (1)
<b>TEAEs leading to reduction</b>	0	0	0	1 (5) <sup>#</sup>	3 (17) <sup>§</sup>	4 (6)

- 4 DLTs: 1 patient at 62.5 µg had grade 4 neutropenia >7 days; 3 patients at 100 µg had 5 DLT events (grade 4 neutropenia >7 days, grade 3 ALT increase, grade 3 febrile neutropenia, grade 3 pneumonia in 2 subjects)

\*A patient in the 75 µg cohort discontinued due to grade 5 AE of septic shock, deemed unrelated to cemsidomide; <sup>#</sup>A patient in the 75 µg cohort had grade 4 thrombocytopenia possibly related to cemsidomide resulting in dose reduction; <sup>§</sup>A patient in the 100 µg cohort had grade 3 pneumonia and another patient at 100µg had grade 3 neutropenia, both AEs possibly related to cemsidomide resulting in dose reduction, a patient in the 100 µg cohort had two dose reductions after two events of pseudomonal bacteremia, deemed unrelated to cemsidomide. Data as of 23 July 2025

AEs, adverse events; ALT, alanine aminotransferase; Dex, dexamethasone; DLT, dose limiting toxicities; MWF, Monday Wednesday Friday; QD, once daily; TEAEs, treatment emergent adverse events; TESAEs, treatment emergent serious adverse events

# Most Common TEAEs and AEs of Interest

Majority of Grade 3/4 TEAEs Were Hematologic

Common (>20% All Grades) TEAEs and Events of Interest, n (%)	All Grades (N=72)	Grade 3 (N=72)	Grade 4 (N=72)	Grade 5 (N=72)
<b>Neutropenia</b>	44 (61)	17 (24)	24 (33)	0
<b>Infections</b>	42 (58)	17 (24)	0	1 (1)
Pneumonia	10 (14)	9 (13)	0	0
Upper Respiratory Tract Infection	10 (14)	2 (3)	0	0
Septic Shock	1 (1)	0	0	1 (1)
Sepsis	2 (3)	2 (3)	0	0
<b>Anemia</b>	27 (38)	16 (22)	1 (1)	0
<b>Fatigue</b>	26 (36)	0	0	0
<b>Diarrhea</b>	26 (36)	1 (1)	0	0
<b>Leukopenia</b>	21 (29)	9 (13)	8 (11)	0
<b>Thrombocytopenia</b>	14 (19)	5 (7)	3 (4)	0
<b>Lymphopenia</b>	13 (18)	6 (8)	2 (3)	0
<b>Febrile Neutropenia</b>	4 (6)	3 (4)	1 (1)	0

- 2 patients experienced grade 5 AEs (septic shock and subdural hematoma), both deemed unrelated to cemsidomide
- G-CSF support was not allowed during cycle 1 for patients in dose escalation cohorts
- 41/72 (57%) of patients experienced grade 3/4 neutropenia, an anticipated on-target effect of IKZF1/3 degradation
  - Neutropenia was manageable with treatment interruptions and G-CSF use when permitted
  - Across all doses, 40% (29/72) of patients received G-CSF

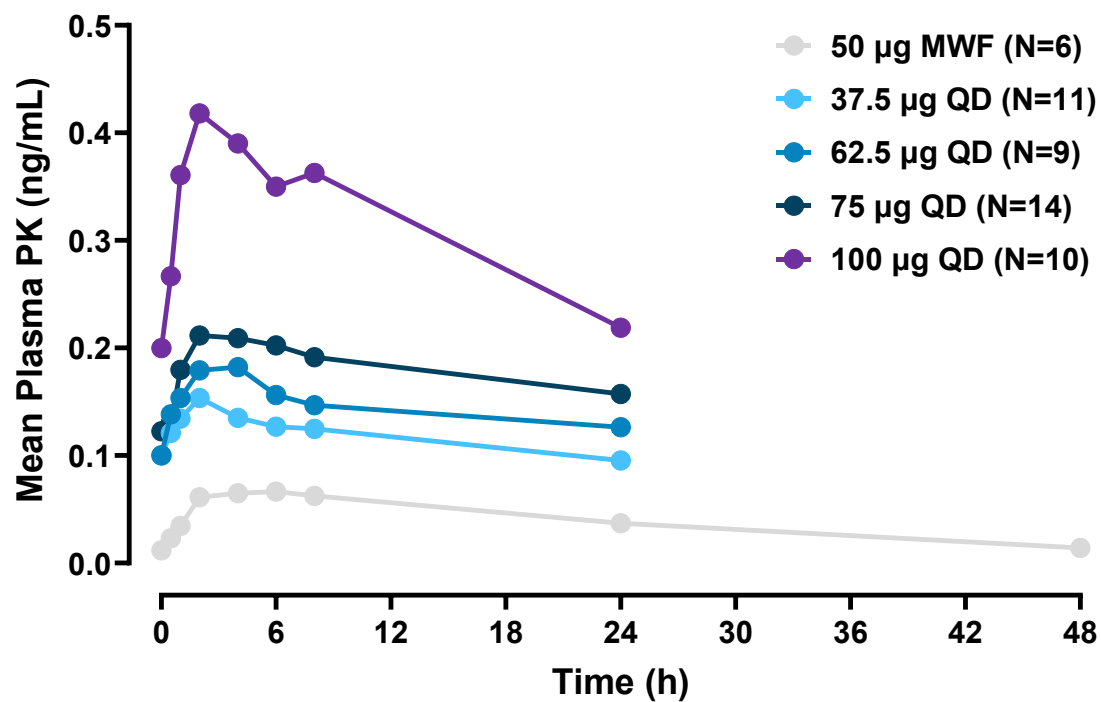
AEs, adverse events; G-CSF, granulocyte colony stimulating factor; IKZF 1/3, Ikaros zinc finger protein 1/3; TEAEs, treatment emergent adverse events. Data as of 23 July 2025



# Pharmacokinetics of Cemsidomide 14/14 + Dex

PK Was Dose-Proportional With an ~2-day Half-life

## Cemsidomide 14/14 + Dex PK at Steady-state



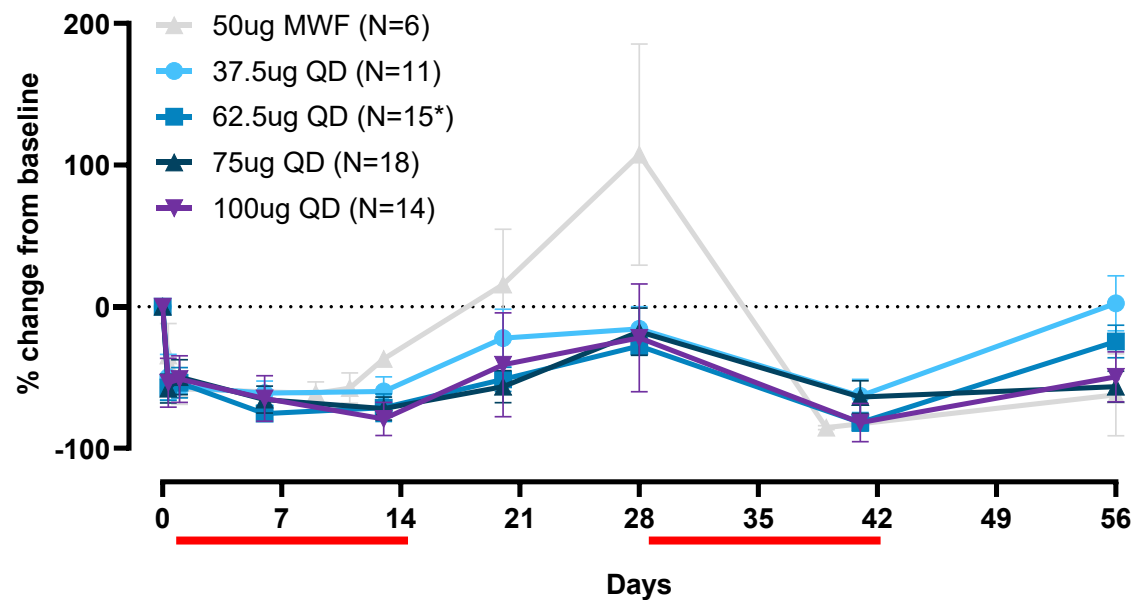
- Cemsidomide 14/14 exposure was dose-proportional when combined with Dex
- The overall geometric mean half-life estimate is approximately 2 days

Dex, dexamethasone; MWF, Monday Wednesday Friday; PK, pharmacokinetics; QD, once daily. Data as of 23 July 2025

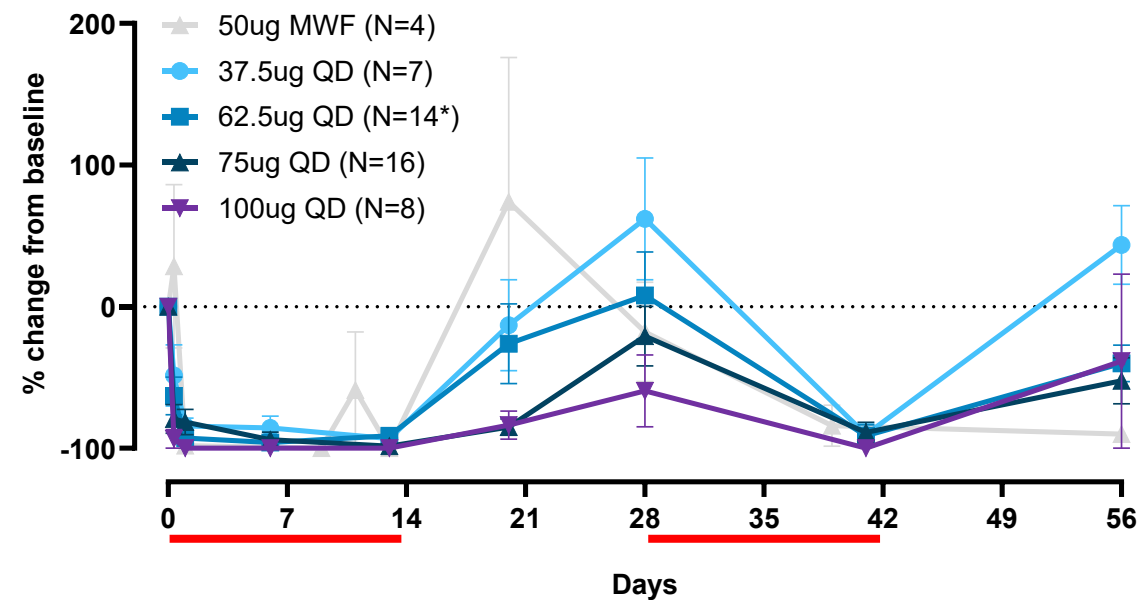
# Pharmacodynamics of Cemsidomide 14/14 + Dex

## Optimal Degradation of IKZF1/3 Observed at 100µg Dose Level

### Ikaros (IKZF1) Expression in PBMCs



### Aiolos (IKZF3) Expression in PBMCs



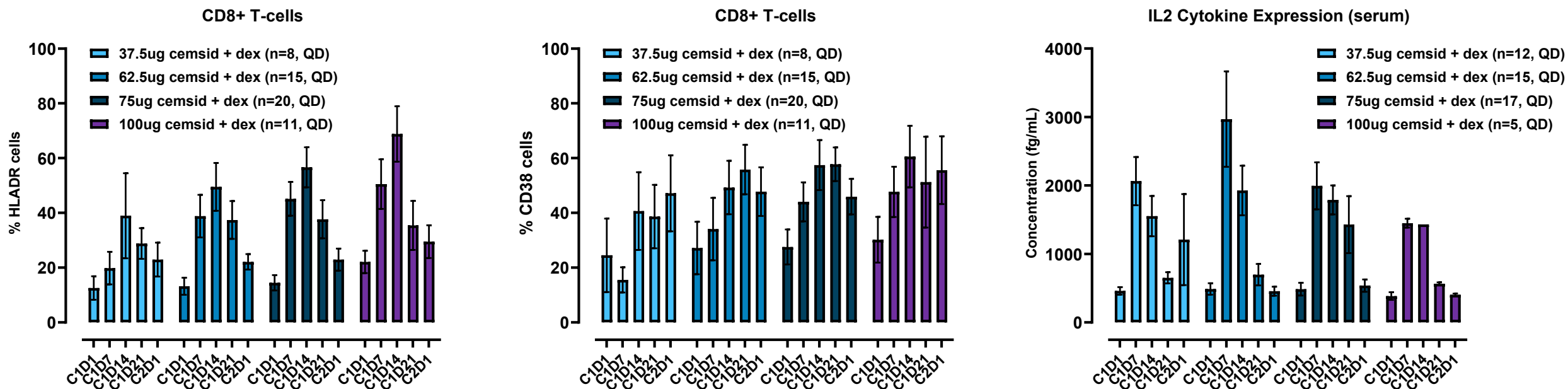
- Cemsidomide 14/14 + Dex achieves >50% degradation of IKZF1 and >80% degradation of IKZF3, as assessed by mass spectrometry in human PBMCs
- Sustained IKZF3 degradation up to day 20 observed at the two highest doses of cemsidomide (75µg and 100µg)

Red bar indicates the 14-day periods of cemsidomide dosing; \*1 patient censored due to abnormal mass spectrometry values. Data as of 23 July 2025

Dex, dexamethasone; IKZF1/3, Ikaros zinc finger protein 1/3 ; MWF, Monday Wednesday Friday; PBMC, peripheral blood mononuclear cell; QD, once daily

# Pharmacodynamics of Cemsidomide 14/14 + Dex

## CD8+ T-cell Activation Observed at All Dose Levels

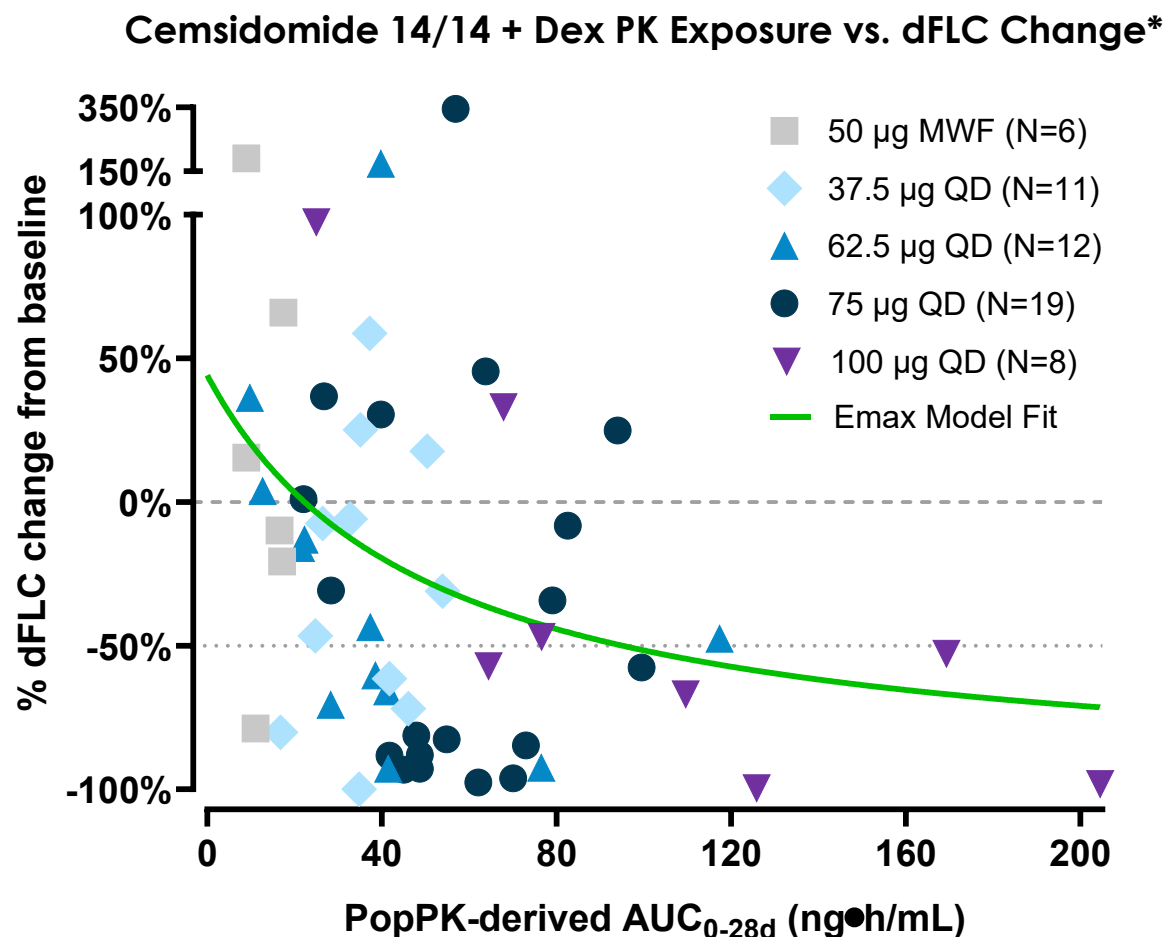


- Significant elevation of CD8+ T-cells harboring HLA-DR and CD38 markers after 7 and 14 days of dosing
- Activated T-cells continued to be observed until Cycle 1 Day 21
- CD8+ T-cell activation translates to increased serum IL2 cytokine expression

Dex, dexamethasone; HLA-DR, human leukocyte antigen-DR isotype; IL2, interleukin 2, QD, once daily. Data as of 23 July 2025.

# Cemsidomide 14/14 + Dex PK Exposure vs dFLC Change

## 100µg QD Drives Sufficient Exposure With Meaningful Reductions in FLC



**Exposure (AUC) Quartiles**

	<Q1 (N=14)	Q1-Q2 (N=14)	Q2-Q3 (N=14)	>Q3 (N=14)
Mean AUC <sub>0-28d</sub> (ng•h/mL)	16.8	34.9	51.9	<b>103.3</b>
Mean Change in dFLC from Baseline	+10%	-11%	-31%	<b>-52%</b>

\*Includes 56 patients with abnormal baseline sFLC defined as (A) kappa FLC >19.4 mg/L or lambda FLC >26.3 mg/L and (B) kappa-to-lambda FLC ratio >4 or <0.5.

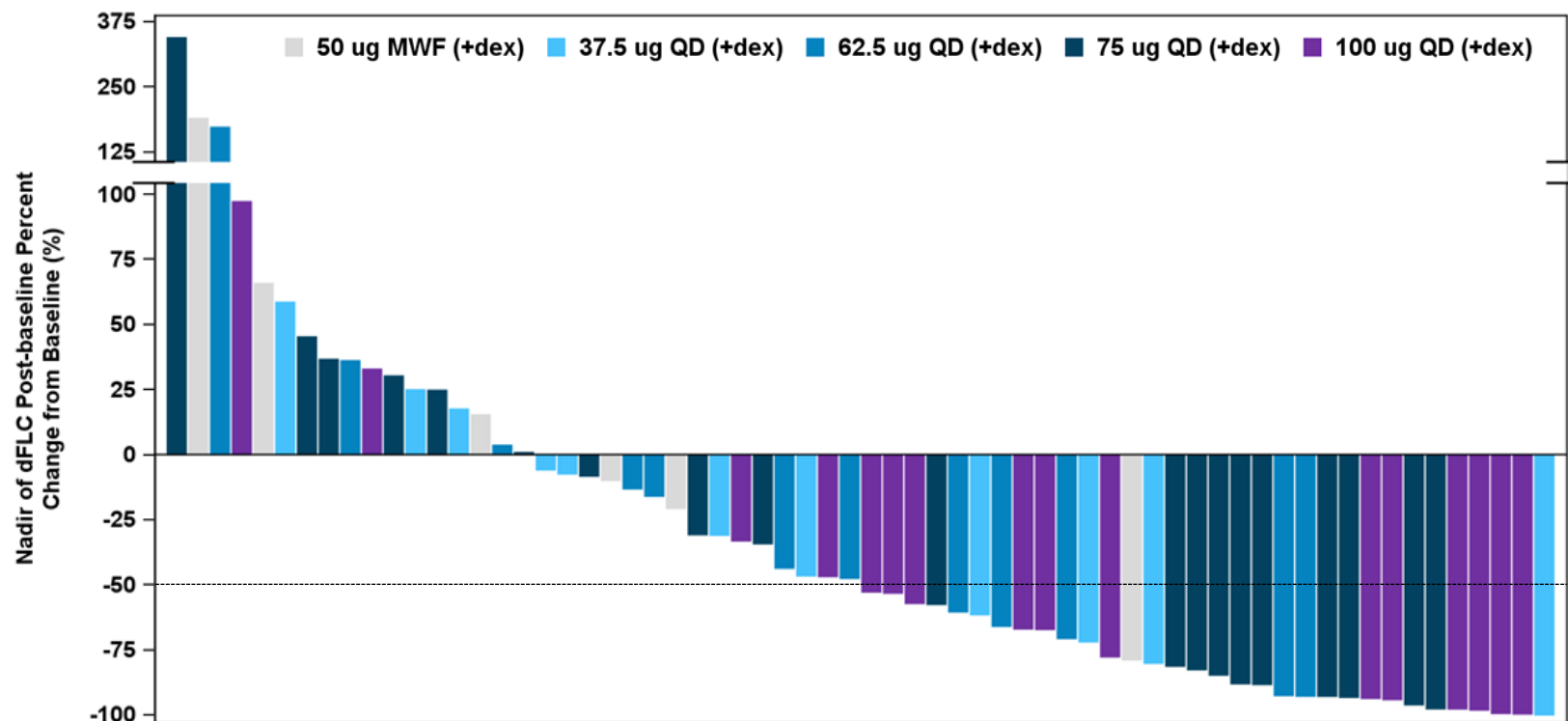
AUC, area under the curve; Dex, dexamethasone; dFLC, difference in involved and uninvolved free light chain; Emax, maximum response; MWF, Monday Wednesday Friday; QD, once daily; popPK, population pharmacokinetics; PK, pharmacokinetic

# Best Change in dFLC from Baseline

50% of Patients With Elevated Light Chains Achieved  $\geq 50\%$  Decrease in dFLC

## Best Change in dFLC from Baseline (Cemside 14/14 + Dex)

Multiple Myeloma Patients w/ Elevated Light Chain Disease (N=64)\*



\*Only includes treated subjects who meet both criterion (A) and (B): (A) baseline kappa free light chain value  $>19.4$  mg/L or baseline lambda free light chain value  $>26.3$  mg/L; (B) ratio of baseline free light chain kappa over baseline free light chain value lambda  $>4:1$  or  $<1:2$ .

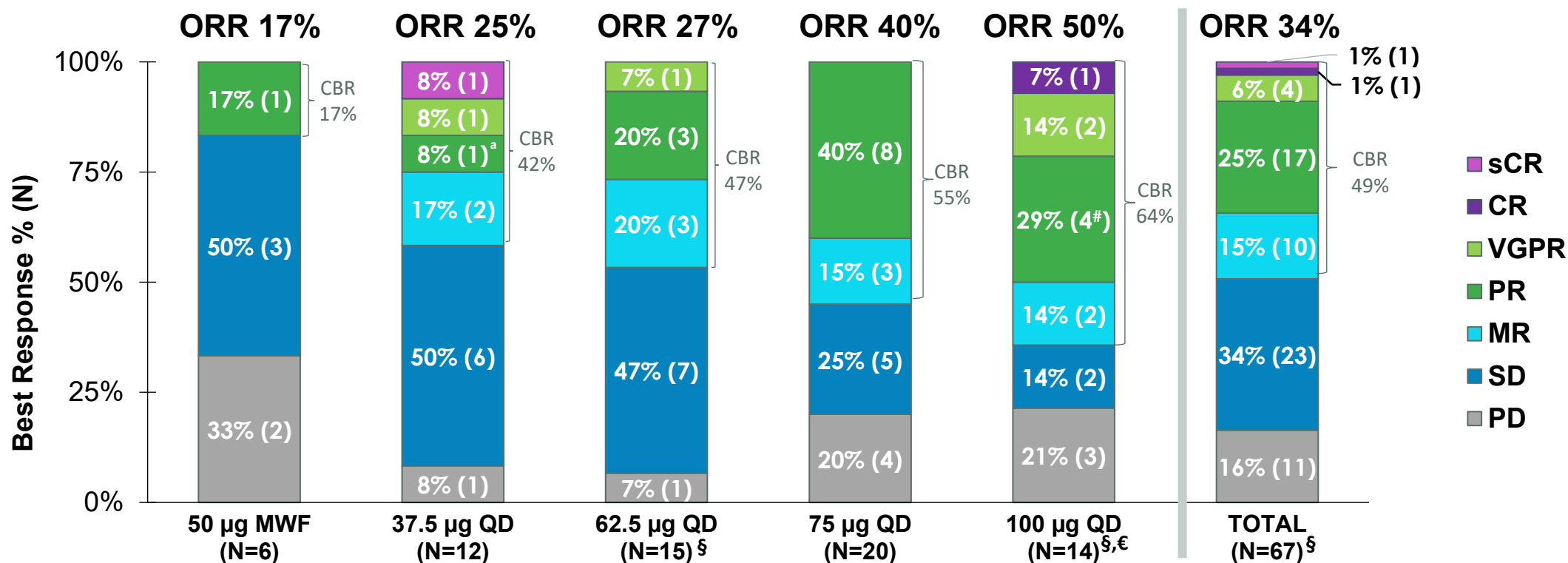
- Cemside 14/14 + Dex induced dFLC decrease in 73% (47/64) of patients, with 50% of patients having a reduction of  $\geq 50\%$
- Cemside 14/14 + Dex demonstrated anti-myeloma activity across a broad range of doses

Dex, dexamethasone; dFLC, difference in involved and uninvolved free light chain; MWF, Monday Wednesday Friday; QD, once daily. Data as of 23 July 2025.

# Best Response of Cemsidomide 14/14 + Dex

Response Rate of 50% Achieved at 100µg in Heavily Pretreated RRMM population

## Best Response: Multiple Myeloma – Cemsidomide 14/14 + Dex\*



- ORR (≥ PR) of 34% (23/67) was achieved across all dose levels with a clinical benefit rate (≥ MR) of 49%
- ORR at the highest dose level of cemsidomide 100µg was 50% with a clinical benefit rate of 64%
- MRD negativity achieved in 1 patient with a CR at the highest dose level of cemsidomide (100µg)

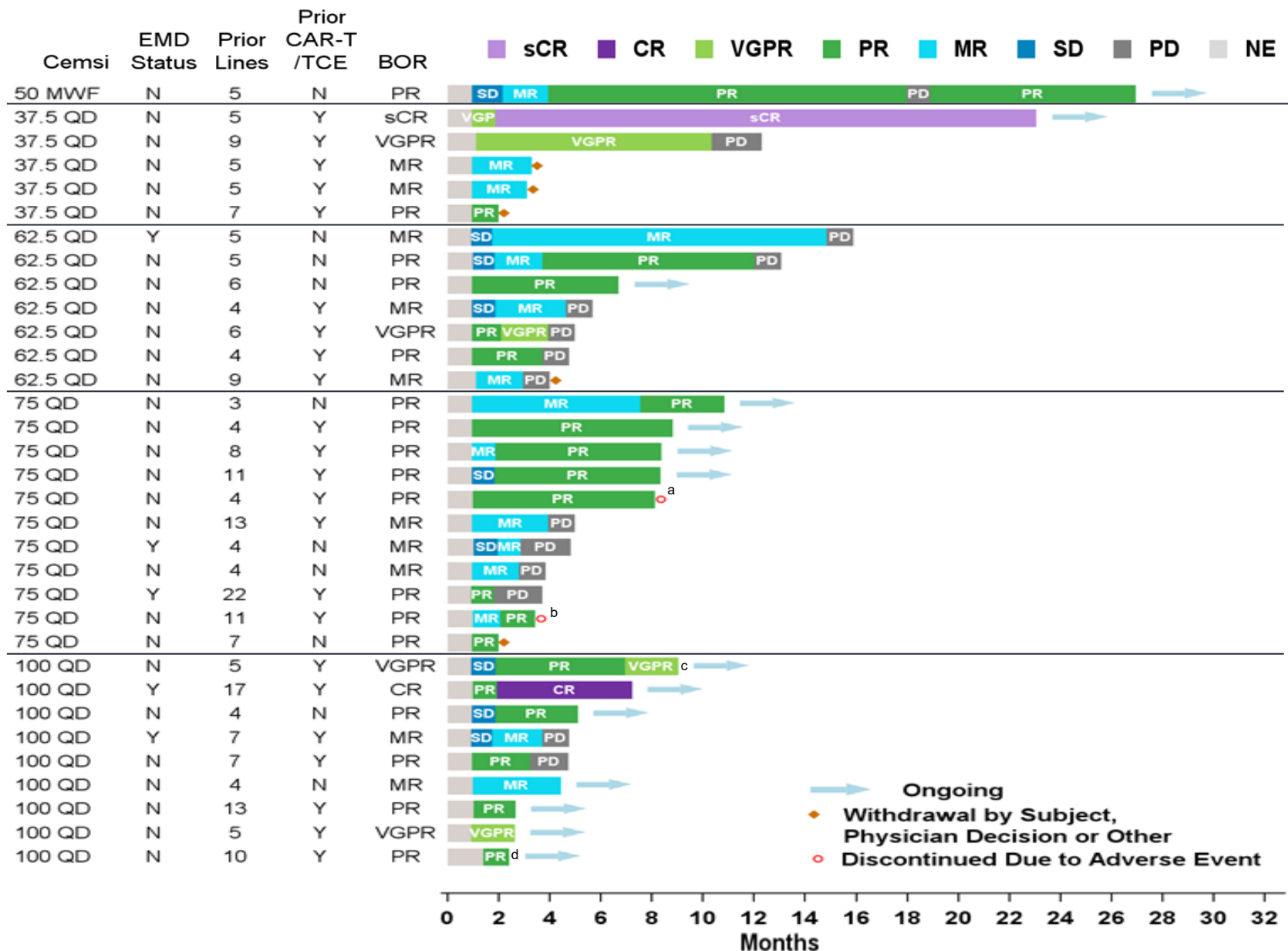
\*Investigator assessed response; Data as of 23 July 2025.

<sup>§</sup>1 patient in the 62.5µg cohort did not have a post-baseline assessment and 4 patients in 100µg cohort did not have a post-baseline assessment performed at the time of data cutoff, #1 patient in the 100µg cohort had a PR confirmed after data cut off date, <sup>a</sup>1 patient in the 37.5µg cohort achieved a PR based on light chains, no follow up M protein available. <sup>€</sup>After the data cut off date, one patient in the 100µg cohort depicted as VGPR in the figure converted to a CR and one additional patient in the 100µg cohort who was not efficacy evaluable previously achieved a PR

CBR, clinical benefit rate; Dex, dexamethasone; MR, minimal response; MRD, minimal residual disease; MWF, Monday Wednesday Friday; ORR, objective response rate; PD, progressive disease; PR, partial response; QD, once daily; RRMM, relapsed/refractory multiple myeloma; sCR, stringent complete response; SD, stable disease; VGPR, very good partial response

# Exposure and Clinical Responses (MR or Better)\*

## Durable Responses Across a Broad Range of Doses in a Heavily Pre-Treated Patient Population



All doses (N=72)

Months (95% CI)

Median PFS

3.7 (2.9-5.6)

Median DOR

9.3 (2.8-NE)

Data as of 23 July 2025. \*Investigator assessed response; swimmer plot only includes patients that achieved an MR or better (33/72 patients)

<sup>a</sup>Patient at 75µg had EOT reason updated from discontinued due to AE to disease progression after data cut off, <sup>b</sup>Patient at 75µg discontinued due to grade 5 AE of septic shock, deemed unrelated to cemsidomide. <sup>c</sup>After the data cut off date, patient at 100µg cohort depicted as VGPR in the figure converted to a CR, <sup>d</sup>Patient in 100µg had PR confirmed after data cut off date

AE, adverse event; BOR, best overall response; CAR-T, chimeric antigen receptor-t cell; CI, confidence interval; DOR, duration of response; EMD, extramedullary disease; EOT, end of treatment; MR, minimal response; NE, not estimable; PFS, progression-free survival; PD, progressive disease; PR, partial response; QD, once daily; RRMM, relapsed/refractory multiple myeloma; sCR, stringent complete response; SD, stable disease; TCE, t-cell engager; VGPR, very good partial response

# Conclusions

- Cemsidomide 14/14 plus Dex was well tolerated and demonstrated durable anti-myeloma activity at increasing dose levels
  - A 50% ORR was observed at the highest dose of 100µg QD, with a 34% ORR observed across all dose levels
  - TEAEs were manageable with minimal treatment discontinuations or reductions
- Cemsidomide 14/14 plus Dex has an ~2-day half-life, induces potent IKZF1/3 degradation and promotes CD8 T-cell activation
- Cemsidomide is well suited for further development across multiple lines of treatment and in combination with other anti-myeloma agents, including proteasome inhibitors, monoclonal antibodies, antibody-drug conjugates, and T-cell engagers
- Based on these results, cemsidomide 14/14 plus Dex will be further assessed in a Phase 2 study in the 4L+ patient population and in a Phase 1b study in combination with a BCMA-BiTE

BCMA-BiTE, B cell maturation antigen targeted bispecific T-cell engager; Dex, dexamethasone; IKZF 1/3, Ikaros zinc finger protein 1/3; ORR, objective response rate; QD, once daily



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- All authors contributed to and approved the presentation

