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eMMpower: A Longitudinal Multi-Center Chart Review Consortium for Multiple Myeloma

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Key Takeaway

The novel and transformative eMMpower consortium marks a major advancement in the generation of seamless, longitudinal real-world data (RWD) collection for multiple myeloma (MM) across all stages of the disease and all lines of therapy.

Conclusions

Through diverse demographic, geographic, and practice type representation coupled with robust longitudinal data collection, eMMpower offers a powerful platform for timely and clinically relevant real-world insights through clinician-led research.

eMMpower can potentially redefine the role of RWD in MM—filling key evidence gaps, informing care, supporting innovation and raising patient (pt) treatment standards.

As of March 31, 2025, the first 6 contracted sites/networks provided de-identified data on 499 pts, 260 receiving frontline therapy, 161 receiving later-line teclistamab, and 78 receiving later-line talquetamab.

– The eMMpower consortium continues to grow and evolve: as of August 6, 2025, 15 sites/networks have completed contracting and begun data collection, providing 961 pt charts across 8 treatment cohorts to capture deep clinical, genomic, and patient-centric data geared towards practice informing insight generation.

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Poster

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https://www.congresshub.com/Oncology/IMS2025/GeneralMultipleMyeloma/Fonseca

Abbreviations

AON, American Oncology Network; CAR-T, chimeric antigen receptor T-cell; Cilta-cel, ciltacabtagene autoleucel; DKRd, daratumumab + carfilzomib + lenalidomide + dexamethasone; DRd, daratumumab + lenalidomide + dexamethasone; DVRd, daratumumab + bortezomib + lenalidomide + dexamethasone; ECOG, Eastern Cooperative Oncology Group; FCS, Florida Cancer Specialists; Ide-cel, idecabtagene vicleucel; IQR, interquartile range; IsaVRd, isatuximab + bortezomib + lenalidomide + dexamethasone; J&J, Johnson & Johnson; KOL, key opinion leader; MCW, Medical College of Wisconsin; MM, multiple myeloma; RWD, real-world data; RWE, real-world evidence; SCT, stem cell transplant; SD, standard deviation; TE, transplant-eligible; TIE, transplant-ineligible; VRd, bortezomib + lenalidomide + dexamethasone; UMich, University of Michigan; USA, United States of America; USC, University of Southern California.

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Introduction

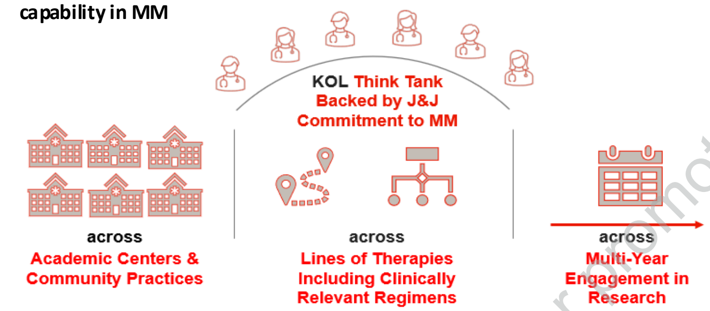
- The treatment landscape for MM is rapidly evolving with the introduction of novel therapies, including anti-CD38 monoclonal antibodies, bispecific T-cell engagers, and CAR-T cell therapies.
- To fully understand the real-world impact of these advancements, it is critical to complement clinical trial findings—which are often limited by restrictive eligibility criteria and underrepresentation of diverse populations—with robust, timely, high-quality, representative real-world evidence (RWE).
- Existing RWD sources in MM lack key elements such as clinical depth, physician-confirmed response, cytogenetic profiling, and broad representation across racial/ethnic groups, practice setting (community vs. academic), and geographic regions.[1-3]
- The **eMMpower consortium** was established to address these gaps—by building a long-term, clinically-rich, and demographically inclusive RWD infrastructure in the USA, supported by a GenAI-enabled rapid analytics platform to accelerate insight generation and inform evidence-based decision-making in MM care.

Methods

The eMMpower Consortium

- eMMpower is a multi-site retrospective chart review consortium collecting clinically rich, longitudinal RWD that is reflective of demographics of pts with MM, geography, and practice type in the USA.
- Objectives (**Figure 1**) include:
  - To form a MM RWE think tank
  - To curate long-term, in-depth, research-ready RWD
  - To generate timely and impactful RWE to address clinical needs and shape practice

Figure 1: The eMMpower consortium: an initiative to build long-term research capability in MM



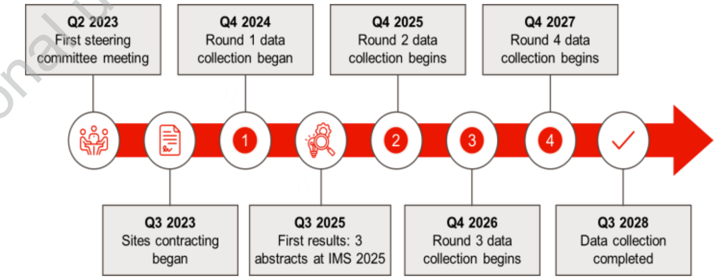
The Consortium Steering Committee

- The steering committee consists of key opinion leaders (KOLs) from participating academic and community sites and members from Johnson & Johnson (J&J), with rotating membership.
- The committee sets scientific priorities aligned with emerging clinically-relevant questions unanswered by clinical trials and other RWD with an emphasis on practice-informing RWE.
- The committee meets biannually to review research proposals and make selections based on scientific merit, feasibility and translational impact.
- These meetings also serve to exchange progress updates, review results from ongoing data collection, discuss further enhancement of data collection, and plan new studies.

Data Collection Plan

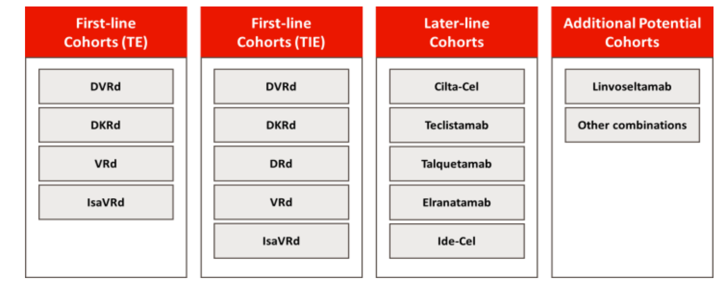
- eMMpower gathers detailed pt characteristics, treatment patterns and sequencing, and outcomes across the MM care continuum—from frontline therapy in transplant-eligible (TE) and -ineligible (TIE) pts to later-line therapy where bispecifics and CAR-T are approved for use.

Figure 2: Timeline for forming the consortium and 4 annual rounds of data collection



- Four rounds of data collection with annual updates will support robust longitudinal analyses (**Figure 2**).
- The current target is 2,000 pts from 20 high-volume centers and large health care systems in the USA.
- The charts of 100-200 pts per cohort of interest (**Figure 3**) will be abstracted.

Figure 3: Treatment cohorts of interest



Results

Status of the eMMpower Consortium

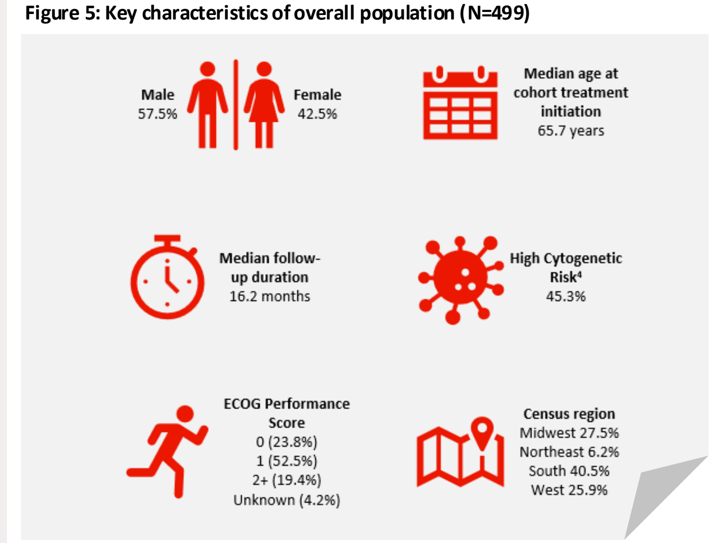
- As of March 31, 2025, 14 sites have joined eMMpower, including 9 academic medical centers (2 Northeast, 3 Midwest, 1 South, 3 West), 4 community networks (2 National, 2 South), and a national patient advocacy organization. After the abstract was submitted, one additional national network joined eMMpower, leading to a total of 15 participating sites as of August 6, 2025 (**Figure 4**).
- The steering committee approved 7 proposals in December 2024 (3 frontline-focused, 4 later line-focused) and 6 of these studies have already been initiated.

Figure 4: Status of the eMMpower Consortium as of August 2025

Interim Results from Round 1 of Data Collection (as of March 31, 2025)

- Nine sites have begun data collection, among which 44% see ≥50 new MM pts/year and all offer stem cell transplant (SCT) and CAR-T therapy.
- In the overall population (n=499), the median age range was 62-70 years (66 years overall) with 56-60% of pts being male (58% overall), 70-82% being White (75% overall), and 9-20% being African American (17% overall). Key characteristics of the overall population are illustrated in **Figure 5**.
- More than 60% of pts in each treatment cohort had ECOG <2; the proportions of pts with high cytogenetic risk[4] varied widely by cohort (DVRd: 47%; VRd: 28%; teclistamab: 48%; talquetamab: 65%).

Figure 5: Key characteristics of overall population (N=499)



- There were 260 TE pts on DVRd or VRd frontline therapy, 161 pts on teclistamab, and 78 pts on talquetamab (see **Table 1**).
- Within the DVRd and VRd cohorts, 99 (72%) and 74 (60%) pts received SCT while on first-line treatment, respectively; within the teclistamab and talquetamab cohorts, pts received a median of 5 and 6 prior lines of therapy, respectively.
- The mean (SD) follow-up time post-treatment initiation was 25.7 (13.2) months for DVRd, 35.8 (13.5) months for VRd, 10.1 (6.9) months for teclistamab, 7.0 (4.5) months for talquetamab, and 20.3 (15.5) months overall.
- Data for other novel frontline and later-line treatments will also be collected in the future.
- Additionally, significant progress has been made since the end of March.
  - As of August 6, 2025, a total of 961 charts have been abstracted across pts treated with DVRd (277 TE, 46 TIE), VRd (175 TE), DRd (53 TIE), DKRd (3), teclistamab (243), talquetamab (110), and cilta-cel (54).

Table 1: Patient characteristics at the time of initiating treatment

	Overall N = 499	DVRd (TE) N = 137	VRd (TE) N = 123	Teclistamab N = 161	Talquetamab N = 78
Age at the time of initiating treatment (years)					
Mean ± SD	64.1 ± 8.9	62.7 ± 8.9	61.1 ± 9.0	69.4 ± 10.5	65.1 ± 9.1
Median (IQR)	65.7 (58.6, 71.3)	63.4 (57.4, 68.9)	62.5 (54.8, 68.1)	70.4 (62.9, 76.7)	65.2 (59.3, 71.6)
Male, N (%)	287 (57.5%)	81 (59.1%)	69 (56.1%)	90 (55.9%)	47 (60.3%)
Race, N (%)					
White	375 (75.2%)	102 (74.5%)	87 (70.7%)	122 (75.8%)	64 (82.1%)
Black/African American	86 (17.2%)	27 (19.7%)	21 (17.1%)	31 (19.3%)	7 (9.0%)
Other	16 (3.2%)	6 (4.4%)	5 (4.1%)	2 (1.2%)	3 (3.8%)
Unknown	22 (4.4%)	2 (1.5%)	10 (8.1%)	6 (3.7%)	4 (5.1%)
Region, N (%)					
Midwest	137 (27.5%)	29 (21.2%)	22 (17.9%)	65 (40.4%)	21 (26.9%)
Northeast	31 (6.2%)	19 (13.9%)	3 (2.4%)	6 (3.7%)	3 (3.8%)
South	202 (40.5%)	55 (40.1%)	51 (41.5%)	72 (44.7%)	24 (30.8%)
West	129 (25.9%)	34 (24.8%)	47 (38.2%)	18 (11.2%)	30 (38.5%)
ECOG performance status, N (%)					
0	119 (23.8%)	53 (38.7%)	33 (26.8%)	23 (14.3%)	7 (9.0%)
1	262 (52.5%)	74 (54.0%)	59 (48.0%)	77 (47.8%)	49 (62.8%)
2	80 (16.0%)	6 (4.4%)	10 (8.1%)	47 (29.2%)	17 (21.8%)
>2	17 (3.4%)	1 (0.7%)	1 (0.8%)	11 (6.8%)	4 (5.1%)
Unknown	21 (4.2%)	3 (2.2%)	20 (16.3%)	3 (1.9%)	1 (1.3%)
Prior lines of treatment					
Mean ± SD	2.7 ± 3.3	0.0 ± 0.0	0.0 ± 0.0	5.4 ± 2.4	6.4 ± 2.5
Median (IQR)	0 (0.0, 5.0)	(0.0, 0.0)	(0.0, 0.0)	5 (4.0, 6.0)	6 (5.0, 7.0)
Cytogenetic risk, N (%)					
High*	226 (45.3%)	64 (46.7%)	34 (27.6%)	77 (47.8%)	51 (65.4%)
Standard	228 (45.7%)	65 (47.4%)	76 (61.8%)	63 (39.1%)	24 (30.8%)
Unknown	45 (9.0%)	8 (5.8%)	13 (10.6%)	21 (13.0%)	3 (3.8%)
Years from MM diagnosis to treatment initiation					
Mean ± SD	2.9 ± 4.0	0.1 ± 0.1	0.2 ± 0.9	5.9 ± 3.6	6.3 ± 4.2
Median (IQR)	0.2 (0.1, 5.3)	0.1 (0.0, 0.1)	0.1 (0.0, 0.1)	5.6 (3.0, 7.5)	5.4 (3.2, 8.6)
Months of follow-up post treatment initiation					
Mean ± SD	20.3 ± 15.5	25.7 ± 13.2	35.8 ± 13.5	10.1 ± 6.9	7.0 ± 4.5
Median (IQR)	16.2 (7.7, 31.3)	24.1 (15.0, 36.4)	36.8 (25.7, 45.6)	8.7 (3.8, 15.9)	6.8 (3.2, 11.3)

* High cytogenetic risk per Tan et al. (2025)[4] was defined as having any of the genetic abnormalities: del(17p), t[4;14], t[14,16], t[14,20], 1q21 gain/amplification.

Multiple Myeloma

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