Real-World Characteristics and Treatment Patterns of Transplant-Eligible Patients with Newly Diagnosed Multiple Myeloma Treated with Daratumumab, Bortezomib, Lenalidomide, and Dexamethasone (DVRd) as Front-line Treatment: Results from A Multicenter Chart Review Study

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Introduction

- On July 30, 2024, the Food and Drug Administration approved DVRd for induction and consolidation in transplant-eligible (TE) patients with newly diagnosed multiple myeloma (NDMM), based on the results from the PERSEUS and GRIFFIN studies.
- Both studies showed that the addition of daratumumab, a CD38-directed monoclonal antibody, to VRd (the DVRd regimen) during induction/consolidation followed by daratumumab + lenalidomide (DR) maintenance improved response rates and minimal residual disease (MRD) negativity rates as well as progression-free survival compared to VRd followed by lenalidomide only (R) maintenance[1,2], leading to a current shift in treatment paradigm from front-line (FL) triplet therapy to daratumumab-based quadruplets.
- However, patient characteristics and treatment patterns, including maintenance therapy selection, may differ in the real-world setting compared to clinical trials.
- This study aimed to describe the real-world demographic and clinical characteristics as well as treatment patterns (overall and stratified by maintenance regimen [i.e., DR and R maintenance]) among TE NDMM patients treated with DVRd as FL therapy.

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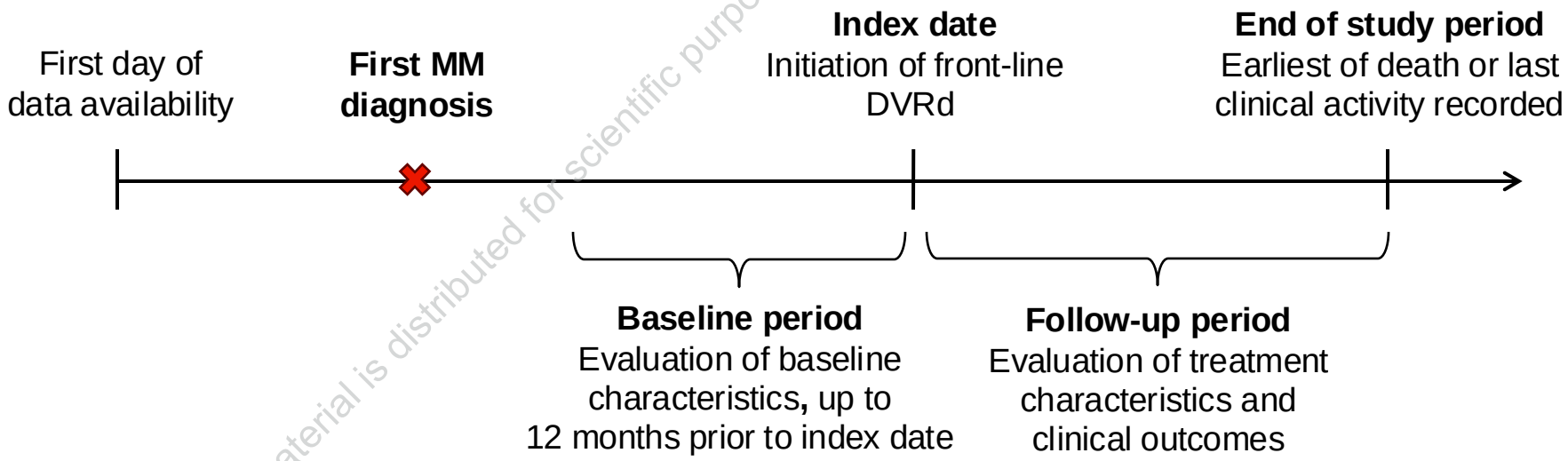
Methods

Data Source and Study Design

- A retrospective multi-center chart review study was conducted at 10 clinical sites in the United States.
- All eligible adults who initiated FL DVRd therapy for treating TE NDMM between January 1, 2019, and June 30, 2022, were included.
  - Except at one site, where eligible patients were randomly selected because of an abundance of eligible patients

Figure 1: Study design schema



DVRd: daratumumab, bortezomib, lenalidomide, and dexamethasone; MM: multiple myeloma

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Methods

Inclusion Criteria

- Confirmed NDMM (must meet at least 1 SLiM CRAB criterion[3] at the time of diagnosis)
- Were eligible for stem cell transplant (SCT) at MM diagnosis per physician assessment
- Received DVRd (first date of administration defined as index date) as FL therapy between January 1, 2019 and June 30, 2022
- Aged ≥18 years as of index date

Exclusion Criteria

- Received/initiated any recommended treatment for MM (except corticosteroids) for more than 30 days prior to the index date
- Initiated FL DVRd treatment more than one year after initial MM diagnosis
- Participated in an interventional clinical trial related to MM prior to the index date

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Results

- Baseline characteristics of FL DVRd recipients were similar to patients in the GRIFFIN[2] trial.
- 216 FL DVRd patients were included, of whom 176 initiated maintenance, including:
  - 68 with DR maintenance (“DVRd-DR recipients”)
  - 71 with R maintenance (“DVRd-R recipients”)
- DVRd-DR recipients were older than DVRd-R recipients (median age DR: 65 years, R: 62 years)
- DVRd-DR seemed to be used less frequently in Black or African American patients compared to DVRd-R (DR: 5.9%, R: 14.1%).
- In comparison with DVRd-R recipients, DVRd-DR recipients had:
  - Lower ECOG score (ECOG=0: DR: 47.1%, R: 33.8%)
  - Higher Revised ISS disease stage (stage III MM: DR: 13.2%, R: 5.6%)
  - Slightly higher rate of high cytogenetic risk abnormalities (DR: 13.2%, R: 11.3%)
- The patients who did not receive SCT were older than those who did, and the DVRd-DR recipients without SCT had more high cytogenetic risk disease compared to the DVRd-R recipients without SCT.

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Results

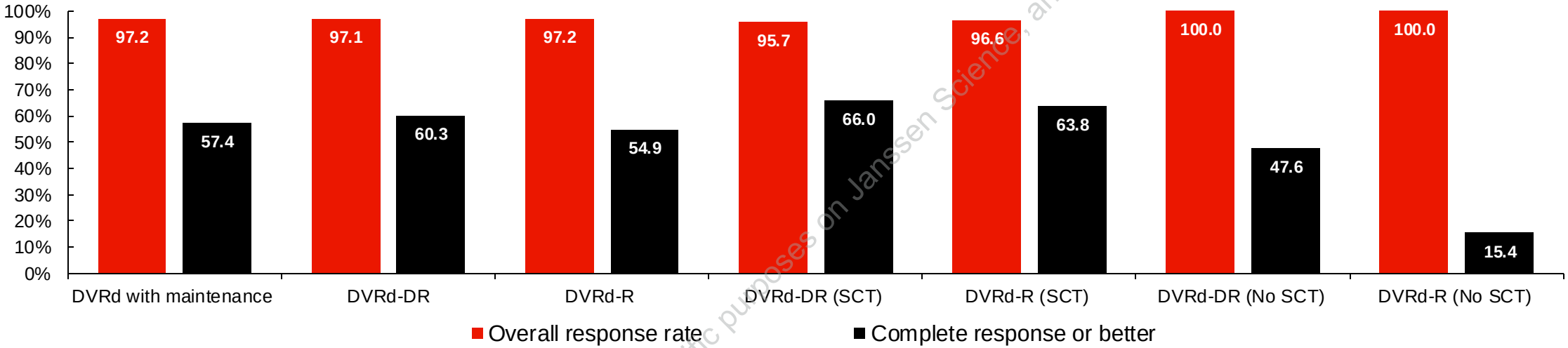
- Of the 216 patients that were considered as TE per physician assessment, 144 (66.7%) DVRd patients actually received an FL SCT.
  - DVRd-DR recipients with SCT: n=47 (69.1% of 68)
  - DVRd-R recipients with SCT: n=58 (81.7% of 71)
  - Other types of maintenance or no maintenance with SCT: n=39 (50.6% of 77)

- Of the 51 DVRd patients who deferred SCT, 20 (39.2%) went straight to maintenance therapy.
  - 14 (70.0%) received >1 agent

- More DVRd-DR recipients received DVRd consolidation therapy following SCT (17.6%) than DVRd-R recipients (1.4%).

Results

Figure 2: Response assessments after the index date among DVRd-DR and DVRd-R recipients, overall and by receipt of SCT[1]



DR: daratumumab and lenalidomide; DVRd: daratumumab, bortezomib, lenalidomide, and dexamethasone; R: lenalidomide; SCT: stem cell transplant

Notes:
1. Response rates are shown only for patients with at least one response assessment.

- A greater proportion of DVRd-DR recipients achieved complete response or better (CR+) compared to DVRd-R recipients (DR: 60.3%, R: 54.9%), both in patients receiving SCT (DR: 66.0%, R: 63.8%) as well as in patients not receiving SCT (DR: 47.6%, R: 15.4%)

Results

Duration of FL treatment

- Kaplan-Meier rates of patients who did not initiate the next line of therapy at 30 months were 87.9% among DVRd-DR recipients and 84.7% among DVRd-R recipients.
  - Among SCT recipients, rates were 91.1% and 85.3%, respectively.
  - Among non-SCT recipients, rates were 80.4% and 69.2%, respectively.

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Conclusions

- Compared to patients in the pivotal clinical trials, the TE NDMM patients treated with FL DVRd identified in this real-world study were largely similar, with the exception of DVRd patients being older in the real world.
- DR maintenance was more commonly used in the older patients and in patients with high-risk disease, however it was less frequently used in Black or African American patients.
- Although all patients enrolled in this study were deemed TE, only 67% received an SCT, with transplant deferral being the most common reason for not receiving FL SCT.
- Patients who received DR maintenance had a higher CR+ rate and longer FL treatment compared to those who received R-only maintenance.
- This real-world study complements evidence from the PERSEUS[1] and GRIFFIN[2] clinical trials, indicating that DVRd is an effective FL treatment regimen in TE NDMM patients, with favorable outcomes when D is added to R maintenance.

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https://www.congresshub.com/ASH2024/Oncology/Daratumumab/Tan

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