

Addressing Disparities in Cancer Care and Incorporating Precision Medicine for Minority Populations

A NEW ACCREDITED CONTINUING EDUCATION SERIES WITH THE EXPERTS

WEBINAR 4: Disparities in Multiple Myeloma

R E S O U R C E G U I D E

TABLE OF CONTENTS

Introduction to Disparities in Multiple Myeloma [3](#)

Sources of Disparities [4](#)

Addressing Disparities [5](#)

References [6](#)



[LINK TO RECORDED WEBINAR](#)



[DOWNLOADABLE SLIDES](#)

Introduction to Disparities in Multiple Myeloma



COURSE DIRECTOR AND MODERATOR

Edith Mitchell, MD, MACP, FCPP, FRCP

Clinical Professor of Medicine and Medical Oncology
Department of Medical Oncology
Director, Center to Eliminate Cancer Disparities
Associate Director, Diversity Affairs
Sidney Kimmel Cancer Center at Jefferson Health
116th President of the National Medical Association

FEATURED FACULTY



Sagar Lonial, MD, FACP
Winship Cancer Institute
of Emory University



Joseph Mikhael, MD, MEd, FRCPC, FACP
Translational Genomics Research Institute
(TGen), City of Hope Cancer Center
International Myeloma Foundation

Cancer incidence and outcomes vary considerably between racial and ethnic groups. Inequalities in wealth that lead to differential exposure to risk factor and structural barriers to high-quality cancer prevention, early detection, and treatment; and differences in death rates between non-Hispanic (NH) Black and NH White men and women are well documented.¹

Multiple myeloma (MM) is the most common hematologic cancer in African American individuals¹ and the incidence rates are more than 2 times higher compared with White Americans.² Novel therapies have improved the estimated life expectancy of patients with MM from a 5-year relative survival rate of 35% in 2000 to over 50% today. However, survival gains for Black patients are not as high as for White patients.³ Genetic analysis of newly diagnosed patients with MM suggests that there are differences in how the disease can progress, and Black patients have lower risk of transformation to clinical MM.⁴ Black patients have similar response rates and survival when enrolled in clinical trials compared with White patients.^{5,6} Moreover, evidence suggests that Black patients with MM have the potential to experience similar or better survival than White patients with MM.³ Based on subgroup analysis, Black patients appear to have deeper and more durable responses to daratumumab and chimeric antigen receptor (CAR) T-cell therapy,⁷ highlighting the importance of precision therapy.

Racial disparities in cancer occurrence and outcomes arise from disparities across the cancer care continuum. Below are examples of how racial disparities affect cancer outcomes.



Exposure to risk factors

Structural racism leads to higher exposure to risk factors: due to banking policies such as redlining, minority communities are more likely to be located near waste sites and less likely to have access to resources like fresh foods—both of those can contribute to higher rates of obesity, which is linked to higher rates of cancer⁸



Early Detection

Black individuals face delays in diagnosis of 6 months or longer⁵



Access to Treatment

- Treatment with novel agents and use of autologous stem cell transplantation have become the standard of care for patients with newly diagnosed MM. However, racial and ethnic minorities receive these treatments at a lower rate than their White counterparts⁹
- Differences in survival are related to access to standard of care. Based on the RVD 1000 study, when newly diagnosed patients received the same treatment, racial disparities in survival disappeared¹⁰
- Black individuals are less likely to receive the standard of care, including triplet therapy and stem cell transplant^{11,12}
- Black individuals have less access to academic medical centers and have lower participation rates in clinical trials¹³

Addressing Disparities



- Patient and provider education is essential for reducing disparities



- A timely and accurate diagnosis – when patients present with early symptoms, primary care providers should include MM as a potential diagnosis



- Precision medicine is an important part of this process and leads to true targeted therapy



- Black individuals comprise 20% of all patients with MM and only represent 8% of patients in clinical trials.¹⁴ It is imperative to ensure that clinical trials incorporate Black patients at rates that represent incidence rates in the real world



- Specific trial and tissue analysis based on race are critical to understanding how to optimize treatment for all patients

References



1. Rosenberg PS, Barker KA, Anderson WF. Future distribution of multiple myeloma in the United States by sex, age, and race/ethnicity. *Blood*. 2015;125(2):410-412. doi:10.1182/blood-2014-10-609461
2. American Cancer Society. *Cancer Facts & Figures for African Americans 2019-2021*; 2019.
3. Marinac CR, Ghobrial IM, Birmann BM, Soiffer J, Rebbeck TR. Dissecting racial disparities in multiple myeloma. *Blood Cancer Journal*. 2020;10(2):1-8. doi:10.1038/s41408-020-0284-7
4. Dhodapkar MV., Sexton R, Hoering A, van Rhee F, Barlogie B, Orlowski R. Race-dependent differences in risk, genomics, and Epstein-barr virus exposure in monoclonal gammopathies: Results of SWOG S0120. *Clin Cancer Res* 2020;26(22):5814-5819. doi:10.1158/1078-0432.CCR-20-2119
5. Ailawadhi S, Parikh K, Abouzaid S, et al. Racial disparities in treatment patterns and outcomes among patients with multiple myeloma: A SEER-Medicare analysis. *Blood Adv*. 2019;3(20):2986-2994. doi:10.1182/bloodadvances.2019000308
6. Ailawadhi S, Jacobus S, Sexton R, et al. Disease and outcome disparities in multiple myeloma: Exploring the role of race/ethnicity in the Cooperative Group clinical trials. *Blood Cancer J* 2018;8(7):67. doi:10.1038/s41408-018-0102-7
7. Nooka Aj, Dhodapkar M, Lonial S. MM-345: Differential toxicities and survival outcomes by race: chimeric antigen receptor (CAR) T-cell therapy for myeloma. *Clinical Lymphoma Myeloma and Leukemia*. 2020;20:S307. doi:10.1016/s2152-2650(20)30954-x
8. Sauer AG, Siegel RL, Jemal A, Fedewa SA. Current prevalence of major cancer risk factors and screening test use in the United States: disparities by education and race/ethnicity. Published online 2019. doi:10.1158/1055-9965.EPI-18-1169
9. Fiala MA, Wildes TM, Vij R. Racial disparities in the utilization of novel agents for frontline treatment of multiple myeloma. *Clinical Lymphoma, Myeloma and Leukemia*. 2020;20(10):647-651. doi:10.1016/j.clml.2020.04.018
10. Joseph NS, Kaufman JL, Dhodapkar MV., et al. Long-term follow-up results of lenalidomide, bortezomib, and dexamethasone induction therapy and risk-adapted maintenance approach in newly diagnosed multiple myeloma. *J of Clin Oncol*. 2020;38(17):1928-1937. doi:10.1200/JCO.19.02515
11. Necamp J, Haque S, Girnius SK. Practice Patterns in newly diagnosed multiple myeloma in the prospective observational CoMMpass Trial. *Blood*. 2016;128(22):4502. doi:10.1182/blood.v128.22.4502.4502
12. Chehab S, Zhang C, Panjic EH, et al. Response to therapeutic monoclonal antibodies for multiple myeloma in African Americans versus whites. *Cancer*. 2018;124(22):4358-4365. doi:10.1002/cncr.31746
13. Gormley N, Fashoyin-Aje L, Locke T, et al. Recommendations on eliminating racial disparities in multiple myeloma therapies: a step toward achieving equity in healthcare. *Blood Cancer Discov*. 2021;2:119-143. doi:10.1158/2643-3230.BCD-20-0123
14. Duma N, Azam T, Riaz I bin, Gonzalez-Velez M, Ailawadhi S, Go R. Representation of Minorities and Elderly Patients in Multiple Myeloma Clinical Trials. *Oncologist*. 2018;23(9):1076-1078. doi:10.1634/theoncologist.2017-0592