Racial Disparities in Long-Term Adverse Outcomes Among Relapsed Multiple Myeloma Patients: A Real World Comparative Analysis of Asian, Black, and White Cohorts (2000–2020)

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Introduction

The evolving therapeutic landscape for Multiple Myeloma (MM) has been resourceful in improving its health outcomes. However, relative 5-year survival remains low, with relapse being common place.

Established racial disparities persists in the incidence and complications of the disease with a higher incidence and mortality in Black patients.

The long-term adverse outcomes in relapsed MM remain underexplored across racial groups.

Aim

To evaluate racial disparities in 5-year health outcomes among patients with relapsed multiple myeloma.

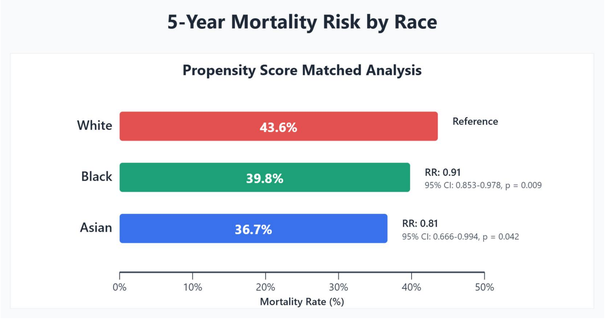
Objectives

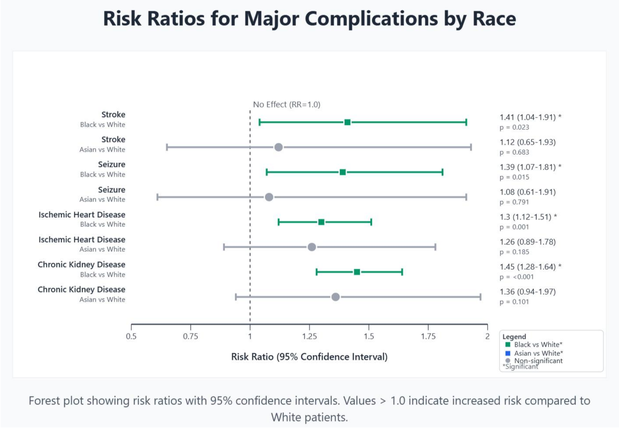
To compare 5-year morbidity and mortality outcomes among Asian, Black, and White patients with relapsed MM using healthcare data.

Methods

Using TriNetX, we identified adults (≥18 years) diagnosed with relapsed MM from 2000 to 2020 among patients with newly diagnosed MM beginning from the year 2000. MM diagnoses prior to 2000 were excluded. Propensity score matching (PSM) adjusted for age, sex, ethnicity, and comorbidities. Risks and risk ratios were assessed for mortality, hospitalization, stroke, seizures, CKD, and Ischemic heart diseases.

Results





Forest plot showing risk ratios with 95% confidence intervals. Values > 1.0 indicate increased risk compared to White patients.

Summary

Black patients with relapse have a significantly higher rate of comorbidities as seen in non relapse patients however,white relapsed patients had a higher rate of mortality.

Discussion

There is a paradoxically better survival outcome among balck relapsed patients than among white patients inspite of their having a higher rate of comorbidities. Relapsed MM patients may be faced with cumulative treatment toxicities that pose a selective safety risk along racial lines.

References

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