RACIAL DISPARITIES IN OUTCOMES AMONG PATIENTS WITH NPM1-MUTATED AML: A PROPENSITY-MATCHED REAL-WORLD ANALYSIS

H. Hotchandani1 A Patel1, V Patel1, I Deshmukh2, N Naji1, R Desai3, D Parekh1, K Desai1, T Gentile1

1. SUNY Upstate Medical University, Syracuse, New York, USA
2. University of Texas MD Anderson Cancer Center, Houston, Texas, USA
3. Orlando College of Osteopathic Medicine, Winter Garden, FL, USA

INTRODUCTION

NPM1-mutated acute myeloid leukemia (AML) is generally considered favorable-risk disease, yet racial disparities in outcomes among these patients remain poorly characterized.

AIM

To evaluate racial disparities in mortality, stem cell transplant (SCT) utilization, and treatment-related complications among non-Hispanic White and non-Hispanic Black patients with NPM1-mutated AML.

METHOD

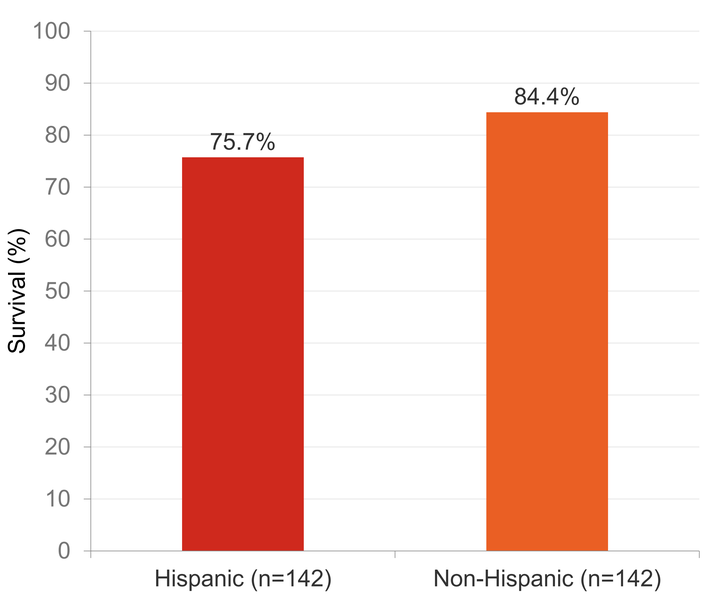
Retrospective cohort study using the TriNetX Research Network

- Adults with AML and documented NPM1 mutation, diagnosed January 2015 onward
- Cohorts stratified by non-Hispanic White vs non-Hispanic Black race/ethnicity

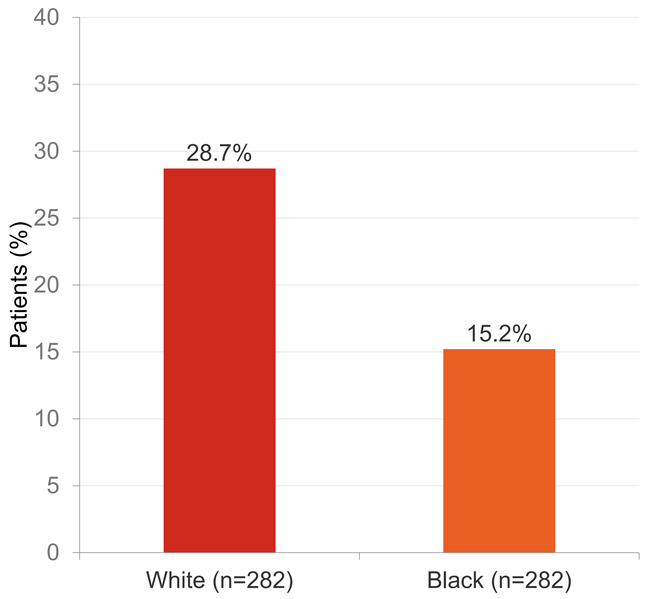
CONCLUSIONS

Despite comparable short- and long-term mortality after propensity matching, non-Hispanic Black patients with NPM1-mutated AML experienced significantly lower stem cell transplant utilization and higher rates of sepsis and ICU admission.

RESULTS



A. 1-Year Survival — Hispanic vs Non-Hispanic (log-rank p=0.06)



B. Stem Cell Transplant — White vs Black (p<0.001)

Outcome	White (n=396)	Black (n=396)	p-value	Significance
30-day mortality	6.3%	4.5%	0.269	NS
60-day mortality	8.6%	7.3%	0.505	NS
1-year mortality	23.0%	26.0%	0.331	NS
Stem cell transplant	40.4%	17.4%	<0.001	White higher
Sepsis	30.1%	38.9%	0.009	Black higher
ICU admission	23.5%	30.3%	0.030	Black higher
Pneumonia	30.8%	34.3%	0.288	NS
Neutropenic fever	52.5%	58.1%	0.116	NS