Real-World Data Showing Trends and Outcomes by Race and Ethnicity in Allogeneic Hematopoietic Cell Transplantation

A report from the CIBMTR® (Center for International Blood and Marrow Transplant Research®)

Study Details:

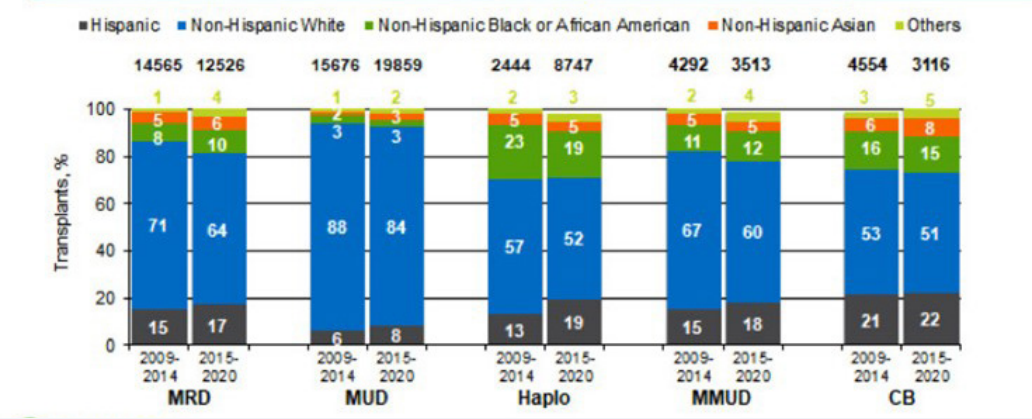
This study analyzed data from the CIBMTR registry to assess the use of HLA-mismatched donors in allogeneic hematopoietic cell transplantation (alloHCT) for ethnically diverse patients, specifically focused on access to transplant and the impact of novel graft-versus-host disease (GVHD) prophylaxis regimens.

The study evaluated alloHCT recipients in the United States from 2010 – 2020, with 8,326 HCT procedure reported in 2020. In 2010, most recipients were non-Hispanic white (NHW, 75%), while 13% were Hispanic, and 8% were non-Hispanic Black or African American.

Results at a Glance:

- The total number of alloHCT procedures in the U.S. decreased by approximately 5% in 2020, likely due to the impact of the COVID-19 pandemic, which led to deferred procedures and supply shortages.
- Ethnically diverse patients are now receiving more alloHCT procedures, most likely due to using alternative donor platforms and post-transplant cyclophosphamide (PTCy) as GVHD prophylaxis. Haploidentical (haplo) and mismatched unrelated donor (MMUD) transplants were associated with the highest proportion of diverse recipients. The use of haplo donors has risen substantially, from 6% in 2013 to 24% in 2020, while cord blood transplants have decreased.
- Survival rates improved across all racial and ethnic groups between 2016 – 2019, but disease relapse persisted as the primary cause of post-transplant death. GVHD-related deaths were higher after matched unrelated donor (MUD) and MMUD transplants.

Figure: Transplant Volume Proportions



Clinical Impact:

The use of alternative donor platforms and PTCy for GVHD prophylaxis has increased, enabling more ethnically diverse patients to receive transplants. Despite the increase in transplantation among ethnically diverse patients, racial and ethnic disparities persist in access to treatment, calling for a holistic approach that addresses social determinants of health, access barriers and promotes patient support services.

The findings of this study call for a proactive and patient-centric approach from the industry to enhance access, develop innovative treatment options, and address barriers to alloHCT for ethnically diverse patients. The National Marrow Donor Program®/Be The Match® has partnered with the American Society for Transplantation and Cellular Therapy to form the ACCESS Initiative to address and reduce barriers to HCT, ensuring access and outcomes equity for all patients.

Read the publication in *Transplantation and Cellular Therapy* (DOI:10.1016/j.jtct.2023.03.007).

To review more clinical research, visit BeTheMatchClinical.org/Research

NATIONAL MARROW DONOR PROGRAM® BE THE MATCH®

CIBMTR® CENTER FOR INTERNATIONAL BLOOD & MARROW TRANSPLANT RESEARCH

© 2023 National Marrow Donor Program. All Rights Reserved
NP22509; SEPT 2023