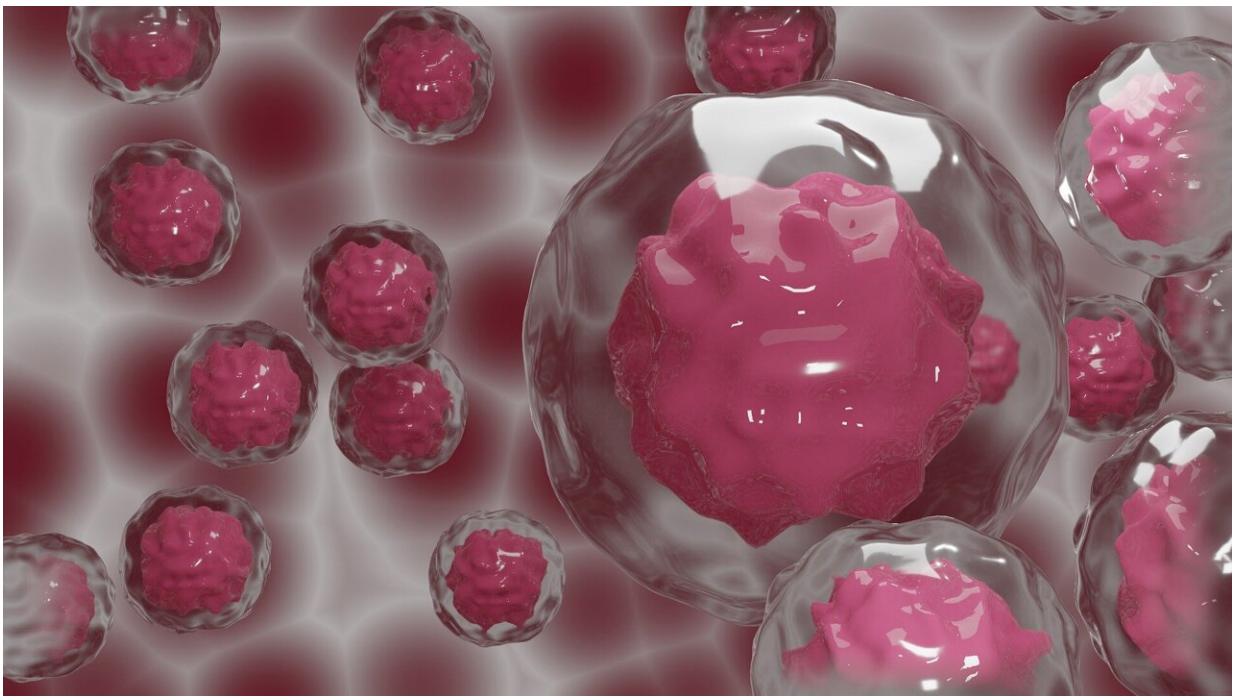


Stem cell transplants and survival rates on the rise across all racial and ethnic groups

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The volume of hematopoietic cell transplants rose among all racial/ethnic groups, but grew faster among African Americans and Hispanics compared with non-Hispanic white individuals, mirroring

changes in population growth rates. Survival after both autologous hematopoietic cell transplant (autoHCT) and allogeneic hematopoietic transplant (alloHCT) improved over time across racial/ethnic groups, though non-Hispanic African Americans still have worse outcomes, according to results published in [*Blood Advances*](#).

AutoHCT uses a patient's own stem cells to help restore the body's ability to make normal blood cells after high doses of chemotherapy and is a common treatment modality for patients with multiple myeloma and lymphoma. AlloHCT is a potentially curative treatment for people with life-threatening blood cancers such as acute leukemias and myelodysplastic and myeloproliferative syndromes and involves the use of stem cells from a suitable donor.

Although previous studies have shown improvements in outcomes post-transplant, researchers said they have been relatively small or have not included robust data to examine trends by racial/ethnic background.

For this study, researchers used data from the Center for International Blood and Marrow Transplant Research, which collects patient data for 90% of autoHCT and nearly all alloHCT recipients in the United States. The analysis included 79,904 autologous transplants and 65,662 allogeneic transplants for non-Hispanic whites, non-Hispanic African Americans, and Hispanics across five two-year cohorts from 2009 to 2018.

"This is certainly the largest study to look at the state of the science in terms of use of transplants by racial/ethnic minorities, involving over 145,000 transplants over a 10-year period. We wanted to see if improvements translated proportionally for all patients," said Nandita Khera, MD, MPH, professor of medicine in the Division of

Hematology/Oncology at Mayo Clinic in Phoenix, AZ and the study's lead author.

"Overall, we saw that the volume of transplants and survival increased for everyone, but not at the same rate."

While survival improved after both autoHCT and alloHCT over time for all racial/ethnic groups, Non-Hispanic African American adults and children undergoing alloHCT had a 13% and 62% higher risk of death, respectively, compared to non-Hispanic whites, even after adjusting for known [risk factors](#) for mortality such as age, treatments received, disease status, and donor type.

"This suggests the need to better understand the reasons for these disparities through qualitative studies exploring the impact of social determinants of health on outcomes," Dr. Khera said.

A positive trend, she added, is that based on adjusted analyses, survival outcomes for Hispanic patients are now on par with those of non-Hispanic whites, which is an "indicator of progress in the field."

While outside the scope of the study, she says improvements in transplant volume could be due to greater awareness of transplantation, better access to donors for alloHCT, and policy changes stemming from Medicaid expansion and the Affordable Care Act.

The study is limited in that it didn't include enough patients of Asian descent or mixed race/ethnicity, and only captures people who are coming to transplant, not those who never gained access.

The study's senior author, Theresa Hahn, Ph.D. of the Roswell Park Comprehensive Cancer Center, has a separate ongoing study that is examining true use. "We are using data from Surveillance,

Epidemiology, and End Results (SEER) Program and the U.S. Census to estimate the pool of people who need a transplant and using the registry data to calculate those who actually get a [transplant](#)."

"This study helps justify efforts for continued investments in research, training, practice, and [community engagement](#) to address the disparities in access and outcomes of these highly expensive and complex medical technologies so that everyone can enjoy the benefits of scientific progress equally," Dr. Khera said.

Fortunately, she explained there is increasing awareness of these issues and societal efforts such as ACCESS initiative: a collaboration between American Society of Transplantation and Cellular Therapy and NMDP to help expand access to HCT and improve outcomes for all.

More information: Trends in Volumes and Survival After Hematopoietic Cell Transplantation in Racial/Ethnic Minorities, *Blood Advances* (2024). [DOI: 10.1182/bloodadvances.2023012469](https://doi.org/10.1182/bloodadvances.2023012469)

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