

New treatment may help more people have a safe donor match for blood and marrow transplant

Use of cyclophosphamide after BMT expands access for people of color



Many people don't have a fully matched family or unrelated donor for a life-saving blood or marrow transplant (BMT). Now, a new treatment may help more people have a safe mismatched BMT.

BMT can cure diseases like leukemia, lymphoma, and sickle cell disease. However, many people in need of BMT don't have a fully matched unrelated donor, for example, about:

- 80% of Black or African American people
- 60% of Asian or Pacific Islander people
- 50% of Hispanic or Latino people
- 40% of American Indian or Alaskan Native people
- 20% of White people

People who don't have a fully matched donor can get a mismatched donor. But, mismatched BMTs are more likely to cause a serious problem called graft-versus-host disease (GVHD). GVHD can affect skin, lungs and other organs.

A new study shows that giving a certain medicine, cyclophosphamide, after mismatched BMT helps reduce GVHD.

Making mismatched BMT safer will help everyone who needs BMT, especially people of color, whose racial and ethnic backgrounds are under-represented in the donor registry.

This study involved 80 people in the U.S. who were 15 to 71 years old. All had a blood cancer: acute or chronic leukemia, myelodysplastic syndrome, or lymphoma. None of the people had a fully matched donor. About half the people in the study were

people of color, and more than a third used a donor with more than one mismatch.

A year after mismatched BMT, 76% of people were alive, which are good results for such serious cancers.

Keep in mind

This study used bone marrow transplants, not peripheral blood stem cell transplants. None of the people in the study had sickle cell disease. Also, the use of cyclophosphamide needs to be compared to other treatments.

What's next

Researchers will study mismatched BMTs further in a study that will include peripheral blood stem cell transplants for adults and bone marrow transplants for children. Peripheral blood is easier for the donor to donate and does not require an operation.

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Source

Shaw, BE; Jimenez-Jimenez, AM; Burns, LJ. A National Marrow Donor Program Sponsored Multi-Center, Phase II Trial of HLA-Mismatched Unrelated Donor Bone Marrow Transplantation Using Post-Transplant Cyclophosphamide. *Journal of Clinical Oncology*. [Epub ahead of print] Epub 2021 April 27. PMC journal in process. doi:10.1200/JCO.20.03502.

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About this research summary

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