

For patients unlikely to have a fully matched donor, their team should quickly switch to searching for alternate (mismatched) donors



Results of a new study show transplant should not be delayed waiting for a fully matched donor.

BMT can cure some cancers and blood disorders. However, 2 out of 3 patients do not have a completely matched sibling who can donate to them.

In the past, BMT might be delayed for months during the search for a fully matched unrelated donor. Meanwhile, patients got sicker and needed more treatment.

After a new study, doctors say that no one should wait long for BMT. People who are very unlikely to have a matched donor should quickly get BMT from a mismatched donor. Newer approaches, such as using post-transplant cyclophosphamide, can prevent side effects from the mismatch.

The likelihood of having a fully matched donor depends on genetic markers called HLA, as well as ancestry.

About 1800 people volunteered in a recent clinical trial of donor selection. Everyone had aplastic anemia, leukemia, lymphoma, myelodysplastic syndrome, or sickle cell disease. Researchers used a tool to divide people into 3 groups, by patients' likelihood of having a fully matched donor:

- Very likely
- Less likely
- Unlikely

Most patients who were unlikely to have a full match got BMT from a mismatched donor. The group that was very likely to have a fully matched donor and those very unlikely to find a fully matched donor took about the same time to get to transplant and had same likelihood to receive BMT.

About 2 years later, survival of the 3 groups of patients was not different.

Doctors said it is more important to have the transplant when you are ready for it than to wait for a fully matched donor.

Keep in mind

Each person's health is different. Ask your doctor about treatments.

Learn more about

- [Finding a blood stem cell donor](#) at NMDP.org
- [Clinical trials of mismatched BMT](#) at CTsearchsupport.org
- More [study summaries](#) at CIBMTR.org

Source

Stephanie J Lee, Brent Logan, Mary M Horowitz, et al. [Primary Results from BMT CTN 1702 - Clinical Transplant-related Long-term Outcomes of Alternative Donor Allogeneic Transplantation](#). Journal of Clinical Oncology. [Epub ahead of print] Epub 2025 Sept 18. doi:10.1200/JCO-25-00206.

Clinical Trial IDs: BMT CTN 1702; ClinicalTrials.gov NCT03904134

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Learn more at [BMTCTN.net](#)

This plain-language summary was written by Jennifer Motl at the Medical College of Wisconsin and reviewed by an author of the full article. © 2025 by CIBMTR, license [CC BY-SA 4.0](#).