

Half-matched and cord blood transplants fight leukemia

Both help people who have acute leukemia but no matched donor

A blood or marrow transplant (BMT) from a fully matched donor is the first choice to cure acute leukemia.

Two other types of BMT, half-matched and cord blood, also can help people with acute leukemia. A new study found they are equally helpful as each other, but not quite as good as fully matched BMT. So fully matched BMT remains the first choice of BMT for acute leukemia, and half-matched and cord blood BMT are tied for second.

Many people don't have a fully matched donor. While this problem can happen to anyone, it is more common in people whose background is:

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or other Pacific Islander
- More than one race

The new study found that when there is no fully matched donor, two alternatives are OK.

- Half-matched (also called haploidentical) donor, such as a parent or child, and sometimes a sibling
- Umbilical cord blood, which comes from the umbilical cord after a baby is born

The study included 700 children and adults who had blood cancers, either acute myeloid leukemia (AML) or acute lymphoblastic leukemia (ALL).

First, everyone got treatment so that the leukemia stopped growing temporarily (also called remission). Next, everyone got myeloablative therapy to prepare for BMT. (Most other studies used reduced-intensity therapy, not myeloablative therapy, so this was important.)

After 3 years, **people were equally likely to be alive, whether they got BMT from a half-matched donor or cord blood.**

Keep in mind

This news applies only to people with acute leukemia who got myeloablative therapy. Results may differ for other diseases or therapies. And although BMT can cure leukemia, it also may have serious effects.

Ask your doctor

What is the best treatment for me?



Learn more about

- Haploidentical transplant at [BeTheMatch.org](https://www.bethematch.org)
- Clinical trials of cord blood at [CTsearchsupport.org](https://www.ctsearchsupport.org)
- More study summaries at [CIBMTR.org](https://www.cibmtr.org)

About this research summary

This information is provided on behalf of the Consumer Advocacy Committee of the CIBMTR[®] (Center for International Blood and Marrow Transplant Research[®]).

Source

Wagner JE, Ballen KK, Zhang M-J, et al. [Comparison of haploidentical and umbilical cord blood transplantation after myeloablative conditioning](#). Blood Advances. Epub 2021 Aug 30. doi:10.1182/bloodadvances.2021004462.

