

A transplant from an unrelated donor can treat acute lymphoblastic leukemia (ALL)

Now, people with ALL may have more treatment options

New research may make it possible for more people with acute lymphoblastic leukemia (ALL) to get life-saving transplants. In the past, a transplant using blood-forming cells from a sibling was the only well-tested transplant option. However, only about 33% of people (3 out of 10) have a sibling who is a full match. Through the Be The Match Registry[®], up to 75% (about 7 out of 10 people) have a fully matched, unrelated donor. And the new research shows that a transplant from an unrelated donor can help people with ALL live equally long as a transplant from a sibling. Because many more people have fully matched, unrelated donors, this is helpful news.

Survival rates are similar using related and unrelated donors

In the research, scientists studied more than 1,400 people with ALL who had a blood or marrow transplant (BMT). The average person in the study was 37 years old, although ages ranged from 18 to 69 years old. Doctors followed these people for up to 6 years.

Scientists measured several things. They recorded whether people received bone marrow or peripheral blood stem cells (PBSC) from their donor. They also checked whether donors were related to patients.

And, scientists rated how closely each donor and patient matched. Doctors look at human leukocyte antigens (HLA) to match patients and donors. They looked at 8 different HLA markers. When a patient and donor match all 8 markers, it's called an 8/8 match or full match. When a patient and donor match only 7 out of 8 markers, it is called a 7/8 match.

- People who got transplants from fully matched unrelated donors **lived equally long** as people who got transplants from fully matched siblings.
- But, people who got transplants from fully matched unrelated donors had **a higher chance** of getting chronic graft-versus-host disease (GVHD) compared with people who got transplants from fully matched siblings.
- People who got transplants from 8/8 matched donors **lived longer** than if their donor was a 7/8 match.
- People who got bone marrow had **a lower risk of GVHD** compared with people who got PBSC.

Keep in mind

BMT from a fully matched sibling is still the best choice. But if you don't have a fully matched sibling, BMT from a fully matched, unrelated donor may be a good option. This study only looked at people with B-cell ALL, so the results don't apply if you have a different disease.

Ask your doctor

If you're considering a transplant from an unrelated donor, you may want to ask your doctor:

- How long does the average person with ALL live after transplant?
- How likely is it for me to have a fully matched donor?
- For me personally, what are the benefits and risks of a transplant?

Learn more about

- [This research study](#)
- [Blood and marrow transplant research](#)

Source

Segal E, Martens M, Wang HL, et al. Comparing outcomes of matched related donor and matched unrelated donor hematopoietic cell transplants in adults with B-cell acute lymphoblastic leukemia. *Cancer*. 2017 Sep 1; 123(17):3346-3355. doi:10.1002/cncr.30737. Epub 2017 Apr 27. PMC5568918.

About this research summary

Ground-breaking research into blood and marrow transplant is happening every day. That research is having a significant impact on the survival and quality of life of thousands of transplant patients. But the research is written by scientists for scientists. By providing research news in an easy-to-understand way, patients, caregivers, and families have access to useful information that can help them make treatment decisions.

This information is provided on behalf of the Consumer Advocacy Committee of the CIBMTR[®] (Center for International Blood and Marrow Transplant Research[®]). The CIBMTR is a research collaboration between the National Marrow Donor Program[®]/Be The Match[®] and the Medical College of Wisconsin.