

## Half-matched (haploidentical) transplant for patients with lymphoma

### What were researchers trying to learn?

Researchers looked at 2 types of transplant to see if one worked better than the other. They compared:

1. **Haploidentical transplant** – The donor is a “half-matched” family member. This means the donor matches exactly half of the patient’s HLA (human leukocyte antigen) markers. A patient’s biological parents and children will always match half of their HLA markers.
2. **Unrelated donor transplant** – The adult volunteer donor isn’t related to the patient. Donors come from registries such as the Be The Match Registry<sup>®</sup>.

The researchers studied more than 900 patients who had transplant for either Hodgkin lymphoma or non-Hodgkin lymphoma. They looked at:

- How many patients were alive 3 years after transplant (overall survival).
- How often the disease came back (relapsed) after transplant.
- How many patients had graft-versus-host disease (GVHD) after transplant. GVHD is a complication that happens when new cells from the donor (the graft) see the patient’s cells (the host) as different and attack them.

### What did they find?

Researchers found no major difference in survival between the 2 types of transplant. In this study, 3 years after transplant 50% - 62% of patients were alive.

Both types of transplant had similar relapse rates. In this study, the disease came back for 28% - 36% of patients.

But, in other transplant outcomes, there were differences. More patients who had a transplant from an unrelated donor had GVHD. The biggest difference was in chronic GVHD. A year after transplant:

- 13% of the patients who had haploidentical transplant had chronic GVHD.
- 33% - 51% of the patients who had unrelated donor transplant had chronic GVHD.

#### Important Points:

- **Patients who had a haploidentical or unrelated donor transplant had about the same 3-year survival.**
- **Patients who had a haploidentical transplant had less chronic GVHD.**

#### Why is this important?

In the past, haploidentical transplants weren't used very often because patients got a lot of GVHD. But now there's a medicine, called cyclophosphamide, to prevent GVHD. In this study, all the patients who got a haploidentical transplant also got cyclophosphamide.

If more studies show that haploidentical transplant with cyclophosphamide has good outcomes, then more patients can get transplant. That's because many people have a haploidentical donor in their family.

Survival was about the same for patients with either type of transplant, but patients who had a haploidentical transplant had less GVHD. This means their quality of life is generally better than the patients who got unrelated donor transplants.

#### What else should I keep in mind about this study?

The results of research studies are always limited in what they can and can't tell you. With this study, one drawback is that all the patients had lymphoma. So the findings may not apply to patients with other diseases. Also, all the patients were adults, so the findings may not apply to children who need a transplant.

#### Questions to ask your doctor

If you are considering a transplant, you may want to ask your doctor:

- What is the best type of donor for me? Why?
- How does the type of donor I use affect my risk of getting GVHD?
- How many haploidentical transplants has this hospital done? What were the results?

#### Learn more about

- [This research study](#)
- [Haploidentical transplant](#)

#### Source:

Kanate AS, Mussetti A, Kharfan-Dabaja MA, et al. Reduced-intensity transplantation for lymphomas using haploidentical related donors versus HLA-matched unrelated donors. *Blood*. 2016 Feb 18; 127(7): 938-947. Epub 2015 Dec 15. PMC4760094.

#### About this research summary

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