

Most patients without fully matched donors now have options

Younger, mismatched unrelated donors can help close the gap



People who need blood or marrow transplant (BMT) have more donor options than before, according to a new study.

BMT cures diseases such as leukemia and sickle cell disease. Finding the best BMT donor is complex, but there are more options now than in the past. More options help everyone, especially people who have ethnically diverse backgrounds.

In the past, patients only got BMT from **fully matched family** donors. Unrelated donors who match for 8 factors also can be used. This is called an **8/8 fully matched unrelated donor**. People who did not have a fully matched donor could not get lifesaving BMT. People who are ethnically diverse are less likely to have a fully matched unrelated donor.

Matching is important because a mismatched BMT raises the risk of graft-versus-host disease (GVHD).

But, in the last 10 years, doctors found new medicines that help prevent GVHD. With the medicines, people who didn't have fully matched donors were able to get a BMT with haploidentical, or **4/8 half-matched related donors**. A half-matched donor usually is the parent, child or sibling of the patient.

However, these new medicines also are effective with another donor option: **7/8 mismatched unrelated donors**. This is helpful, especially if no matches exist in the family. In addition, the large number of 7/8 donors ensures that a younger donor will likely be available. BMT from donors younger than 35 years old can help patients live longer.

More than half of people who got half-matched related BMT also had a possible 7/8 mismatched donor, according to a

recent study. That study included 10,000 people who got BMT during 2013-2020 in the US.

When a person doesn't have a fully matched donor, the staff at the transplant center look for another donor. At some centers, if staff found a half-matched related donor, they did not look for a 7/8 unrelated donor. There can be good reasons for this, such as patients who need BMT fast.

If you need BMT, ask your doctor how they find a donor.

What's next

Studies are needed to compare BMT from half-matched related and 7/8 mismatched unrelated donors.

Learn more about

- [How doctors find donors at NMDP.org](https://www.nmdp.org)
- [Clinical trials of mismatched BMT at CTsearchsupport.org](https://www.ctsearchsupport.org)
- [More study summaries at CIBMTR.org](https://www.cibmtr.org)

Source

Fingerson S, Maiers M, Bolon YT, et al. [Expanding donor options: haploidentical transplant recipients also highly likely to have a 7/8 matched unrelated donor](#). Blood Advances. 2023. Epub 2023/12/21. doi: 10.1182/bloodadvances.2023011814.

About this research summary

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