

For blood or marrow transplant, younger donors more helpful

Older adults with leukemia should get younger, matched donors, if possible



Researchers wondered which type of blood or marrow transplant (BMT) is better at curing acute myeloid leukemia (AML) in patients aged 50 or older.

Researchers wondered, which matched donor is better?

- A younger, unrelated donor, who might have healthier cells, or
- A brother or sister, of similar age as the patient, whose cells might be more similar to the patient's cells?

Researchers studied about 4,700 patients with AML. The patients got BMT during 2011-2018. All the patients were aged 50 and older. Patients got BMT from a matched donor, from either of 2 groups:

- A brother or sister, aged 50-85 (older, sibling donor)
- A person who was not a relative, aged 18-35 (younger, unrelated donor)

About 5 years later, patients were more likely to be free from leukemia if they had a younger, unrelated donor instead of an older, sibling donor.

Leukemia came back (relapsed) in:

- 35% (35 out of every 100 people) who had a younger, unrelated donor
- 41% (41 out of every 100 people) who had an older, sibling donor

Researchers said **a matched unrelated donor aged 18-35 is usually better than a matched sibling donor aged 50 or older**. However, if a patient doesn't have a readily available younger unrelated donor, it's still helpful to get BMT from a sibling who is older.

Keep in mind

This was a real-world study conducted at several medical centers, so patients got different medicines and therapies before and after BMT. Results are not as exact as in clinical trials, where patients all get the same medicines and the only difference is the type of BMT.

What's next

More research is needed as medicines and therapies improve.

Learn more about

- [Why a donor's age matters at BeTheMatch.org](#)
- [Clinical trials for AML at CTsearchsupport.org](#)
- [More study summaries at CIBMTR.org](#)

Source

Abid MB, Estrada-Merly N, Zhang MJ, et al. [Impact of Donor Age on Allogeneic Hematopoietic Cell Transplantation Outcomes in Older Adults with Acute Myeloid Leukemia.](#) Transplantation and Cellular Therapy. 2023. Epub 2023/07/06. doi: 10.1016/j.jtct.2023.06.020.

About this research summary

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This plain-language summary was written by Jennifer Motl at the Medical College of Wisconsin and reviewed by an author of the full article. © 2023 by CIBMTR, license [CC BY-SA 4.0](#).