

Blood or marrow transplant can work well to treat B-cell acute lymphoblastic leukemia for older patients

What were researchers trying to learn?

In this study, researchers wanted to learn how well blood or marrow transplant (BMT) works in older patients with a type of leukemia called B-cell acute lymphoblastic leukemia (ALL). This is a fast-growing blood cancer. It affects a type of blood cell called a B lymphocyte. In B-cell ALL, B lymphocytes grow rapidly and keep the bone marrow from making healthy blood cells.

In this study, researchers looked at 273 patients with B-cell ALL. The patients were all between 55 – 72 years old. They all had:

- BMT using cells from a donor or cord blood unit.
- A reduced-intensity preparative regimen.

The preparative regimen is the chemotherapy (chemo) and sometimes radiation given to prepare a patient's body for transplant. There are 2 main types of preparative regimens:

1. Standard-intensity – Uses higher doses. Called a standard-intensity BMT.
2. Reduced-intensity – Uses lower doses. Called a reduced-intensity BMT.

What did they find?

The researchers found that a reduced-intensity BMT can cure B-cell ALL in some older patients. They found:

- More than a third (35%) of patients were alive 3 years after BMT. This is about the same as the number of patients with B-cell ALL who are alive 3 years after other treatments, such as chemo.
- Patients who had BMT soon after diagnosis did better. Almost half (45%) of patients were alive 3 years after BMT when they had it during 1st complete remission (no signs of disease after initial treatment).

The researchers say that older patients with B-cell ALL should talk to a transplant doctor about BMT. This is very important if the B-cell ALL is in, or may soon be in, complete remission.

Important Point:

- **Reduced-intensity BMT can work well for older patients with B-cell ALL.**
- **For patients who had BMT when the disease was in 1st complete remission, almost half (45%) were alive 3 years later.**

Why is this important?

Now, there's information about how older patients with B-cell ALL do after BMT. So the results of this study can help these patients and their doctors make treatment decisions.

Other treatments for B-cell ALL include chemo and radiation. Doctors are studying newer treatments such as targeted therapy and immunotherapy. These treatments look for, or help your immune system look for, cancer cells and destroy them. Patients who want these treatments may need to join a [clinical trial](#).

What else should I keep in mind about this study?

Research results are always limited in what they can and can't tell you. In this study, the researchers only included patients who had a reduced-intensity BMT. So they don't know how patients do after a standard-intensity BMT.

Also, for about a third (31%) of patients in this study, the researchers didn't know about their overall health. This makes it hard for doctors to know how someone else might do after BMT.

Questions to ask your doctor

If you are considering BMT to treat B-cell ALL, you may want to ask your doctor:

- What are the chances that BMT will cure my B-cell ALL?
- What other treatment options do I have?
- Does my current health or age affect how well BMT might work for me?

Learn more about

- [This research study](#)
- [Acute lymphoblastic leukemia](#)

Source

Rosko AE, Wang H-L, de Lima M, et al. Reduced intensity conditioned allograft yields favorable survival for older adults with B-cell acute lymphoblastic leukemia: A CIBMTR analysis. *American Journal of Hematology*. 2017 Jan 1; 92(1): 42-49. Epub 2016 Oct 6. PMC5167625.

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[®]). The CIBMTR is a research collaboration between the National Marrow Donor Program[®]/Be The Match[®] and the Medical College of Wisconsin.