

## Transplant may be better when it uses bone marrow compared to peripheral blood stem cells from unrelated donors

### What were researchers trying to learn?

Researchers wanted to know what type of blood-forming cells are best for people getting a blood or marrow transplant (BMT) from unrelated donors to treat blood cancers. BMT uses blood-forming cells from either bone marrow or peripheral blood, called peripheral blood stem cells (PBSC). PBSC are the blood-forming cells from the bloodstream. Bone marrow is the soft, spongy tissue inside of bones.

Researchers studied around 200 people who got a transplant from an unrelated donor. Half got bone marrow, and half got PBSC. Researchers interviewed people 5 years after transplant to see how they were doing.

### What did they find?

At 5 years after transplant, people who got bone marrow were more likely to be back at work than people who got PBSC. People who got bone marrow also said they felt better emotionally. And they had fewer symptoms of chronic graft-versus-host disease (GVHD). GVHD is a common complication after transplant.

Researchers didn't find any differences in how long people lived after transplant or how often the disease came back.

#### Important Points:

At 5 years after transplant from an unrelated donor, people who got bone marrow had better quality of life than people who got PBSC. People who got bone marrow:

- Were more likely to be back at work
- Said they felt better emotionally
- Had fewer symptoms of chronic GVHD

### Why is this important?

Transplant doctors have more information about the risks and benefits of transplant using bone marrow compared to PBSC. This can help patients decide what type of transplant to get.

### 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. In this study, everyone had leukemia, myelodysplasia, or myelofibrosis. The results might not be the same for people with other diseases. And everyone got a transplant from a well-matched unrelated donor. So the results might not be the same for people who get a transplant from a family member.

Also, some people in the study didn't complete the interview. People who completed the interview might be different than people who didn't. This can make it hard to know what the results mean for you.

### Questions to ask your doctor

If you are considering a transplant from an unrelated donor, you may want to ask:

- Do you recommend transplant using bone marrow or PBSC for me? Why?
- Are the risks and benefits of transplant for me different if I get bone marrow or PBSC?

### Learn more about

- [This research study from its publication](#)
- [This research study on ClinicalTrials.gov](#)
- [Transplant considerations \(including cell source\)](#)

#### Source:

Lee SJ, Logan B, Westervelt P, et al. Comparison of patient-reported outcomes in 5-year survivors who received bone marrow vs peripheral blood unrelated donor transplantation long-term follow-up of a randomized clinical trial. JAMA Oncology. Epub 2016 Aug 11.

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