

For multiple myeloma, BMT is an option

For younger patients with multiple myeloma, getting a blood or marrow transplant (BMT) is sometimes better than using newer combinations of medicines alone. Now, preparatory therapy can be adjusted to meet individual patients' needs.

That's according to a new clinical trial. More than 700 adults, aged 18 to 65 years, participated. Everybody had multiple myeloma, a blood cancer. And everybody got 3 medicines: lenalidomide, bortezomib, dexamethasone; with long-term lenalidomide to follow.

Half the patients also got a BMT using their own healthy cells, called autologous BMT. The study had 2 groups of people: medicines only (with BMT used later if needed) and BMT used early in their treatment course.

Researchers observed people for more than 6 years, with follow-up continuing. **People who got early BMT stayed myeloma-free longer than people who got medicines only.**

Here's how long, on average, people lived without the myeloma getting worse:

- 4 years for people who got medicines only
- 5½ years for people who also got BMT

Importantly, **all of the patients lived equally long on average.** In the long run, people had **equally good quality of life.** But, patients who got BMT had a lower quality of life during the 2 to 3 months of the procedure, though they later recovered.

Lenalidomide, if given continuously as maintenance therapy, was important in controlling myeloma long-term in all patients. This clearly established this approach as the standard of care.

Of note, the patients who got BMT were more likely to have significant and sometimes serious side effects. Effects were mostly changes in their blood, more frequent infections, and rarely, second cancers, including leukemia.

Keep in mind

This study only looked at autologous BMT, using a person's own cells. It did not look at allogeneic BMT, using cells donated by another person.

Ask your doctor

What are the possible benefits and harms of treatments?

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- [Multiple myeloma](#) at BeTheMatch.org
- More [clinical trials](#) at CTsearchsupport.org
- More [study summaries](#) at CIBMTR.org



Original research article

Richardson PG, Jacobus SJ, Weller EA, et al. [Triplet Therapy, Transplantation, and Maintenance until Progression in Myeloma](#). *New England Journal of Medicine*. 2022;387(2):132-147. Epub m. doi: 10.1056/NEJMoa2204925.

About this research summary

The Blood and Marrow Transplant Clinical Trials Network (BMT CTN) is a collaboration of The Center for International Blood and Marrow Transplant Research® (CIBMTR®); The Medical College of Wisconsin; The National Marrow Donor Program® / Be The Match®; and The Emmes Company®.

Clinical Trials IDs

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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. © 2022 by CIBMTR, license CC BY-SA 4.0.



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