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?

**Learn more about**
- [Multiple myeloma](https://www.BeTheMatch.org) at BeTheMatch.org
- More [clinical trials](https://www.CTsearchsupport.org) at CTsearchsupport.org
- More [study summaries](https://www.CIBMTR.org) at CIBMTR.org