

## Auto transplants are safe and effective for people with multiple myeloma and damaged kidneys

### What were researchers trying to learn?

Researchers wanted to find out if blood and marrow transplants (BMT) are safe for people with multiple myeloma and damaged kidneys. Many people with multiple myeloma have kidney damage from the cancer. This damage means the kidneys don't remove waste from the bloodstream very well.

Researchers studied how well people with multiple myeloma and kidney damage did after autologous (auto) transplants. Auto transplant uses the patient's own blood-forming cells. First the people got high-dose chemotherapy (chemo) to eliminate the cancer cells. Then they got the blood-forming cells to replace the bone marrow.

The researchers looked at nearly 1,500 patients. They studied 3 groups of people based on how much kidney damage they had: 1) normal/mild, 2) moderate, and 3) severe kidney damage.

### What did they find?

The researchers found that auto BMT is safe and works well for people with multiple myeloma and damaged kidneys. And they found little difference between the 3 groups. The treatment was safe for people with normal/mild, moderate, and severe kidney damage.

Specifically, the researchers looked at how many people in each group were alive 5 years after BMT. They found:

- Normal/mild kidney damage – Almost 7 out of 10 (68%) were alive
- Moderate kidney damage – Almost 7 out of 10 (68%) were alive
- Severe kidney damage – 6 out of 10 (60%) were alive

The researchers also looked at whether an auto BMT could help people with severe kidney damage stop dialysis. Dialysis is when a machine filters out waste from a patient's blood, acting as a replacement for the kidneys. The researchers found that 34 of the 35 people in this study who were on dialysis before transplant were able to stop dialysis treatments.

And finally, the researchers found that people who got a higher dose of the chemo drug melphalan before transplant generally did better.

#### Important Points:

- **Auto transplants are safe and work equally well in people with multiple myeloma and damaged kidneys.**
- **The treatment can help some people stop dialysis treatments.**
- **Higher doses of melphalan can improve results.**

### Why is this important?

Doctors used to think people with kidney damage couldn't get auto BMT. But this study tells doctors that people with multiple myeloma and kidney damage can safely get auto BMT. And it tells transplant doctors that a higher chemo dose before transplant is generally a good idea.

### 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. With this study, only people with multiple myeloma who got a transplant were studied. So, we don't know anything about the people who were excluded from transplant. We also don't know whether people with other diseases and damaged kidneys can safely get auto BMT.

This study also doesn't tell us if people with multiple myeloma and kidney damage can safely get allogeneic BMT. Allogeneic BMT uses blood-forming cells from a donor or umbilical cord blood.

### Questions to ask your doctor

If you have multiple myeloma and kidney damage and you're considering a BMT, you may want to ask:

- Which kind of BMT is best for me, auto or allogeneic?
- Will I see doctors who specialize in treating patients with kidney damage?
- How much experience does this hospital have treating patients with multiple myeloma?
- What factors about me or my disease might affect how I do after transplant?

### Learn more about

- [This research study](#)
- [Multiple myeloma](#)

#### Source

Mahindra A, Hari P, Fraser R, Fei M, et al. Autologous hematopoietic cell transplantation for multiple myeloma patients with renal insufficiency: A CIBMTR analysis. *Bone Marrow Transplantation*. 2017 Dec 1; 52(12):1616-1622. doi:10.1038/bmt.2017.198. Epub 2017 Sep 18.

#### About this research summary

Ground-breaking research into blood and marrow transplant is happening every day. That research is having a significant impact on the survival and quality of life of thousands of transplant patients. But the research is written by scientists for scientists. By providing research news in an easy-to-understand way, patients, caregivers, and families have access to useful information that can help them make treatment decisions.

This information is provided on behalf of the Consumer Advocacy Committee of the CIBMTR<sup>®</sup> (Center for International Blood and Marrow Transplant Research<sup>®</sup>). The CIBMTR is a research collaboration between the National Marrow Donor Program<sup>®</sup>/Be The Match<sup>®</sup> and the Medical College of Wisconsin.

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