

## Better survival over time for patients with acute GVHD

### What were researchers trying to learn?

In this study, researchers wanted to learn more about a serious complication of bone marrow transplant (BMT) called graft-versus-host disease (GVHD).

GVHD happens when new cells from the donor (the graft) see the patient's cells (the host) as different and attack them. GVHD can be mild to severe, and even life-threatening. In this study, researchers focused on acute GVHD. This kind of GVHD often happens within the first 3 months after transplant.

The researchers wanted to know whether advances in supportive care of patients with acute GVHD (particularly newer antifungal medications), helped patients live longer. So, they compared patients during 3 different time periods: 1999-2001, 2002-2005, and 2006-2012.

In their study, the researchers looked at nearly 3,000 patients who had transplants at hospitals across the United States. Although acute GVHD can be mild, all the patients in this study had moderate to severe acute GVHD.

### What did they find?

Researchers found that more patients who got treatment from 2006-2012 were alive 2 years after transplant compared to patients who got treatment from 1991-2001. The table below shows 2-year survival in the 3 time periods for BMT patients who had moderate to severe acute GVHD.

#### Patients with acute GVHD who were alive 2 years after BMT

	1999-2001	2002-2005	2006-2012
<b>Patients with moderate GVHD</b>	4 ½ out of 10 (46%)	5 out of 10 (52%)	6 out of 10 (60%)
<b>Patients with severe GVHD</b>	2 out of 10 (21%)	2 ½ out of 10 (25%)	3 out of 10 (31%)

Also, the researchers looked at 2 medicines used to prevent GVHD:

- Tacrolimus
- Cyclosporine

They found that tacrolimus worked better than cyclosporine. It helped patients live longer.

#### Important Points:

- **Treatments for patients with moderate to severe acute GVHD have gotten better over time.**
- **Tacrolimus helped patients with moderate acute GVHD live longer.**

### Why is this important?

Transplant doctors and patients can use this study to talk about how acute GVHD can affect their chance of survival after transplant. It can also help them talk about the different medicines to prevent acute GVHD.

### 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, researchers only looked at patients with acute myeloid leukemia (AML), acute lymphoblastic leukemia (ALL), or myelodysplastic syndromes (MDS). So, the results may not apply to patients with other diseases.

All patients in the study had standard-intensity chemotherapy to prepare their bodies for transplant. So, these results may not apply to patients who had reduced-intensity chemotherapy. Also, all patients had moderate or severe acute GVHD. So, the results may not apply to patients who had mild acute GVHD or chronic GVHD.

### Questions to ask your doctor

If you are considering BMT, you may want to ask your doctor:

- Does my age or other factors affect the chances that I will get acute GVHD?
- What can I do to lower my chances of getting acute GVHD?
- How likely will treatment for acute GVHD work for me?
- What are the side effects of the medicines used to treat acute GVHD?

### Learn more about

- [This research study](#)
- [GVHD](#)

#### Source:

Khoury HJ, Wang T, Hemmer MT, et al. Improved survival after acute graft-versus-host disease diagnosis in the modern era. *Haematologica*. 2017 May 1; 102(5):958-966. doi: 10.3324/haematol.2016.156356. Epub 2017 Mar 16. PMC5477615.

#### About this research summary

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