

Better transplant results with rituximab for people with B cell non-Hodgkin lymphoma

What were researchers trying to learn?

Researchers wanted to learn whether giving the medicine rituximab to patients before their transplant would make the transplant work better. Specifically, they gave rituximab to patients as part of their preparative regimen. The preparative regimen is the treatment given in the days right before transplant. It's given to prepare the body to receive the donated cells. It's also called the conditioning regimen.

Rituximab attacks and kills B cells (a type of immune cell). In this study, rituximab was given to patients with the types of non-Hodgkin lymphoma (NHL) that affect B cells. This includes diffuse large B cell lymphoma (DLBCL), follicular lymphoma, mantle cell lymphoma, and marginal zone lymphoma. Because rituximab kills B cells, the researchers thought that it would help patients with B cell NHL when given before transplant.

Researchers studied transplant results (outcomes) in more than 1,400 adults with B cell NHL. They compared patients who got rituximab to patients who did not get rituximab.

What did they find?

They found that the NHL was **less likely** to get worse in patients who got rituximab before transplant compared to those who did not. At 3 years after transplant, the NHL did **not** get worse in:

- A little more than half (56%) of patients who got rituximab
- A little less than half (47%) of patients who did **not** get rituximab

There was **no difference** between the 2 groups of patients when doctors compared how many:

- Were alive 3 years after transplant, regardless of whether they had signs of NHL
- Had graft-versus-host disease (GVHD)
- Had their NHL come back (relapse)

Important Points:

- **Rituximab helped patients live a little longer without the NHL getting worse.**
- **Rituximab made no difference in rates of overall survival, GVHD, and relapse.**

Why is this important?

This study tells doctors that giving rituximab to patients before transplant may help them do better. Specifically, rituximab can help patients with B cell NHL live longer without the disease getting worse.

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, the researchers only studied rituximab before reduced-intensity transplants. Reduced-intensity transplants use preparative regimens with lower doses of chemotherapy and radiation treatments. Most older patients get transplant with reduced-intensity regimens.

This study cannot tell us whether rituximab would lead to better outcomes for patients getting standard-intensity preparative regimens.

Questions to ask your doctor

If you have B cell NHL and are considering a transplant, you may want to ask:

- What type of preparative regimen will I get?
- Does this hospital have experience treating patients with B cell NHL?
- What specific factors about me or my disease might affect my transplant outcome?

Learn more about

- [This research study](#)
- [Non-Hodgkin lymphoma](#)

Source

Epperla N, Ahn KW, Ahmed S, et al. Rituximab-containing reduced-intensity conditioning improves progression-free survival following allogeneic transplantation in B cell non-Hodgkin lymphoma. *Journal of Hematology & Oncology*. 2017 Jun 12; 10(1):117. doi:10.1186/s13045-017-0487-y. Epub 2017 Jun 12. PMC5469142.

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.

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