

## More teens and young adults with ALL survive after blood or marrow transplant than in the past

### What were researchers trying to learn?

Researchers wanted to learn whether survival after blood or marrow transplant has increased over time, especially for patients 15-40 years old (teens and young adults).

In general, cancer survival for teens and young adults has not increased during the last 20 years. However, cancer survival has increased for patients younger than 15 and patients older than 40. Researchers wanted to know if survival has increased for teens and young adults who get a transplant.

Researchers studied more than 2,600 patients of all ages who had transplant between 1990 and 2007. All patients had acute lymphoblastic leukemia (ALL), a type of blood cancer. The patients in the study had transplants from related donors (brothers or sisters) or unrelated donors from a volunteer donor registry, like the Be The Match Registry<sup>®</sup>. All patients had transplants using a standard-intensity preparative regimen. This is high-dose chemotherapy and sometimes radiation that patients get before transplant to kill as many cancer cells as possible.

Of the patients studied, there were more than:

- 980 children
- 1,200 teens or young adults
- 460 adults older than 40

### What did they find?

The researchers compared transplant results for each of the age groups during 3 time periods: 1990-1995, 1996-2001, and 2002-2007. They measured how many patients were alive 5 years after transplant (5-year survival).

They found that 5-year survival increased over time for teens and young adults and for children. For example, for teens and young adults, 5-year survival increased from 34% during 1990-1995 to 43% during 2002-2007.

#### **Important Point:**

**5-year survival increased over time in teens and young adults and in children.**

### Why is this important?

Transplant doctors can now give up-to-date information on 5-year survival to their patients with ALL who are considering transplant. Also, because the researchers studied 3 different age groups, patients in each age group can have more accurate 5-year survival estimates.

### 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, one drawback is researchers only studied patients with ALL who got a standard-intensity preparative regimen. Also, the patients had different treatments before transplant.

Another drawback is researchers don't know all the reasons why some patients had better results from transplant. This can make it hard to know what the results mean for you.

### Questions to ask your doctor

If you have ALL and are considering transplant, you may want to ask:

- What is the average survival for patients in my age group?
- Do you recommend a standard-intensity preparative regimen? Why or why not?
- Is there anything about my health that would raise or lower my chances of survival?
- When is the best time for me to have a transplant?

### Learn more about

- [This research study](#)
- [ALL and transplant outcomes](#)

#### Source:

Wood WA, Lee SJ, Brazauskas R, et al. Survival improvements in adolescents and young adults after myeloablative allogeneic transplantation for acute lymphoblastic leukemia. *Biology of Blood and Marrow Transplantation*. 2014 Jun 1; 20(6): 829-836. Epub 2014 Mar 7. PMC4019683.

#### 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.