

CAR-T therapy for lymphoma, leukemia, works well

Large study of tisagenlecleucel shows it helps hard-to-treat cases



A CAR-T cell therapy helps hard-to-treat cases of lymphoma and leukemia, according to a large study.

This study included more than 500 people who got tisagenlecleucel, pronounced “tiss-uh-jen-luh-CLUE-sell.” This is a type of CAR-T therapy, sold under the brand name Kymriah. The people got the therapy during 2017 to 2020.

Tisagenlecleucel can help 2 groups of people who have cancer that either comes back or isn’t helped by the usual treatments (relapsed or refractory cancer):

- Young people, from infants to young adults aged 26 years, who have acute lymphoblastic leukemia (ALL)
- Adults, aged 18 and older, who have non-Hodgkin lymphoma (NHL)

These relapsed or refractory cancers are very serious. Before CAR-T therapy was developed, most people died.

This study showed that after getting tisagenlecleucel, cancer cells could not be found in:

- 85% of people with ALL
- 40% of people with NHL

One year after getting tisagenlecleucel, more than 70% of all people were still alive.

These results were similar to those of the first clinical trial for tisagenlecleucel.

This study also showed similar rates of unwanted effects. Though temporary, these effects can be serious.

About half of people had cytokine release syndrome (CRS), which causes fevers and organ problems.

And roughly 1 in 4 people had brain problems, ranging from confusion to seizures.

These problems usually get better over time.

What's next for CAR-Ts

The Center for International Blood and Marrow Transplant Research (CIBMTR) Cellular Therapy Registry observes CAR-T therapies. The registry links info on how well therapies work, side effects, and doses. Medical centers and CAR-T makers can report info to the registry. This info is shared with the public, so patients can choose what is best for them.

Learn more about

- [CAR-T therapy at BeTheMatch.org](https://www.bethematch.org/car-t-therapy)
- [CAR-T clinical trials at CTsearchsupport.org](https://www.ctsearchsupport.org)
- [More study summaries at CIBMTR.org](https://www.cibmtr.org)

Original source

Pasquini MC, Hu Z-H, Curran K, et al. [Real-world evidence of tisagenlecleucel for pediatric acute lymphoblastic leukemia and non-Hodgkin lymphoma](#). Blood Advances. 2020 Nov 10; 4(21):5414-5424. Epub 2020 Nov 4. PMC7656920. doi:10.1182/bloodadvances.2020003092.

About this research summary

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

Learn more at [CIBMTR.org](https://www.cibmtr.org).

