# A Potential Alternative to CAR T-cell Therapy
## For Relapsed or Refractory Large B-cell Lymphoma

If your cancer comes back after treatment or does not respond well to treatment (is relapsed or refractory), you may be looking for a new option. Many individuals who have certain cancers, such as blood cancers, might consider CAR T-cell therapy. However, not everyone qualifies to receive it. Clinical research studies are currently investigating a potential alternative to CAR T-cell therapy, and you may be eligible.

**If you or someone you know has relapsed or refractory (r/r) large B-cell lymphoma (LBCL), this study may interest you.**

### About the Study

The [redacted] Study is researching an investigational cancer treatment called chimeric antigen receptor (CAR) natural killer (NK), or CAR NK, cell therapy. Researchers believe that this therapy may be an alternative to CAR T-cell therapy and have a lower chance of side effects.

The purpose of this study is to see how well the investigational CAR NK cell therapy works with the body for individuals with r/r LBCL. All participants will receive the investigational therapy. This study may be an alternative for you if you do not qualify for CAR T-cell therapy.

### Study Schedule

The [redacted] Study is made up of two parts and is currently recruiting for Part 1. During Part 1, there will be three study periods.

- **Screening**
  - This period lasts up to 28 days and may include assessment visits.
  - The study team will perform assessments to see if the study is a good match for you.
- **Treatment**
  - This period lasts up to four weeks and may include up to nine visits.
  - Before your treatment begins, you will undergo conditioning chemotherapy. This is to make sure your body does not attack the CAR NK cells you will receive.
  - You will receive up to three intravenous infusions (administered through a vein) of the investigational therapy.
- **Follow-up**
  - This period lasts up to five years.
  - The number of visits will depend on how you respond to the therapy and whether or not you need another treatment (other than the investigational therapy) for your cancer.
  - At visits, the study team will perform various assessments to check on your health.

After your time in this study is complete, you may continue on to a long-term follow-up study, where the study team will occasionally check in with you about your health for up to 15 years.

### Who Can Participate

To qualify for this study, you must:

- Be 18 years or older
- Have a diagnosis of r/r LBCL
- Have received and had a poor response to at least one prior treatment for your cancer
- Have not received CAR T or CAR NK cell therapy within the past three months

There are additional requirements, which a study doctor will go over with you.

## The Difference between CAR T and CAR NK

T cells and NK cells are both naturally found in the body's immune system. They work by finding foreign cells and fighting them. However, there are some key differences between T cells and NK cells.

- **T cells** are white blood cells that, when activated by an antigen, fight infection and protect the body from disease.
- **NK cells** are white blood cells that do not need to be activated and may respond more quickly to harmful cells.
  - NK cells are often present at lower levels in people who have cancer.
  - Giving an individual with cancer donated NK cells may have the potential to improve how their immune system fights the cancer.[1]

Both T cells and NK cells can be taught by a chimeric antigen receptor (CAR) to target and attack certain cancer cells.

| CAR T-cell therapy | CAR NK cell therapy |
|---|---|
| • T cells are extracted from the patient's own blood and, in a lab, modified with CAR to target cancer cells.<br>• The CAR T cells are then returned to the same patient they were taken from, now programmed specifically to attack the cancer. | • NK cells are extracted from donated umbilical cord blood and modified with CAR to potentially target cancer cells more efficiently.<br>• The CAR NK cells are then given to a patient and may also target harmful cells on their own.<br>• Compared to CAR T-cell therapy, CAR NK cell therapy has a lower chance of side effects and is typically better received by the patient's immune system.[2] |

**The [redacted] Study is researching a CAR NK cell therapy.**

**To learn more about the [redacted] Study, contact the research site listed below or visit ClinicalTrials.gov (NCT[redacted]).**


Resources
1. ncbi.nlm.nih.gov/pmc/articles/PMC8394762
2. frontiersin.org/journals/oncology/articles/10.3389/fonc.2021.720501/full


[redacted] **Study**

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