How is CAR T-cell therapy different from stem cell transplantation? Both stem cell transplantation and CAR T-cell therapy are cellular therapies, and many of the steps in the procedures are similar, such as collecting cells from the patient, conditioning chemotherapy, and reinfusion of the cells. However, CAR T-cell therapy and stem cell transplantation differ in many ways. A transplant is not immunotherapy (promoting the body’s own immune response), but rather gives a patient a new immune system to reshuffle after chemotherapy. Patients who receive stem cells from a matched donor may require immunosuppressant to control rejection of the graft or experience graft-versus-host disease. Since the CAR T-cells use your own genetically altered cells, your body should not reject these new cells. Additionally, the chemotherapy is less intense, with fewer side effects, and the side effects caused by cytokine release syndrome (CRS) are unique to CAR T-cell therapy.

Is the procedure covered by insurance? Before undergoing the procedure, check with your medical insurance provider to see what costs the provider will cover and what costs you will be responsible for paying. If there is a dispute about coverage or if coverage is denied, ask your insurance carrier about their appeals process if a claim is repeatedly denied, contact your state’s insurance agency.

Can I take other medications at the same time as CAR T-cell therapy? Immunotherapy enhances the power of a patient’s immune system to attack tumors. An immunotherapy approach, called chimeric antigen receptor (CAR) T-cell therapy, uses patients’ own immune cells to treat their cancer.

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How long do I need to be near the certified treatment center? You will need to plan to be near the certified treatment center for at least four weeks after the infusion of your CAR T cells.

How do I know I am getting my own CAR T-cell therapy? CAR T-cell therapy should only be performed at certified centers, which may require travel and lodging near the treatment center. Be sure to consider these costs and ask your provider if they cover these expenses.

How long do I need to be near the certified treatment center? You will need to seek immediate attention for any of the following:

- Signs or symptoms associated with CRS including fever, chills, fatigue, rapid heartbeat, nausea, feeling short of breath, and feeling faint or dizzy upon standing.
- Signs or symptoms associated with neurologic events including altered mental state, sleepiness, memory loss, or personality changes, weakness, changes in your level of consciousness, difficulty writing, speech disorders, tremors, and confusion.
- Signs or symptoms associated with infection such as fever or chills.
- Signs or symptoms associated with bone marrow suppression including feeling overtired, bleeding that does not stop, or signs or symptoms associated with CRS including fever, chills, fatigue, rapid heartbeat, nausea, feeling short of breath, and feeling faint or dizzy upon standing.

How can I be sure that I am getting my own CAR T-cell therapy? There are several quality control checks throughout the process to make sure that you only receive your own CAR T cells. Your T cells are labeled with a unique identifier that stays with them during the entire process, and the identifiers are carefully matched to your identity before the cells are infused.

How do I need to be near the certified treatment center? You will need to plan to be near the certified treatment center for at least four weeks after the infusion of your CAR T cells.

Can I take other medications at the same time as CAR T-cell therapy? Before receiving the CAR T-cell therapy, tell your healthcare provider about all your medical history, including if you have or have had:

- Kidney conditions
- Neurologic conditions (such as seizures, stroke, or memory loss)
- Lung or breathing conditions
- Heart conditions
- Liver conditions
- A recent or active infection
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For additional information on financial aid resources, view LRF’s Resources for Financial Assistance fact sheet available at lymphoma.org/publications, or contact the LRF Helpline at (800) 500-9976 or helpline@lymphoma.org.

Which symptoms should I call my healthcare provider about or go to the emergency room? You will need to seek immediate attention for any of the following:

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CAR T-Cell Transport

The first step of CAR T-cell therapy is to obtain some of your T cells, a type of white blood cell. This process is called leukapheresis and usually takes three to four hours.

• During leukapheresis, your blood is removed through an IV.
• Your blood is processed through a machine that separates your T cells from the other blood cells.
• The rest of your blood cells are returned to your body.

Leukapheresis

The T cells are sent to a processing center where they are genetically engineered to target your lymphoma.

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A few days prior to your CAR T-cell infusion, you will receive low-dose chemotherapy.

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