

CELLULAR THERAPY

WHAT IS CAR T-CELL THERAPY?

Chimeric antigen receptor (CAR) T-cell therapy is a type of cancer treatment known as *immunotherapy*. It changes the T cells of your immune system so that they recognize and attack cancer cells. T cells are a type of white blood cell that helps the immune system find and destroy foreign objects in the body.

To create CAR T-cell therapy, a sample of your T cells is collected from your blood and sent to a manufacturing site. At that site, a chimeric antigen receptor is added to your T cells; the receptor recognizes certain markers found on cancer cells. Think of this new chimeric antigen receptor as the global positioning system (GPS) that gives your car directions to a specific location. After the CAR T cells are given back to you through an infusion in your vein, the CAR T cells (with the added GPS information) will track down the cancer cells they are programmed to find and will activate your immune system to attack and destroy them (**Figure 1**).

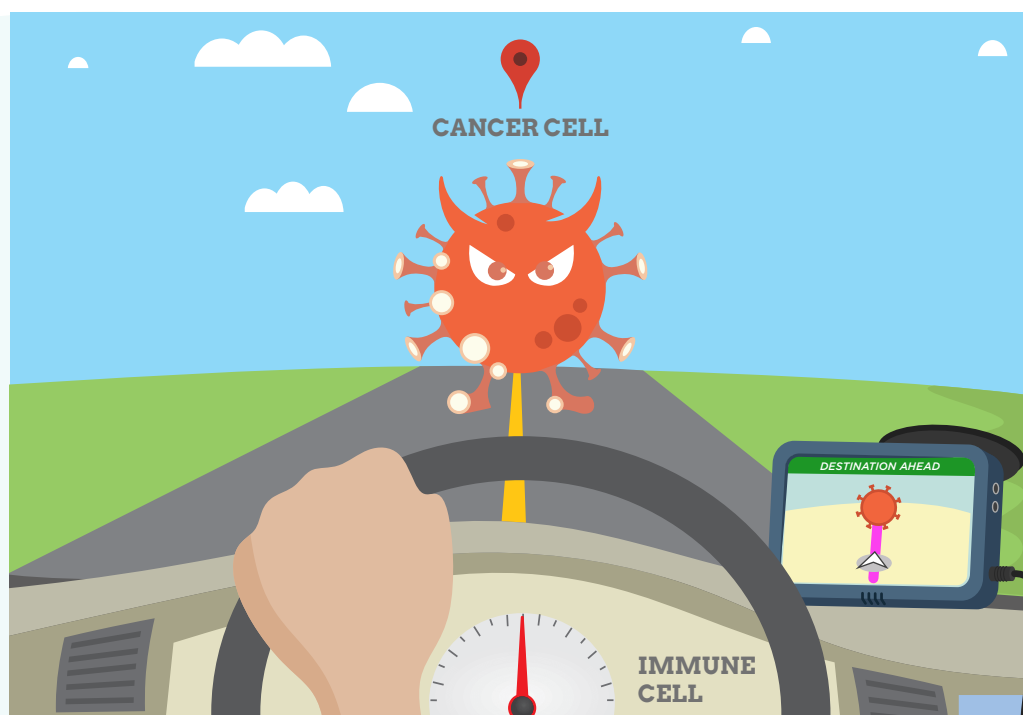


Figure 1. The chimeric antigen receptor added to your T cells is like the information in a GPS that routes your car to a certain destination. It routes your immune system to the cancer cells.

How Will My CAR T Therapy Be Given?

Several steps are taken to create and deliver your CAR T therapy:

1. **T cells are collected from your blood.** You will need to go to the hospital or clinic to have blood drawn by an apheresis machine. An apheresis machine removes blood through a needle in your arm and separates out the T cells needed to make the CAR T drug. Your blood is then returned to you through a needle in your other arm. This process usually takes 2–3 hours.
2. **CAR T cells are made.** Your T cells are then sent to a laboratory where a chimeric antigen receptor (CAR) is added to them. The addition of this receptor allows your T cells to recognize certain markers found on cancer cells. CAR T cells are copied in the lab to make sure you will have enough of them in your body to treat your cancer. It may take several weeks for the CAR T cells to be made.
3. **You are given lymphodepleting (LD) chemotherapy.** Several days (usually 2–14 days) before you receive your CAR T cells, you will return to the hospital or clinic to receive one or more chemotherapy agents. This chemotherapy decreases the number of T cells in your body to make room for the new CAR T cells. This process is called *lymphodepletion*. The lymphodepleting chemotherapy will be given to you by a nurse or another trained healthcare professional. You will receive these medications through a vein. Bendamustine is usually given daily for 2 days before the CAR T therapy. Fludarabine and cyclophosphamide are usually given daily for 3 days before the CAR T therapy (**Figure 2**).

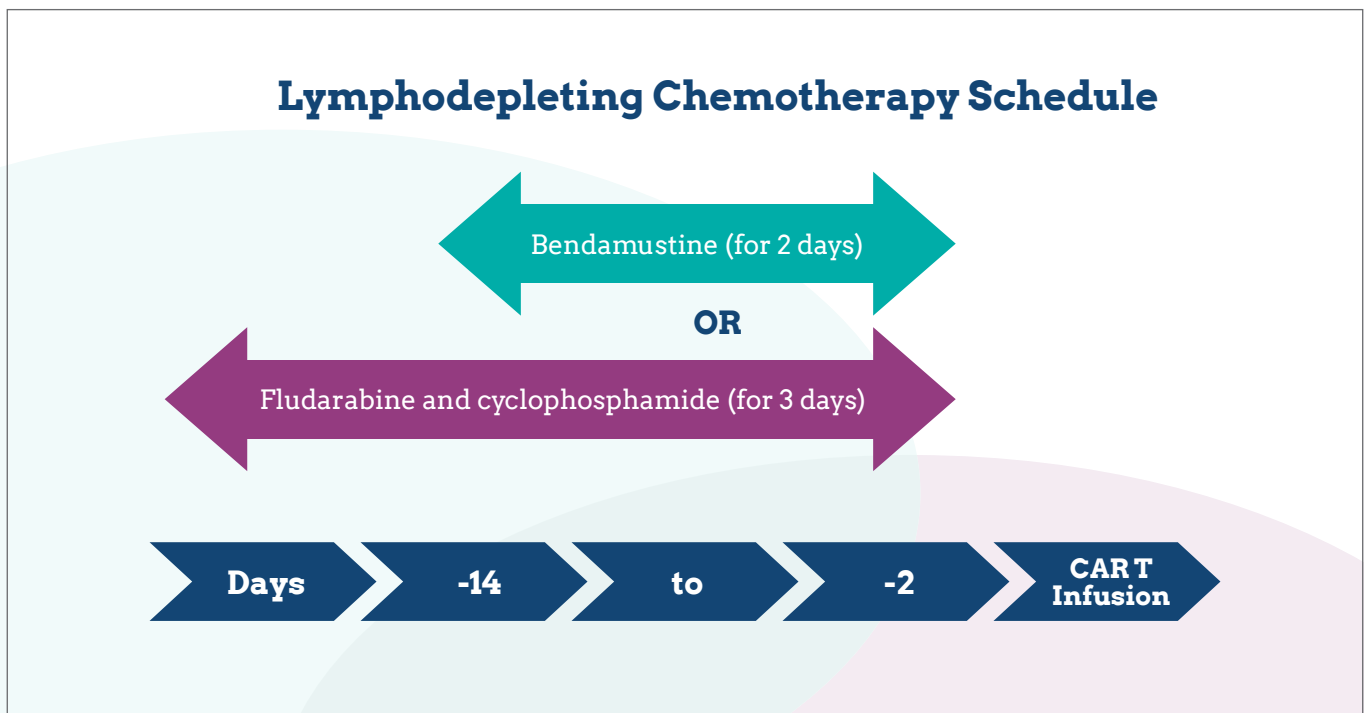


Figure 2. The lymphodepleting chemotherapy is given 2–14 days before the CAR T infusion.

4. **You are given the infusion of CAR T cells.** The CAR T infusion will be given to you through the vein. The infusion usually takes 30–90 minutes to complete. The day you receive your CAR T cells is called infusion day 0 or infusion day 1. (Note: you may be given special medications during Steps 3 and 4 to help prevent some side effects. These are discussed below.)
5. **The CAR T cells go to work.** After your CAR T therapy has been administered, the CAR T cells seek out and attack the cancer cells. Your healthcare team will monitor you closely while the CAR T cells begin their work. Usually you will be asked to stay in the hospital or near the hospital or clinic for several weeks after your infusion.

Steps 1–5 are shown in **Figure 3**.

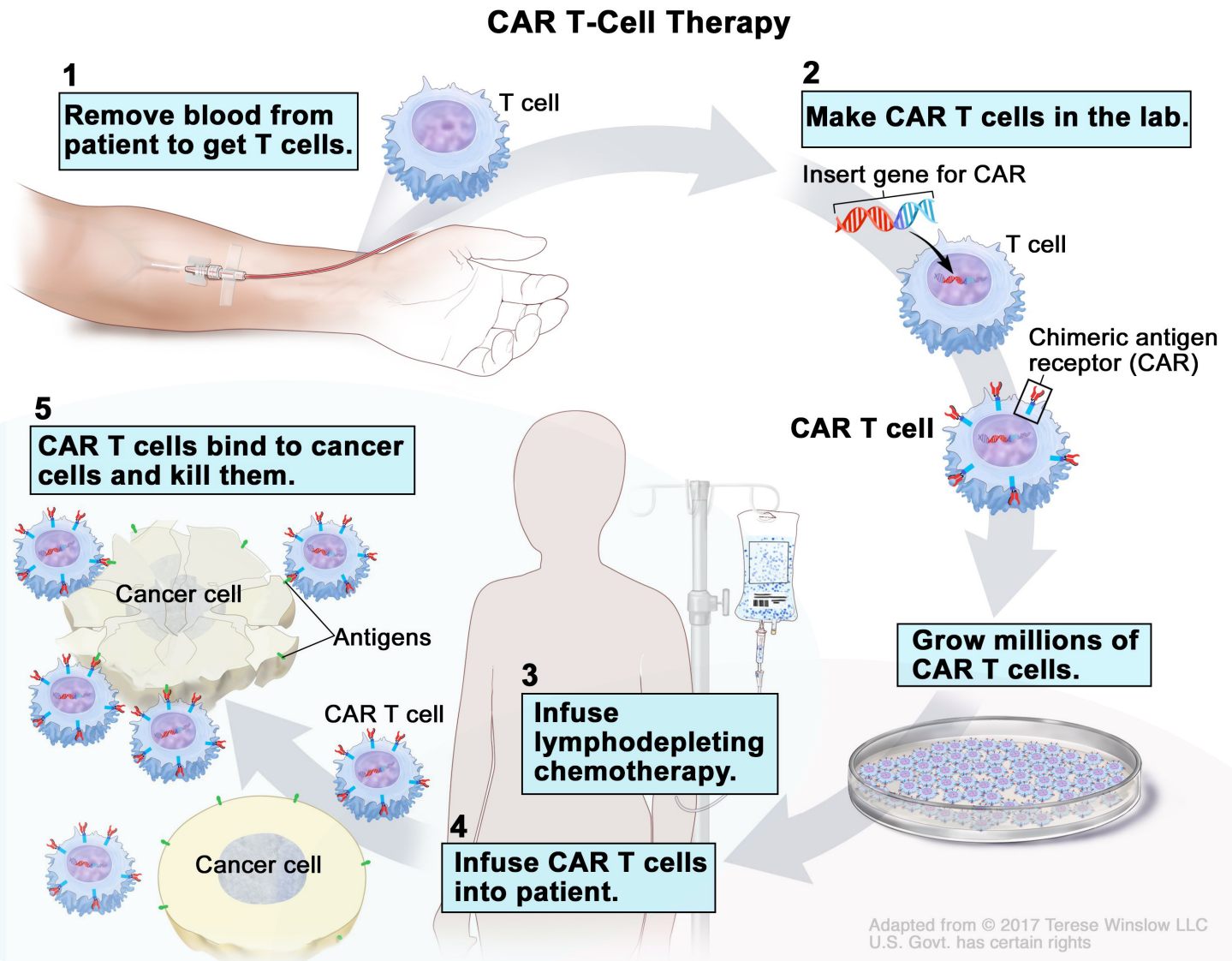


Figure 3. In chimeric antigen receptor T-cell therapy, the T cells of a person’s immune system are changed so that they recognize and attack cancer cells.

Adapted from © 2017 Terese Winslow LLC; the U.S. Government has certain rights. Used with permission.

What Can I Expect During My Treatment? What Are the Possible Side Effects?

Chemotherapy agents given during Step 3 (lymphodepletion) may cause side effects like the ones listed here:

- **Bendamustine:** low blood counts, infusion reactions (fevers, chills, itching, skin rash), nausea, vomiting, and fatigue. More serious side effects are infertility and injury to the liver.
- **Fludarabine:** low blood counts, weakness, nausea, vomiting, cough, infection, and poor appetite. More serious side effects are numbness and tingling of the hands and feet, skin rash, taste changes, and confusion.
- **Cyclophosphamide:** low blood counts, nausea, vomiting, hair loss, and poor appetite. More serious side effects are mouth sores and bladder irritation, including blood in the urine.

The CAR T therapy may also cause side effects. While you are receiving lymphodepleting chemotherapy and CAR T therapy, you may be given one or more of the following medications, called *supportive care medications*, to prevent side effects.

- **Allopurinol:** This medication helps prevent damage to your kidneys as the cancer cells break down. You will take allopurinol by mouth daily when you begin the lymphodepleting chemotherapy and for at least a week after your CAR T infusion. Some side effects of allopurinol are skin rash, nausea, vomiting, and diarrhea.
- **Antibiotic medications:** After you receive lymphodepleting chemotherapy, you will develop low white blood cell counts. During this time, you will be at higher risk of getting an infection. In order to prevent a potential infection, you will be given antibiotics.
- **Antiseizure medications:** These medications help prevent seizures. You may start one of these when you begin your CAR T therapy and continue it for 30 days. Some side effects are drowsiness, headache, anxiety, nausea, and fatigue.
- **Antiviral medications:** These medications help prevent the reactivation of herpes simplex virus (HSV) after CAR T therapy.
- **Antifungal medications:** These medications help prevent infection with a fungus after CAR T therapy.

What Should I Expect Immediately Following My CAR T Infusion?

Your CAR T cells are actively seeking out and destroying cancer cells. This can cause your body to react. You may feel as if you have the flu and have fever and chills. These symptoms are related to the release of substances called *cytokines*, and the side effect is called *cytokine release syndrome* (CRS). Cytokines help your CAR T cells become excited about destroying the cancer cells, but they can also make you feel sick. The symptoms can be minor or severe. If you develop fever, chills, or lightheadedness (symptoms of low blood pressure) or have difficulty breathing, you should contact your healthcare team immediately.

CAR T therapy may also cause changes in your neurologic system (brain, spinal cord, and nerves). You may feel confused, feel sleepy, or have trouble speaking or remembering. In severe cases you may pass out or have seizures. If you have any of these symptoms or if your caregiver notices any changes in your behavior, you should contact your healthcare team immediately.

How Long Do I Need to Stay Near the Hospital?

CAR T therapy may be given in the hospital or in an outpatient unit. Your healthcare provider will determine when it is safe for you to leave. You should plan to stay close to the hospital or outpatient treatment area for at least 4 weeks after your CAR T therapy. This is necessary in case you experience cytokine release syndrome or neurologic side effects.

It is important to have a caregiver with you during this time to help identify any side effects. This tool kit contains resources to help you and your caregiver track your symptoms.

If you experience cytokine release syndrome or have neurologic side effects, you should contact your healthcare team immediately. If the symptoms are severe, you should go immediately to the emergency room. Be sure you have your wallet card (part of this tool kit) with you so you can show the emergency room physician what CAR T therapy you received and the date of your treatment.

CELLULAR THERAPY

SIDE EFFECTS OF CAR T THERAPY

Immunotherapy works by increasing your immune system's ability to kill cancer cells. When the activity of T cells and other immune cells is increased, side effects can occur. Some risks that may go along with chimeric antigen receptor (CAR) T therapy are serious, so after the CAR T infusion you will need to be admitted to the hospital or to a clinic staffed by people who are specially trained to look out for symptoms. Side effects can occur *early* (from the day of the CAR T infusion to 4 weeks afterward) and *late* (4 weeks or more after the infusion). **Table 1** lists the most common side effects of CAR T therapy. **Figure 1** shows a timeline of when they may occur.

Management of Side Effects

The side effects of CAR T therapy are most often temporary. Medications that slow down the immune system can lessen the side effects.

If you are having a side effect from CAR T therapy, it is *very important* for you to tell your healthcare team about your symptoms. Your healthcare team can check your symptoms, your blood pressure, and your temperature. They can also order blood tests and decide whether additional medications are needed. You may need to be admitted to the hospital so that serious side effects can be managed.

If you have a side effect, you may be treated with one of these medications:

- tocilizumab or a similar medication, given through a vein
- a corticosteroid like dexamethasone or methylprednisolone, given by mouth or through a vein

Self-Care

It is very important to take care of yourself while you are receiving CAR T therapy. Here are some important ways to do that:

- Eat a healthy, well-balanced diet.
- Exercise, even if you feel tired.
- Discuss good mouth care with your healthcare team to help reduce infections and mouth sores.
- Check with your healthcare provider before you take any over-the-counter medications.
- Wear a mask in public until your healthcare team tells you it is no longer needed.
- Avoid being around people who may be sick.
- Drink plenty of water each day.
- Identify a caregiver who can take you to and from your daily appointments, help you manage your medications, keep family members and friends up-to-date on your condition, and help you watch for side effects. It is recommended that you have a caregiver for at least the first 2 to 4 weeks after CAR T therapy. Your caregiver should also be able to give you emotional support during CAR T therapy.
- Report any side effects (large or small) to your healthcare team. They will give you a phone number to call if you have any questions or notice any new symptoms.

Table 1. Possible Side Effects of CAR T Therapy

	Side effect	What does the side effect feel like, or what will my laboratory values show?	When does the side effect happen, and how long may it last?
Early	Cytokine release syndrome (CRS)	<p>May be mild or severe</p> <ul style="list-style-type: none"> • Difficulty breathing • Fever (100.4 °F or higher) • Chills • Nausea or vomiting • Diarrhea • Severe muscle or joint pain • Dizziness • Low blood pressure <p>Contact your healthcare provider if you have any of these symptoms.</p>	<ul style="list-style-type: none"> • Usually occurs within 2 or 3 days of CAR T therapy • Can last 7–8 days
	Neurologic toxicities (effects on the brain, spinal cord, and nerves)	<ul style="list-style-type: none"> • Confusion • Agitation • Headache • Shaking • Not feeling like yourself • Loss of balance • Difficulty speaking • Passing out • Seizures <p>Contact your healthcare provider if you have any of these symptoms.</p>	<ul style="list-style-type: none"> • Usually occurs at the same time as CRS symptoms or within 4–10 days after CAR T therapy • Can last up to 17 days
	Change in the ability to drive or use machines	<ul style="list-style-type: none"> • Difficulty remembering things • Uncoordinated movements • Confusion • Weakness • Dizziness • Seizures <p>Do not drive or use heavy machinery.</p>	<ul style="list-style-type: none"> • May occur up to 8 weeks after CAR T therapy; do not drive during this period. • Can last up to 17 days or as long as you are taking supportive medications that cause sleepiness
Late	Low blood cell counts	<ul style="list-style-type: none"> • Lower number of white blood cells (infection-fighting cells) • Lower number of red blood cells (the cells that carry oxygen to other cells in the body) • Lower number of platelets (the cells that cause clotting during bleeding) 	<ul style="list-style-type: none"> • Can occur at any time during or after CAR T therapy • May last weeks to months after CAR T therapy
	Low B cell count (also called B cell aplasia)	<ul style="list-style-type: none"> • Low immunoglobulins 	<ul style="list-style-type: none"> • Usually occurs 4 weeks or more after CAR T therapy • May last weeks to months after CAR T therapy
	Serious infections	<ul style="list-style-type: none"> • Lower numbers of white blood cells 	<ul style="list-style-type: none"> • Can occur at any time during CAR T therapy • May last weeks to months after CAR T therapy

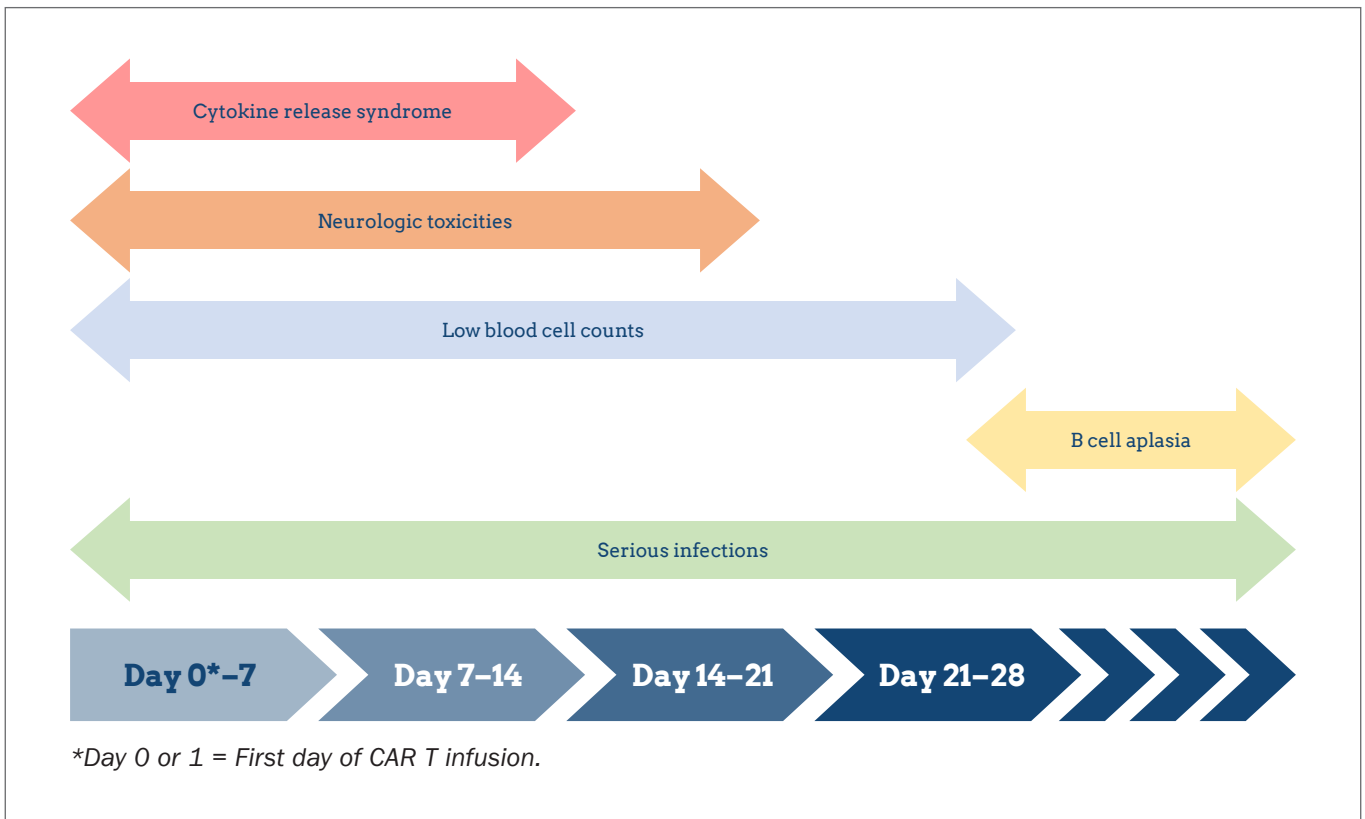


Figure 1. Timeline for Side Effects of CAR T Therapy



**TIME TO TALK
IMMUNO-ONCOLOGY™**



Bristol-Myers Squibb

CELLULAR THERAPY

TRACKING SHEETS FOR EARLY SIDE EFFECTS

Date of CAR T Therapy: _____

Healthcare Team's Phone Number: _____

While you are receiving CAR T therapy, it's important to track any symptoms and tell your healthcare team before the symptoms become severe or life-threatening. The tracking sheets on the next four pages can be used by you or your caregiver to record your symptoms. (You can print out the tracking sheets and complete them by hand, or download the sheets and complete them on a computer.) The regular recording of symptoms will help your healthcare team identify any side effects of CAR T therapy early.

Notes from Your Healthcare Team About Monitoring and Symptom Tracking

Symptom Tracking for Cytokine Release Syndrome

The symptoms to track for cytokine release syndrome include those that can lead to high fevers and low blood pressure. This tracking sheet will help you keep track of those symptoms. Record your symptoms in the morning and evening by completing **Table 1** below.

Table 1. Symptom Tracking for Cytokine Release Syndrome

Date mo/day/yr	Time	1. Temperature (degrees Fahrenheit)*	2. Blood pressure (mm Hg)** <i>(if a home monitoring device is available)</i>	3. Heart rate (or pulse) per minute	4. Breaths per minute	5. Volume of fluids by mouth (in ounces) Goal per day = ___ ounces.	Notes
	__ AM						
	__ PM						
	__ AM						
	__ PM						
	__ AM						
	__ PM						
	__ AM						
	__ PM						
	__ AM						
	__ PM						
	__ AM						
	__ PM						
	__ AM						
	__ PM						
	__ AM						
	__ PM						

*Contact your healthcare team if you have a temperature of 100.4 °F or higher.

**Contact your healthcare team if you have a blood pressure reading lower than 90 mm Hg systolic (top number) or 60 mm Hg diastolic (bottom number).

Symptom Tracking for Neurologic Side Effects (Those Affecting the Brain, Spinal Cord, and Nerves)

Side effects can also develop in the brain, causing confusion, seizures, or headaches. These are called *neurologic toxicities*.

Your caregiver will help you assess for neurologic side effects by asking you to answer the questions and complete the tasks in **Table 2**, parts 1 and 2.

Note to the caregiver: If the patient answers “No” to questions 1–5 or “Yes” to questions 6–11, contact the healthcare team immediately. The patient may be showing early signs of neurologic side effects. Also contact the healthcare team if the patient shows symptoms of a seizure (is confused, seems to be in a trance, has jerky movements, or passes out).

Table 2. Symptom Tracking for Neurologic Side Effects: Part 1

Date mo/day/yr	Time	1. Are you able to name the current month and year?	2. Are you able to name your current location?	3. Are you able to find and point to a specific named object in the room? <i>(Example: Your caregiver asks you to point to the clock. Can you find and point to the clock?)</i>	4. Are you able to write your full name on a piece of paper?	5. Are you able to count backward from 100 by 10?	6. Are you having any difficulty finding words or speaking?
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No

Table 2. Symptom Tracking for Neurologic Side Effects: Part 2

Date mo/day/yr	Time	7. Are you having shaking movements or trembling?	8. Do you have difficulty waking up?	9. Are you more tired than normal?	10. Do you have a headache?	11. Are you feeling restless or anxious?	Notes
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	

Tracking of Other Symptoms

If you are experiencing any other symptoms that you want your provider to be aware of, list them in the first row of **Table 3** and record what time they occur each day.

Table 3. Tracking of Other Symptoms

Date mo/day/yr	Time	Symptom: _____	Symptom: _____	Symptom: _____	Symptom: _____	Notes
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ AM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	
	__ PM	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	



Bristol-Myers Squibb

CELLULAR THERAPY

QUESTIONS TO ASK MY HEALTHCARE TEAM ABOUT CAR T THERAPY

Every person is different, and your cancer treatment plan will be designed especially for you. You can use the following list of questions to help you discuss chimeric antigen receptor (CAR) T therapy with your healthcare team.

About My Treatment

I am being treated for _____

The therapy (or therapies) I am receiving: _____

General Questions

- How is CAR T therapy different from chemotherapy?
- How is CAR T therapy different from a stem cell transplant?
- How long is the time period between having my cells collected to getting them back for my infusion?
- Will I need to be admitted to the hospital?
- Will I need someone to be with me during my hospital stay?
- How long does it take for CAR T therapy to work to treat my cancer?
- What tests will I need before my CAR T treatment?
- How long will I need to be in the hospital?
- Will I be able to leave my hospital room after my CAR T infusion?
- Will I be able to be around other people or be out in public after my hospital stay?
- Does my insurance cover the cost of my treatment? What resources are available to help with the cost of treatment?

Questions About Other Medications and CAR T Therapy

- Will I continue to take my regular prescription, over-the-counter, and herbal medications?
- Are there any medicines I should not take while I am receiving CAR T therapy?
- Can I get vaccines after I receive CAR T therapy?

Questions About Side Effects

- What side effects are common? What are some rare side effects I should know about?
- Do I have any risk factors that would put me at higher risk of side effects from CAR T therapy?
- When can I expect to see side effects from CAR T therapy?
- When should I call my healthcare team about side effects? Which person should I call?
- When should I go to the emergency room?
- If I experience side effects from CAR T therapy, what information does my healthcare team need to know?
- Are there medications I need to take while I am receiving CAR T therapy to prevent or lessen side effects?
- If I do experience a side effect, what treatment will I receive?

CELLULAR THERAPY

RESOURCES FOR PATIENTS WITH CANCER

Table 1. Resources for Patients Receiving Cellular Therapy*

Organization or Program	Phone Number	Website	Immunotherapy Agent generic name (Trade name)
Kite Konnect	844.454.5483	www.kitekonnnect.com	axicabtagene ciloleucel (Yescarta)
Kite Konnect	844.454.5483	www.kitekonnnect.com	brexucabtagene autoleucel (Tecartus)
Novartis	844.459.6742	www.us.kymriah.com/acute-lymphoblastic-leukemia-children/patient-support/support-resources-for-kymriah	tisagenlecleucel (Kymriah)

*This list is current as of September 1, 2020, but new cellular therapies are being developed. Contact your healthcare team if your treatment is not listed here.

Table 2. Other Resources for Patients with Cancer

Organization	Phone Number	Website	Services Provided
Financial Resources (General)			
American Cancer Society	800.277.2345	www.cancer.org	Financial tools
Bringing Hope Home	484.580.8395	bringinghopehome.org	Financial assistance
CancerCare	800.813.4673	www.cancercare.org/services	Financial assistance and support
Cancer Financial Assistance Coalition		www.cancerfac.org	Financial assistance
Cancer Warrior Inc.	323.578.5083	www.cancerwarriorinc.org	Financial assistance
Family Reach Foundation	Boston, MA office: 857.233.2764 NJ office: 973.394.1411	familyreach.org	Financial assistance and planning

Healthcare Hospitality Network	800.542.9730	www.hhnetwork.org	Support services
HealthWell Foundation	800.675.8416	www.healthwellfoundation.org	Financial assistance (medical)
Leukemia and Lymphoma Society	800.955.4572	www.lls.org	Financial assistance, support
Life Beyond Cancer Foundation		www.needhelppayingbills.com/html/life_beyond_cancer_foundation_.html	Financial assistance
Patient Access Network Foundation	866.316.7263	panfoundation.org	Financial assistance
Patient Advocate Foundation	800.532.5274	www.patientadvocate.org	Financial assistance, resource assistance locator
Patient Services Inc.	800.366.7741	www.patientservicesinc.org	Financial assistance
Team Continuum	845.200.7094	www.teamcontinuum.net	Financial assistance (nonmedical needs)
The C.H.A.I.N. Fund	203.691.5955	www.uacommunitycancerconnections.org/content/chain-fund-inc	Financial assistance

Financial Resources: Prescriptions and Medications

Good Days	877.968.7233	www.mygooddays.org	Financial resources
Medicine Assistance Tool	888.477.2669	medicineassistancetool.org	Resource assistance locator: medications, free and low-cost clinics
NeedyMeds	800.503.6987	www.needymeds.org	Resource assistance locator: medication and healthcare costs
RxAssist		www.rxassist.org	Patient assistance program directory
RxHope		www.rxhope.com	Prescription and medication assistance
RxOutreach	800.796.1234	rxoutreach.org	Prescription assistance
Together Rx Access		trxaccess.org	Prescription assistance

Housing and Lodging

Cleaning for a Reason	877.337.3348	cleaningforareason.org	Cleaning services
-----------------------	--------------	--	-------------------

Fisher House	888.294.8560	www.fisherhouse.org	Housing and lodging (for military and veteran families when a family member is in the hospital)
Healthcare Hospitality Network	800.542.9730	www.hhnetwork.org	Housing and lodging
Hope Lodge	800.227.2345	www.cancer.org/treatment/support-programs-and-services/patient-lodging/hope-lodge.html	Housing and lodging
Hospitality Homes	888.595.4678	hosp.org	Housing and lodging
Joe's House	877.563.7468	www.joeshouse.org	Housing and lodging
Ronald McDonald House Charities	630.623.7048	www.rmhc.org/our-core-programs/ronald-mcdonald-house-programs	Housing and lodging

Travel

Air Care Alliance	888.260.9707	www.aircarealliance.org	Air travel assistance
Air Charity Network	877.621.7177	aircharitynetwork.org	Air travel assistance
Along Comes Hope®	805.322.1423	alongcomeshope.com	Air travel assistance
Angel Flight		www.angelflight.com	Air travel assistance
Corporate Angel Network	914.328.1313	www.corpangelnetwork.org	Air travel assistance
LifeLine Pilots	800.822.7972	www.lifelinepilots.org	Air travel assistance
Mercy Medical Angels	888.675.1405	www.mercymedical.org	Air travel assistance
Patient AirLift Services	888.818.1231	www.palservices.org	Air travel assistance

Multipurpose and Other Resources

Alex's Lemonade Stand Foundation	866.333.1213	www.alexlemonade.org	Financial assistance for those with childhood cancer
Alliance for Childhood Cancer		www.allianceforchildhoodcancer.org	Financial assistance for those with childhood cancer
BenefitsCheckUp		www.benefitscheckup.org	Needs of the elderly
Cancer Survivors' Fund	281.437.7142	www.cancersurvivorsfund.org	Needs of young cancer survivors: scholarships, prosthetic limbs, emotional support

CancerCare	800.813.4673	www.cancercares.org	Counseling, support groups, financial assistance
Livestrong Foundation	877.236.8820	www.livestrong.org	Financial assistance, assistance with fertility, insurance, care and support
National Organization for Rare Disorders	203.744.0100	rarediseases.org	Patient assistance, financial assistance, resources for patients and caregivers
Social Security Disability Resource Center		www.ssdrc.com	Assistance with the disability filing process
State Health Insurance Assistance Programs		www.medicare.gov/Contacts	Medicare: state-specific contact information
Stupid Cancer		stupidcancer.org	Financial and legal assistance, fertility assistance, insurance needs for young adults
Verna's Purse	Florida: 888.953.9669 Minnesota: 888.489.8944 Nevada: 888.831.2765 Texas: 888.350.3247	www.reprotech.com/financial-assistance.html	Fertility preservation
Zichron Shlome Refuah Fund	718.438.9355	www.zsrf.org/services.php	Medical expenses, wigs, vitamin therapy, transportation, housekeeping, housing assistance, insurance



CELLULAR THERAPY

WALLET CARD

Chimeric antigen receptor (CAR) T-cell therapy can cause severe and life-threatening side effects. CAR T therapy that has been approved by the U.S. Food and Drug Administration (FDA) must follow guidelines called Risk Evaluation and Mitigation Strategies (REMS). The REMS program requires patients who have recently received CAR T therapy to carry a card in their wallet with information about their treatment.

Patients receiving products approved by the FDA must use the wallet card provided by the manufacturer who makes the CAR T therapy. Currently, cards for the medications Kymriah, Tecartus, and Yescarta are available:

- Kymriah (tisagenlecleucel): www.kymriah-rems.com
- Tecartus (brexucabtagene autoleucel): www.yescartatecartusrems.com
- Yescarta (axicabtagene ciloleucel): www.yescartatecartusrems.com

New cellular therapies are being developed. Contact your healthcare team if your treatment is not listed above.

If you are receiving CAR T therapy that does *not* come with a wallet card (for example, you are receiving treatment as part of a clinical trial), you can use the card below. Fill out the information requested (ask your cancer team if you need help), print out the card, and carry it in your wallet.

You should show the card to members of your healthcare team who are not treating your cancer, like an emergency room staff member or your primary care provider, so they know to look out for special issues related to your CAR T therapy.

HEALTHCARE PROVIDER ALERT: CAR T THERAPY PATIENT	HEALTHCARE PROVIDER ALERT: CAR T THERAPY PATIENT
Patient's Name: _____	Cancer Physician's Name: _____
Patient's Phone Number: _____	Office Phone Number: _____
Cancer Type: _____	After-Hours Phone Number: _____
Therapy: _____	To the patient: CAR T therapy can cause severe and life-threatening side effects. Call your oncologist or go to the emergency room immediately if you experience any of these symptoms: fever (100.4 °F/38 °C or higher), difficulty breathing, low blood pressure, chills or shaking, confusion, headache, dizziness, lightheadedness, nausea, vomiting, or diarrhea.
Date of last CAR T therapy treatment: _____	To the healthcare provider: Contact the oncologist (1) before giving corticosteroids, (2) if the patient has a serious infection, or (3) if the patient must undergo an invasive procedure.
<i>To the patient: For at least 4 weeks after your CAR T therapy treatment, you should stay within 2 hours of the location where you received it.</i>	