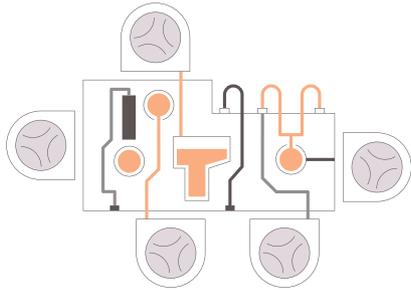


# Understanding Apheresis

**IMPORTANT:** It is important to follow directions and recommendations from your healthcare provider before, during, and after the apheresis procedure. The information in this booklet **does not** replace medical advice from your healthcare team.

# The First Step to Creating Your CAR T Cell Therapy Is Having Your T Cells Collected

This is done through a common process called apheresis (Ay-feh-REE-sis). Apheresis may be done in blood donation centers and hospitals.



Apheresis device

The apheresis process is when your blood is drawn and processed through a machine, called a centrifuge, that spins and separates the blood into different cell types.

## Some examples of what apheresis can collect:



Plasma



Red blood cells

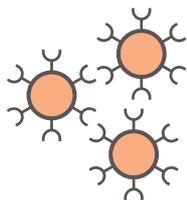


White blood cells (including T cells)



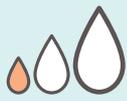
Platelets

For CAR T cell therapy, **white blood cells, including T cells**, are collected. T cells are a type of white blood cell that help create your CAR T cell therapy.



After your white blood cells are collected, the rest of the blood is returned to your body. Your white blood cells are sent to the manufacturing site where the CAR T receptors (or hooks) are added to the T cells, programming them to find specific targeted cells (including both healthy and cancer cells).

You will typically only need 1 apheresis procedure to create your CAR T cell therapy. However, sometimes the procedure will need to be repeated.



## 2-3 Days Before Collection

- Apheresis can deplete the amount of calcium in your blood. Your healthcare provider may recommend increasing your calcium intake to help prevent numbness or tingling in your face or fingers during the collection
  - Good sources of calcium include dairy products (milk, cheese, yogurt), salmon, and broccoli. Ask your healthcare team about calcium supplements
- Stay hydrated by drinking plenty of water, and avoid caffeinated beverages and alcohol



## 1 Day Before Collection

- Get plenty of rest the night before your collection
- Talk to your healthcare team about taking medications before or after collection



## Day of Collection

- Take any morning medication as directed by your healthcare team
- If possible, avoid caffeinated beverages such as coffee, tea, and soda before your collection
- Wear comfortable, loose-fitting clothing
  - Long pants and closed shoes with socks may help keep you warm
  - A short-sleeve shirt will allow the apheresis team to access the veins in your arms
  - If you will have a central venous catheter inserted for the procedure, wear a shirt that will provide access to the catheter (for example, a buttoned shirt rather than a T-shirt)
- Contact the apheresis center to find out what time to get to your appointment, as they may recommend arriving early. Be sure to call your apheresis site if you are going to be late

## What You Can Expect During the Collection

- You will be monitored by a specially trained nurse or technician throughout the collection
- The timing for the apheresis procedure varies, but it normally takes **2 to 6 hours**
- If the veins in your arms are used for the collection, you will have a needle placed in each arm
  - Some patients may instead require the use of a catheter for the collection
- Side effects can occur at any time during the blood collection



**Tell the collection nurse/technician if you experience these symptoms:**

- **Tingling or numbness in your face, lips, or fingertips**
  - **Chills**
  - **Muscle cramping**
  - **Dizziness, which may be a sign of a drop in blood pressure**
  - **Some patients experience rare side effects such as an allergic reaction or excessive red blood cell elimination**
- Most patients and blood donors are able to complete the apheresis process. However, the collection may be terminated if deemed medically necessary
  - Because you will experience some blood loss, you may experience mild fatigue for the days after your apheresis procedure

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*Talk to your healthcare team if you have questions about apheresis at any point during the process.*

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## After the Collection

- Keep bandages in place for as long as your healthcare team instructs
- Bruising at the needle insertion site can occur. Notify your healthcare team if you have any problems with the sites where the needle(s) were inserted



### Symptoms to report include:

- A large bruise
  - Continued bleeding
  - Signs of infection: redness at the insertion site, fever, swelling, etc
- 
- If you feel light-headed after the procedure, lie down and elevate your feet until you feel the sensation pass. Get up slowly afterwards, with assistance if needed. Contact your doctor with any questions about side effects, or if side effects such as light-headedness persist
  - Consider eating a hearty meal and drinking extra fluids after your collection

### What to Bring With You for Your Collection

- Picture ID is recommended to help your apheresis team properly confirm your identity
- Ask your collection center if you can bring a companion
- You may want to bring a book or portable electronic devices to keep you occupied. **However, be aware that you will not be able to move your arms during the procedure** if the collection team uses the veins in your arms for the collection

This guide and other helpful CAR T materials  
are available at [ExploreCARTtherapy.com](https://www.explorecarttherapy.com).