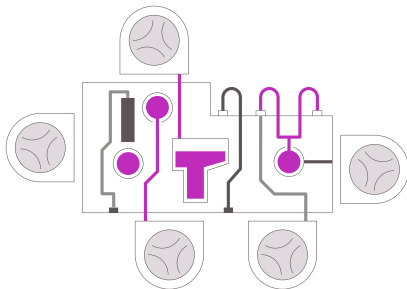


Understanding Apheresis

The first step to creating your CAR T cell therapy is having your T cells collected

In a procedure called “apheresis” (ay-feh-REE-sis), your blood will be drawn and T cells will be collected and sent to a manufacturing facility which produces the CAR T cell therapy made specifically for you. Apheresis is a common procedure and can be done in blood donation centers and hospitals. The collection process typically takes 2-5 hours.* You will typically only need 1 apheresis procedure to create your CAR T cell therapy.



Apheresis device

During the apheresis procedure, 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

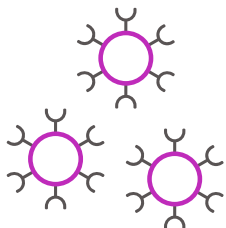


White blood cells
(including T cells)



Platelets

Apheresis for CAR T cell therapy collects **white blood cells**. **T cells**, which are a type of white blood cell, are used to 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 facility where specialized receptors (or hooks) called chimeric antigen receptors (CARs) are added to the T cells, programming them to find specific targeted cells (including both healthy and cancer cells).

*Timing shown here is an estimate and may vary by institution and by patient.

Understanding Apheresis

IMPORTANT: Follow directions and recommendations from your healthcare provider(s) before, during, and after the apheresis procedure. The information in this booklet **does not** replace medical advice from your healthcare team.



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 to Bring With You for Your Collection

- Your picture ID to help your apheresis team properly confirm your identity
- A care partner or support person (if permitted by the collection center)
- A book or portable electronic device to keep you occupied (**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)

Understanding Apheresis

What you can expect during the collection

 2-5 hours*



- During the blood collection procedure, your healthcare provider will make you comfortable in a reclining chair or bed
- 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 5 hours*



- They will place either two intravenous (IV) lines in your arms or a temporary central line
 - One IV line removes your blood (and white blood cells are collected), while the other returns the remainder of the blood without your white blood cells, back into your body



It is normal to experience side effects at any time during the blood collection procedure. Your healthcare team is trained to monitor and manage these side effects.

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

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

*Timing shown here is an estimate and may vary by institution and by patient.

Understanding Apheresis

After the collection



- After the apheresis procedure, you may be monitored for a short period of time to ensure you have no side effects related to the procedure



- Your healthcare provider may order blood testing prior to or after the collection
- Keep bandages in place for as long as your healthcare team instructs
- Bruising at the needle or catheter 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



- Because your blood volume will decrease temporarily during your apheresis procedure, you may experience mild fatigue during the days following the procedure
- 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



- Your doctor may advise for you to take it easy for the first day or so after this procedure to recover. You may want to ask your doctor about any symptoms you should watch for and when to seek medical care. They may include:
 - Fever of 100.4 °F, as this may be a sign of infection
 - Redness, drainage, or pain at the IV or central line access site
 - New symptoms of concern or symptoms that are getting worse or changing

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