

CAR T Cell Therapy Myths Debunked:

Your guide to what cell therapy is (and isn't)

Living with blood cancer can feel overwhelming, especially when it comes to making treatment decisions. It's important to understand what cancer treatment options are available and how they differ by asking questions and working with your healthcare providers to determine the most appropriate path for you.

Chimeric antigen receptor (CAR) T cell therapy is an innovative treatment that's FDA-approved for certain blood cancers. Because of the cutting-edge science behind it, CAR T cell therapy may sometimes be misunderstood. Keep reading to learn the facts about this treatment.

Myth CAR T cell therapy is too new, and it has only been studied for a couple years.

Fact CAR T cell therapy has been researched for over 30 years.

CAR T cell therapy development timeline



Since 2017, CAR T cell therapies continue to demonstrate effectiveness and safety in clinical trial outcomes for people with certain blood cancers. Beyond clinical trials, similar results have been seen in the "real world," meaning results have been collected from patients who received CAR T cell therapy after the treatment received FDA approval.

Myth CAR T cell therapy is only used as a last resort, after chemotherapy and autologous stem cell transplant.

Fact For certain blood cancers, CAR T cell therapies may be used as early as after relapse or failure of initial treatment, which may or may not include a stem cell transplant.

Your doctor may recommend CAR T cell therapy if your disease has:

returned after treatment
(relapsed)

not responded to previous therapy
(refractory)

Myth CAR T cell therapy is the same as an autologous stem cell transplant.

Fact They are different types of treatments.

Autologous CAR T cell therapy

Autologous stem cell transplant

What it is?

Reprograms your own specific disease-fighting white blood cells, in this case your T cells, to target your cancer

Uses your own stem cells (harvested from either your blood or bone marrow) to replace cells that have been destroyed by cancer therapy but does not target cancer directly

How it works?

Reprogrammed cells continue to multiply in your body to work to target and attack cancer cells long after the infusion occurs

May act as a "rescue" to the bone marrow from the toxic side effects of high doses of chemotherapy and radiation used to treat the cancer by restoring your body's ability to produce new blood cells after treatment

Myth Receiving CAR T cell therapy is a long, difficult infusion process compared to stem cell transplant.

Fact The CAR T cell therapy process* includes a one-time infusion that typically takes 30 minutes, whereas an autologous stem cell transplant infusion can last 1-5 hours. Other key factors include:

CAR T cell therapy

Autologous stem cell transplant

Treatment process

- Typically spans 2-3 months
- *Includes: apheresis (removal of certain types of white blood cells from the blood), manufacturing, infusion and adverse event monitoring
- Includes a short course of chemotherapy before CAR T infusion to prepare the body to receive modified cells

- Typically spans 2-7 months
- Includes apheresis (removal of stem cells from the blood) or bone marrow harvest, freezing cells until you're ready for transplant, infusion and adverse event monitoring
- Can only be done after the cancer has been treated with high-dose chemotherapy or radiation

*These may not be the only steps required in the process. Full infusion appointment includes additional steps and will vary in length.

Treatment location

- Certified CAR T cell therapy center
 - Option for outpatient setting (no hospitalization needed), if determined by your doctor
 - Inpatient (requires hospital stay) infusion requires you to be in the hospital before, during and right after treatment, as determined by your doctor

- Autologous stem cell transplant center
 - Option for outpatient setting or inpatient setting, as determined by your doctor and treatment center
 - Inpatient transplant typically requires a hospital stay before, during and right after treatment

Adverse event monitoring

- Monitored for at least 30 days following the infusion for potential serious side effects including cytokine release syndrome (CRS), neurotoxicities and other adverse events
 - Side effects may require treatment in the hospital
- Must stay within close proximity of treatment center during the 30 days following treatment
- Must not drive or operate heavy machinery for 8 weeks post infusion
- Long-term monitoring for side effects, disease status and other cancers

- Monitored for 100 days following the transplant to ensure your blood counts recover, and once they return to normal, the immune system takes several months to recover
 - Side effects may require treatment in the hospital
- Must stay within close proximity of treatment center, as defined by your treating physician during the 100 days following treatment

Myth The side effects of CAR T cell therapy outweigh the benefits this therapy can provide.

Fact Research demonstrates that, with a single infusion*, CAR T cell therapy has been effective at producing improved outcomes in patients where another treatment option(s) has stopped working.

This does not encompass all the possible side effects of CAR T cell therapy, as they will vary from person to person based on a variety of factors, including what CAR T cell therapy you are prescribed. CAR T cell therapy trained healthcare providers are trained to spot and monitor for serious side effects. Prior to treatment, you should speak to your doctor about the possible side effects you may experience and when you should seek immediate medical care.

CAR T cell therapy side effect information

- The most common side effects, which can be severe or life-threatening, include:
 - Cytokine release syndrome - condition that develops when your immune system responds too aggressively to a treatment or infection
 - Neurologic toxicities - side effects that affect the body's nervous system

- These side effects typically occur within the first week after CAR T cell therapy and peak within one to two weeks after infusion but can occur later in some cases
- Your CAR T treatment team is trained to manage the side effects

CAR T cell therapy may increase your risk of getting secondary cancers, including certain types of blood cancers. T cell malignancies have occurred following CAR T cell therapy. The FDA has concluded that the overall benefits of CAR T cell therapy continue to outweigh potential risks.

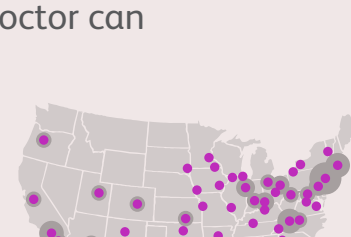
*The treatment process can take approximately 2-3 months and includes: apheresis (removal of certain types of white blood cells from the blood), manufacturing, infusion and adverse event monitoring.

Myth My treatment center doesn't offer CAR T, so I probably can't get it.

Fact If you are eligible to receive CAR T cell therapy, your doctor can refer you to a certified CAR T cell therapy center.

Staff at certified treatment centers are trained on how to deliver treatment and support to patients during every step of the process. Following CAR T cell treatment and adverse event monitoring by the certified CAR T cell therapy center, you can return to your referring physician for follow-up care.

The number of certified treatment centers continues to grow, with sites available around the U.S.



Check out this U.S. [treatment center locator](#) to find a center near you.

Myth CAR T cell therapy is too expensive, and insurance doesn't cover the cost.

Fact Cancer treatment costs can be a very important consideration for patients. The majority of commercial insurance plans and most government payers cover CAR T cell therapies.

- For Medicare patients, CAR T cell therapies are covered for all FDA-approved indications under the National Coverage Determination.
- The price most patients pay for CAR T cell therapies varies according to their insurance coverage and patient cost-sharing benefit design.

Additional assistance and support programs may be available from authorized treatment centers, product manufacturers, charitable foundations, patient financial support programs and other sources. Eligibility requirements may apply and vary by program.

Want to learn more about CAR T cell therapy? Consult your care team to see if this treatment is right for you, or [find a certified treatment center](#) near you.