

CELL THERAPY FOR LUPUS:

How it Works and What to Expect

What is cell therapy?

While treatment options for lupus remain limited, healthcare providers and patients are excited about the potential of cell therapy. Cell therapy has been used for years to treat certain types of cancers and infections. Currently, cell therapy for lupus is being studied in clinical trials, where researchers are studying its safety and potential benefits. While there is still more to learn, the early results from clinical trials are promising.

Cell therapy uses your own immune cells or cells from a donor to treat disease. Cells are collected, modified to rebalance or support the immune system, and then returned to your body. Cell therapy targets specific immune cells that are causing inflammation and damage in lupus.

What is it like to receive cell therapy in a clinical trial?

If you enroll in a cell therapy trial, here is what you might expect with autologous therapy (using your own cells):

5. Fighting Lupus:

The new cells help reduce the immune activity that is causing inflammation in lupus. You will participate in follow-up visits to monitor the effects of the therapy. Please note that cell therapy does not guarantee remission or long-term benefits.

4. Infusing Cells:

The modified cells are returned to your body through an infusion. You may stay in a hospital after the infusion where you will be watched for any serious side effects.

Illustration reflects CAR T as one type of cell therapy; procedures vary across therapies.

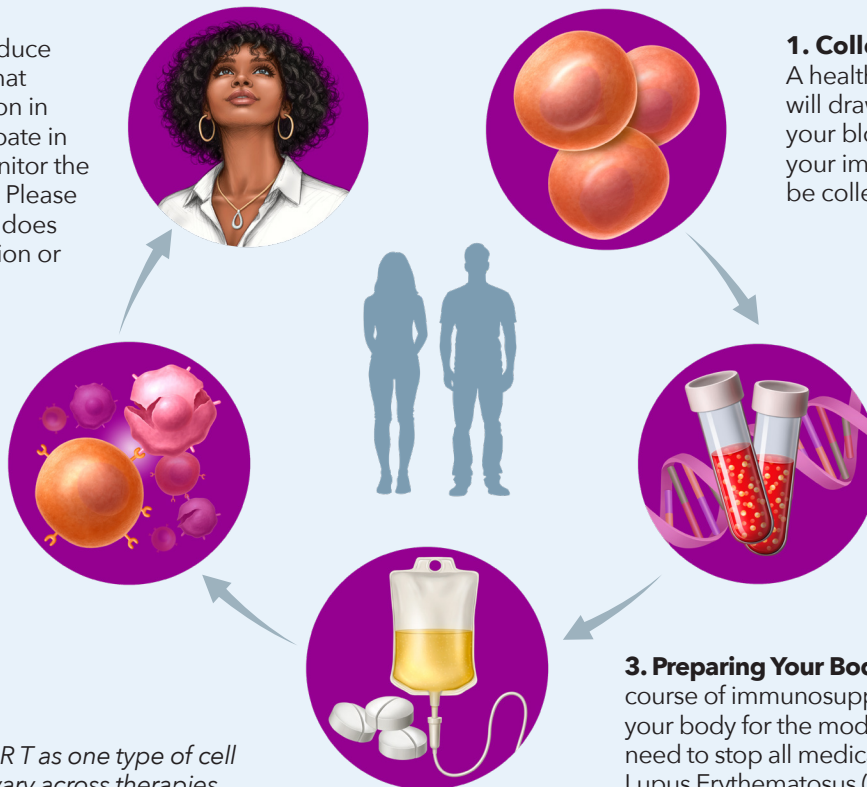
1. Collecting Cells:

A healthcare provider will draw a sample of your blood, so some of your immune cells can be collected.

2. Reprogramming (changing) Cells:

The cells are sent to a specialized lab where they are reprogrammed to recognize and target the specific cells causing your disease. You may go home for a few days or weeks while the cells are modified.

3. Preparing Your Body: You may receive a short course of immunosuppressant treatment to prepare your body for the modified cells. Also, you may need to stop all medications for your Systemic Lupus Erythematosus (SLE) before the infusion.



What are common questions?

Is cell therapy safe? Early results from clinical trials show that it has an acceptable short-term safety profile. Researchers are still studying long-term effects.

What are the benefits? In several clinical trials, some people with lupus improved – even without needing lupus medications other than antimalarials. As more time passed, more participants improved, but some who initially improved later relapsed. Research still needs to be done to understand how long the effects of cell therapy last.

What are the side effects? Typically, people have mild side effects after cell therapy, including fever, dizziness, and fatigue. Some people may develop more serious side effects, such as infections or cytokine release syndrome. You will be monitored for any serious side effects.

Who is eligible for a cell therapy clinical trial for lupus? Cell therapy for lupus is currently available only in clinical trials, typically for people with severe lupus who have not improved with other immunosuppressive treatments.

Does cell therapy use my own cells, or do the cells come from someone else? Some therapies use your own cells (called “autologous”), while others use donor cells (called “allogeneic”). If you’re offered cell therapy, your healthcare provider can explain which would be used for you.

What can you do next?

If your SLE is active and not responding to immunosuppressive treatments, talk to your healthcare provider to see if you are eligible for a clinical trial studying cell therapy.

It’s helpful to bring a few questions to your next appointment or to send them to your provider in advance.

Here are some questions to ask your provider:

- Is a cell therapy clinical trial a good option for me? Am I eligible?
- How long is the treatment process?
- What happens after the infusion?
- How is cell therapy different from my current or past treatments?
- How might cell therapy affect any other diseases or symptoms that I have?
- Do you know of lupus cell therapy clinical trials that I can join?
- What other treatment options should I consider before deciding?

What do these words mean?

Autologous cells

Cells that come from your own body.

Clinical trials

Research that tests new treatments to make sure they are safe and work well.

Cytokine release syndrome

An inflammatory response that develops when your immune system overreacts and releases too many chemicals at once, causing fever, low blood pressure, and trouble breathing.

Allogeneic cells

Cells donated by another person to be used for the treatment of someone else.

Side effects

Unwanted changes or symptoms that may happen after treatment.

Remission

A period of time when lupus symptoms get much better or go away.