

Autologous Blood and Marrow Transplant (BMT) Process

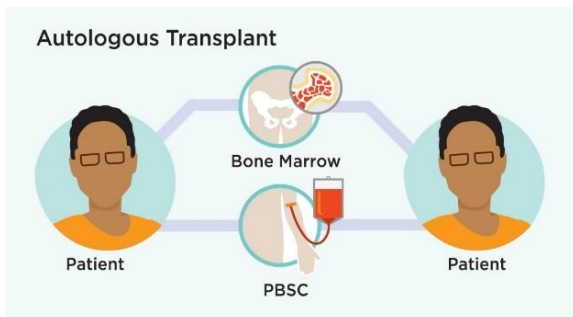
Learning more about your treatment options can help you make informed medical decisions.

THIS FACT SHEET TELLS YOU:

- The basics of an autologous transplant
- What happens before transplant and on transplant day
- What life may be like after transplant

AUTOLOGOUS TRANSPLANT BASICS

Doctors collect your healthy blood-forming cells. The cells are frozen until you are ready for transplant. You will get high doses of chemotherapy, and sometimes radiation, to kill your unhealthy cells. Then, your collected blood-forming cells are given back to you.



BEFORE TRANSPLANT

In the weeks before your autologous transplant, you will meet with your doctor and other members of your transplant team.

Tests before transplant

You will have a physical checkup to make sure that your body is healthy enough to have a transplant. Typically, the tests include:

- Heart tests
- Blood tests
- Pulmonary (lung) function tests
- Bone marrow biopsy — Using a needle, a small sample of your bone marrow is taken from your hip bone. A doctor studies the marrow under a microscope.

Getting a central line

You will give blood samples, get IV medicines and get blood transfusions. If you don't already have one, you'll have a central venous catheter, or central line, put in. This is a thin tube that's put into your arm or chest. It makes it easier to take blood and give you medicines without so many needle pokes.

Collecting your healthy cells

Doctors will collect your healthy blood-forming cells from either your:

1. **Bloodstream.** These are called peripheral blood stem cells, or PBSC. They are collected through a process called apheresis. During apheresis, blood is removed through an intravenous (IV) line and passed through a machine. This machine collects your blood-forming cells and returns the rest back into your bloodstream.
2. **Bone marrow.** The cells are collected from the pelvic, or hip, bone through surgery. This procedure is called a harvest. You receive anesthesia so you're comfortable during it.

Your doctor stores your healthy cells until you're ready for transplant.

Preparative or conditioning regimen

This is the chemotherapy and radiation given in the days right before your transplant. Doses of chemotherapy and radiation are higher than what you would normally get if you weren't getting a transplant. The higher doses may cause more severe side effects, but they also destroy more diseased cells.

TRANSPLANT DAY

The day you receive your cells is often called “Day Zero.” It usually comes 1 or 2 days after you finish your preparative regimen.

The transplant isn't surgery. The cells arrive in blood bags, similar to the ones used for blood transfusions. Your cells are given back to you through your central line. You will be in your hospital room and awake during the infusion.

LIFE AFTER TRANSPLANT

The cells know where they belong in the body. They move through your bloodstream to settle into your bone marrow. There, the cells start to grow and make new red blood cells, white blood cells and platelets. This is called **engraftment**.

Recovering from a transplant takes time, and complications are common. You will stay in or near the hospital during early recovery. You will continue to see your doctor in the weeks and months after your transplant.

Each patient's recovery is different. It is possible to have a short recovery, but for some patients, recovery can last for months or years.

QUESTIONS TO ASK YOUR DOCTOR

- What is the goal of this treatment?
 - To control symptoms?
 - To have a long-term remission—if so, for how long?
 - To cure my disease?
- What are the risks of waiting or trying other treatments first?
- How long will I be in the hospital for my transplant?
- How long do I have to stay near the hospital before I can return home?
- How will you decide the best time to collect my cells?
- How will you decide the best timing for transplant?
- If my disease relapses (comes back), will I be eligible for an allogeneic transplant?

RESOURCES TO LEARN MORE

Be The Match® has a variety of free resources to help you learn about transplant. To see a full list, visit [BeTheMatch.org/request](https://www.bethematch.org/request). Here are some you might find helpful:

- BOOKLET: *Transplant Basics*
- VIDEOS: *Basics of Blood and Marrow Transplant*



AT EVERY STEP, WE'RE **HERE TO HELP**

Be The Match has a team dedicated to providing information and support to you before, during, and after transplant. You can contact our Patient Support Center to ask questions you may have about transplant, request professional or peer support, or receive free patient education materials.

CALL: **1 (888) 999-6743** | EMAIL: patientinfo@nmdp.org | WEB: [BeTheMatch.org/one-on-one](https://www.bethematch.org/one-on-one)



Every individual's medical situation, transplant experience, and recovery is unique. You should always consult with your own transplant team or family doctor regarding your situation. This information is not intended to replace, and should not replace, a doctor's medical judgment or advice.