

# Allogeneic Blood and Marrow Transplant (BMT) Process

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

## THIS FACT SHEET TELLS YOU:

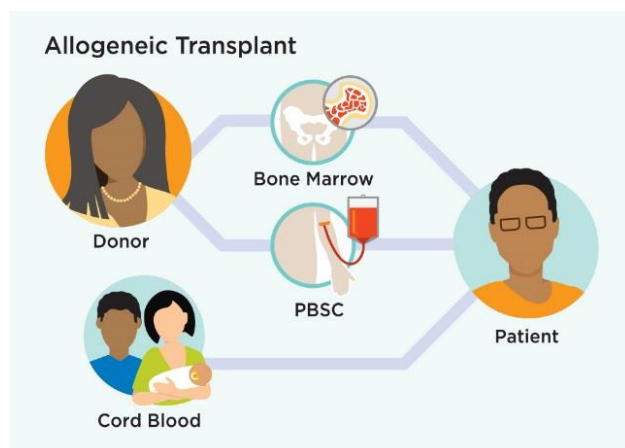
- The basics of an allogeneic transplant
- What happens before transplant and on transplant day
- What life may be like after transplant,
- What graft-versus-host disease (GVHD) is

## ALLOGENEIC TRANSPLANT BASICS

An allogeneic transplant uses healthy blood-forming cells donated by someone else to replace your unhealthy blood-forming cells.

Donated cells can come from a family member or someone unrelated to you. It could also come from umbilical cord blood, which is the blood collected from the umbilical cord and placenta after a baby is born.

No matter where your donor cells come from, you and your donor must have very closely matched human leukocyte antigens (HLA). HLA are proteins, or markers, found on most cells in your body.



## BEFORE TRANSPLANT

In the weeks before your allogeneic 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.

### Preparative or conditioning regimen

This is the chemotherapy and radiation given in the days right before your transplant. Your doctor will choose the type of preparative regimen for you based on your disease and overall health.

1. **Standard-intensity regimen.** Uses high doses of treatment to destroy diseased cells in your body. It also weakens your immune system. A weak immune system helps to keep it from attacking the donated cells.
2. **Reduced-intensity regimen.** Uses lower doses of treatment.

## TRANSPLANT DAY

The day you receive your new 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. The healthy, donated cells are given to you through your central line. You will be in your hospital room and awake when the new cells are given to you.

## 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 months and years 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 years.

## GRAFT-VERSUS-HOST DISEASE (GVHD)

GVHD is a common complication of an allogeneic transplant. It can affect many parts of the body. It happens when your new cells from the donor sees your body’s cells as different and attacks them. GVHD can range from mild to severe. There are 2 types of GVHD:

1. **Acute GVHD:** This typically affects the skin, stomach, intestines and liver
2. **Chronic GVHD:** This can affect the skin, nails, joints, muscles, eyes, mouth and other organs.

## QUESTIONS TO ASK YOUR DOCTOR

- Which family members will you test as possible donors? If a family member is chosen as a donor, what would they have to do?
- What happens if I don’t have a match in my family?
- Is a reduced-intensity transplant an option for me? Why or why not?
- Is a haploidentical (half-matched) transplant an option for me? Why or why not?

## 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: *Allogeneic Transplant*
- 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**



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.