

# The Basics of Blood and Marrow Transplant (BMT)

A blood or marrow transplant (BMT) is a treatment option for people with blood cancers such as leukemia or lymphoma, and immune system or genetic disorders.

## THIS FACT SHEET TELLS YOU:

- What BMT is
- How it works
- The best time to consider it

## WHAT IS A BLOOD OR MARROW TRANSPLANT?

A blood or marrow transplant replaces unhealthy blood-forming cells with healthy ones. Blood-forming cells are immature cells (blood stem cells) that grow into red or white blood cells, and platelets. They're found in your **bone marrow**, the soft tissue inside your bones. When they're mature, they leave the marrow and enter the bloodstream.

## HOW DOES BMT WORK?

Before transplant, you get chemotherapy and sometimes radiation to destroy the diseased cells and marrow. Then, the healthy cells are given to you.

BMT is **not** surgery. The new cells go into your bloodstream through an intravenous (IV) catheter, or tube. It's just like getting blood or medicine through an IV. From there, the cells find their way into your marrow. There, they grow and start to make healthy red blood cells, white blood cells and platelets. It can take months to years to recover from BMT.

## WHERE DO THE HEALTHY CELLS COME FROM?

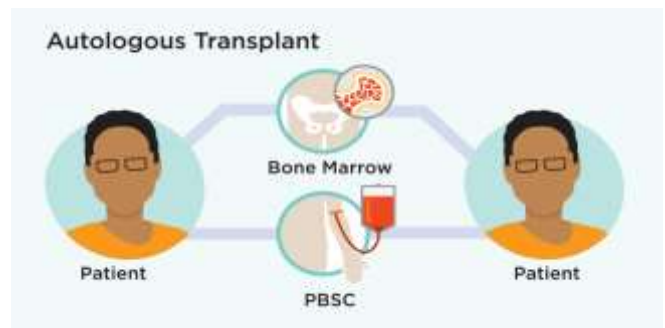
Healthy blood-forming cells used in transplants come from 3 sources. They are:

1. **Bone marrow:** Spongy tissue inside of bones
2. **Peripheral blood stem cells (PBSC):** Blood-forming cells from the circulating blood
3. **Cord blood:** The blood collected from the umbilical cord and placenta after a baby is born

## WHAT ARE THE DIFFERENT TYPES OF BMT?

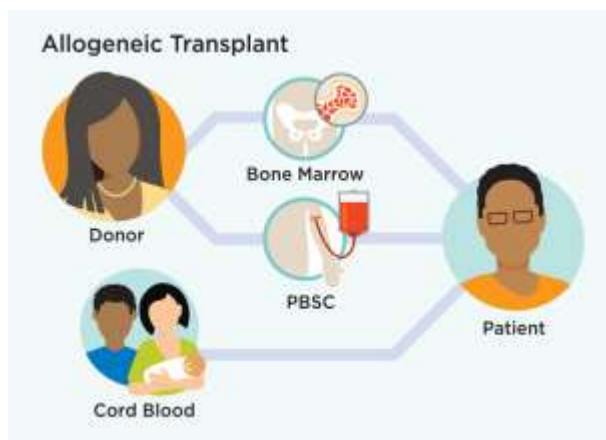
There are 2 main types of transplant:

1. **Autologous transplant**  
An autologous transplant uses your own blood-forming cells. The cells are collected from your bloodstream (peripheral blood stem cells or PBSC) or bone marrow and safely stored until they're used.



## 2. Allogeneic transplant

An allogeneic transplant uses healthy blood-forming cells donated by someone else. This can be a family member or someone unrelated to you. If cord blood is used, this is most often from an unrelated donor, but these cells can sometimes come from a related donor.



## WHICH TYPE OF TRANSPLANT IS BEST FOR ME?

Your transplant doctor will tell you which type of transplant—autologous or allogeneic—and which source of cells is best for you. This decision is based on many factors including:

- What disease you have and its stage
- Your overall health

## WHEN IS THE BEST TIME TO HAVE A TRANSPLANT?

It takes time to plan for a transplant, so your doctor may start the process early—even if you are still considering other treatments.

In general, transplants are most successful if:

- You are in the early stages of disease
- You are in remission (no signs of disease), or there is very little disease in your body
- Your disease has gotten better after treatment
- You are in good overall health

## OTHER NAMES FOR BMT

You might hear BMT called:

- Allo (allogeneic) transplant
- Auto (autologous) transplant
- BMT – bone marrow transplant
- HCT – hematopoietic cell transplant
- SCT – stem cell 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).



### 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](mailto: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.