

Haploidentical Blood or Marrow Transplant (BMT)

Learning more about your treatment options can help you make informed decisions about your health care. For some patients, a blood or marrow transplant (BMT) from a haploidentical (half-matched) donor may be an option.

THIS FACT SHEET TELLS YOU:

- What a haploidentical transplant is
- About the donation process
- The risks and benefits of a haploidentical transplant
- Questions to ask your health insurance company and your doctor

WHAT IS A HAPLOIDENTICAL TRANSPLANT?

- A haploidentical transplant is a type of **allogeneic transplant**.
- Haploidentical means the donor is half-matched and related to the patient.

An allogeneic transplant uses healthy blood-forming cells from a donor to replace unhealthy ones. Doctors try to find a donor whose cells closely match yours. To do this, they look at **human leukocyte antigen (HLA) markers**. These are on most cells in the body.

A haploidentical transplant is when the donor **matches exactly half of your HLA**. A haploidentical, or half-matched, donor may be an option if your doctor can't find a closely matched donor or cord blood unit.

Parents and children are always a half-match for each other. Brothers and sisters have a 50% (1 out of 2) chance of being a half-match for each other. It's very unlikely that other family members (like cousins, aunts or uncles) would be a half-match.

Because haploidentical transplant is newer, not all transplant centers have experience in this area. That means not all hospitals offer this option.

WHAT IS THE DONATION PROCESS?

- The donation process is the same for fully matched and haploidentical donors.
- A haploidentical donor may donate either peripheral blood stem cells (PBSC) or bone marrow.
- The transplant doctor chooses the type of donation based on which is best for the transplant recipient.

PBSC donation: Blood-forming cells are collected from the bloodstream. This process is called apheresis. Before apheresis, the donor receives shots to increase the number of blood-forming cells in the bloodstream. During apheresis, a needle is placed into each of the donor's arms. Blood is removed from a vein in one arm, passed through a machine, and put back into the donor through the vein in the other arm. The machine takes out the blood-forming cells that will be donated to the patient.

Marrow donation: Blood-forming cells are collected from the pelvic, or hip, bone. Marrow donation is a surgical procedure. A doctor uses a special needle to remove the blood-forming cells from the bone marrow. The donor receives anesthesia so he or she is comfortable during the procedure.

WHAT ARE THE RISKS AND BENEFITS OF A HAPLOIDENTICAL TRANSPLANT?

Benefits

- Most patients will have a readily available donor.
- Related donors, including haploidentical donors, are generally available to donate sooner than unrelated donors.
- If more blood-forming cells are needed, haploidentical donors are generally more available to donate a second or third time.

Risks

- Doctors know less about transplant results (such as long-term survival) when a haploidentical donor is used.
- It takes longer for the donated cells start to grow (engraft) in the patient. This can raise the risk of infection after transplant.
- Generally, patients have higher risk of some complications, like graft rejection, graft-versus-host diseases (GVHD), and relapse (disease coming back).

QUESTIONS TO ASK YOUR HEALTH INSURANCE COMPANY

Does my insurance policy pay for:

- An allogeneic transplant from a haploidentical donor?
- My family member's PBSC or marrow donation?



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

QUESTIONS TO ASK YOUR DOCTOR

- Why is a haploidentical transplant being considered for my disease?
- Do I have other donors who would match me?
- What are the risks and benefits of transplant from a haploidentical donor compared to using cord blood or an unrelated donor?
- How do the doctors at this center choose between a haploidentical donor and a matched unrelated donor?
- How much experience does this transplant center have with haploidentical transplant?
- Is there a haploidentical transplant clinical trial that I could join?
- Which family member would be my haploidentical donor? What does that person have to do?

RESOURCES TO LEARN MORE

Be The Match® has a variety of free resources to help you after transplant. To see a full list, visit BeTheMatch.org/request. Here are some you might find helpful:

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



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.