BE THE MATCH®

SCDAA
"Break The Sickle Cycle"®

Sickle Cell Disease and Transplant

A blood or marrow transplant is the only known cure for sickle cell disease. Learn more about transplant as a treatment option.

BeTheMatch.org/sicklecell

Ines, transplant recipient
for sickle cell disease

WHAT IS A **BLOOD OR MARROW TRANSPLANT**?

A blood or marrow transplant (BMT) is a treatment that uses healthy blood-forming cells from a donor to replace your abnormal cells. This is also known as a bone marrow transplant. A BMT isn't surgery.

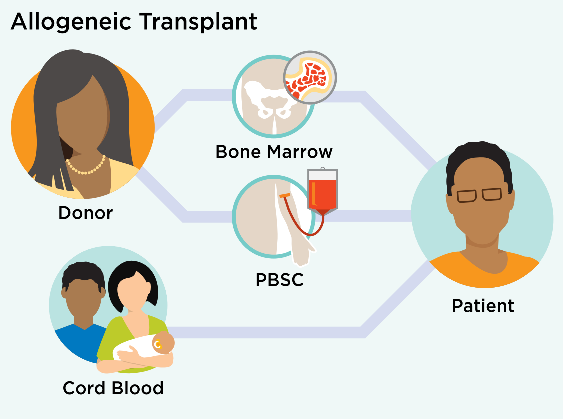
Before transplant, you'll get chemotherapy, with or without radiation, to destroy your abnormal cells. Then, the new cells are given to you through an intravenous (IV) catheter, or tube just like a blood transfusion. From there, the cells find their way into your bone marrow. There, they grow and start to make healthy red blood cells, white blood cells and platelets. Although a transplant can't reverse any organ damage from the sickle cell disease (SCD), it can stop more damage from happening.

A blood or marrow transplant isn't surgery.

WHERE DO THE **NEW CELLS COME FROM**?

The only type of transplant for SCD is an **allogeneic transplant**. This type of transplant uses blood-forming cells donated from someone else. The donor could be a family member (usually a brother or sister), or someone unrelated to you. People with SCD can safely get donated cells from someone with sickle cell trait.

The healthy cells could also be donated umbilical cord blood. This is the blood collected from the umbilical cord and placenta after a baby is born. Most often umbilical cord blood comes from a public cord blood bank (from a baby unrelated to you), but can sometimes come from a baby in your family.



Allogeneic Transplant

If your cells come from a donor, your doctor may ask the person to donate either:

1. Bone marrow: the soft, spongy tissue inside of bones
2. Peripheral blood stem cells (PBSC): cells from the bloodstream

Patients need donors that have closely matched human leukocyte antigen (HLA) markers. If you don't have a matching donor in your family, your doctor can search the Be The Match Registry® for an unrelated donor or cord blood unit.

There's a newer type of allogeneic transplant called a **haploidentical transplant**. Haploidentical means the donor matches half of the patient's HLA markers, and is related to the patient. This may be an option if you don't have a matched related or unrelated donor.

WHO CAN GET A TRANSPLANT?

People with severe sickle cell disease. This includes people who've had a stroke, organ damage, or frequent pain crises.

Transplant has worked very well for children who have a matched sibling donor.

Zalika, pictured here with her parents, received a transplant to cure her sickle cell disease.

Many patients get a transplant while in a clinical trial. Your transplant doctor will tell you if you're eligible to join a clinical trial at your transplant center. You can also find clinical trials by going to **clinicaltrials.gov**.

Ask your doctor which clinical trials might be an option for you. Joining a clinical trial won't affect your quality of care.

WHAT ARE THE **RISKS** AND **SIDE-EFFECTS**?

Although transplant can cure SCD, it has risks, including your body rejecting the new cells, infections, infertility, temporary hair loss, graft-versus-host disease (GVHD) and possibly death. GVHD happens when donor cells see your body's cells as different and attack them. Talk to a transplant doctor to understand more about the risks and benefits of transplant.

José, transplant recipient, with his doctor

QUESTIONS TO **ASK YOUR DOCTOR**

- ☐ What are the chances that transplant will cure my SCD?
- ☐ What are the risks of waiting or trying other treatments before a transplant?
- ☐ Does my age affect the risks of transplant?
- ☐ What are the possible side effects of transplant? How can they be reduced?
- ☐ How might my quality of life change over time, with or without transplant?

BE THE MATCH®

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

As you journey through transplant, you're not alone. Be The Match® is ready to help. We offer many free programs and resources to support patients, caregivers and families before, during and after transplant.

LEARN: BeTheMatch.org/patient

REQUEST INFO: BeTheMatch.org/request

EMAIL: patientinfo@nmdp.org

CALL: 1 (888) 999-6743

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Our mission: To advocate for and enhance our membership's ability to improve the quality of health, life and services for individuals, families and communities affected by sickle cell disease and related conditions, while promoting the search for a cure for all people in the world with sickle cell disease.

sicklecelldisease.org

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