

Transplant for Sickle Cell Disease

WHAT IS A BLOOD OR MARROW TRANSPLANT (BMT)?

- It's a treatment that uses healthy blood-forming cells from a donor to replace your abnormal cells. It is **not** surgery.
- It's the only known cure for sickle cell disease (SCD).
- It can't reverse organ damage from SCD but it can stop more damage from happening.

HOW DOES BMT WORK?

- First, you'll get chemotherapy, and maybe radiation, to destroy your abnormal blood-forming cells.
- Then, the donor's blood-forming cells are given to you through an intravenous (IV) catheter, or tube, like a blood transfusion.
- From there, the cells find their way into your bone marrow to make healthy red blood cells, white blood cells and platelets.

The entire process, starting with treatment through recovery, can take months to years.

WHERE DO THE NEW CELLS COME FROM?

The donor could be a family member or someone unrelated to you. You can get donated cells from someone even if they have sickle cell trait.

Doctors match patients and donors by looking at human leukocyte antigen (HLA) markers on their cells. Your doctor will first look for a matching donor in your family. Biological siblings have a 1 in 4 chance of being a full match for each other. Biological parents

and children are always a half-match for each other (this is called a haploidentical transplant). If you don't have a matched donor in your family, your doctor can search the Be The Match Registry[®].

WHO CAN GET A TRANSPLANT?

People with severe SCD. 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.

Many patients get a transplant by joining a clinical trial. Our clinical trial navigators can help you explore your treatment options. Learn more at CTSearchSupport.org.

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. Talk to a transplant doctor to learn more about your risks.



Desiree, transplant recipient for SCD, with her doctor

QUESTIONS TO ASK YOUR DOCTOR

- Is transplant an option for me?
- What are the chances that transplant will cure the SCD?
- What are the risks of waiting or trying other treatments before 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?