

Every year, thousands of people, including children and teens are diagnosed with leukaemia, a type of blood cancer that affects the white blood cells produced by the bone marrow and lymphatic system. White blood cells circulate in the blood and help the immune system fight off infections.

While chemotherapy and radiation are the most common forms of treatment, with success rates at around 70 per cent, for others their only chance for survival is to have bone marrow or stem cell transplant. That said, finding a suitable donor and "a perfect match" can be challenging.

What are the odds?

In order to be a donor, one needs to have stem cells that match those of the recipient. In most cases, a sibling donor is the most likely match.

According to Cancer Research UK, there is a one in four chance of having matching cells to one's brother or sister. This can be determined by having a blood test that looks for proteins called HLA markers, also known as tissue typing.

In certain cases, you may not be the perfect match for someone, but you could be a "part match" which means that some or half of your cells match, in which case you might still be able to donate some stem cells or bone marrow to a relative in need. Although far more unlikely, it is sometimes possible to have a match with a stranger, i.e. someone from outside of the family.

This is called a "matched unrelated donor" and is sourced via national and international donor registries.

What you can expect?

Extracting and collecting stem cells from bone marrow (aspiration) requires minor surgery and is done at a hospital or clinic.

While it's not always the case, according to the Mayo Clinic, "you'll be given anaesthetic for the procedure.

Needles will be inserted through the skin and into the bone to draw the marrow (aspirate) out of the bone. The aspirate is usually collected from the back of the hipbone (posterior iliac crest).

This process usually takes one to two hours" and once the anaesthetic wears off and you're able to eat and drink again, you can go home.

If you are interested in signing up to become a donor, you'll need to check whether you meet certain criteria relating to age and health. For more information visit the South African Bone Marrow Registry: www.sabmr.co.za, or call +27 21 447 8638.



