



About us

The Leukaemia Foundation is the only national not-for-profit organisation dedicated to the care and cure of patients and families living with leukaemia, lymphoma, myeloma and related blood disorders.

We invest millions of dollars in the work of Australia's leading researchers to develop better treatments and cures and provide free services to support patients and their families.

We receive no ongoing government funding. We rely on the generosity of the community and corporate sector to further our Vision to Cure and Mission to Care.

We can help you

Our range of free services supports thousands of Australians, from diagnosis, through treatment and beyond. To learn more, please call 1800 620 420 to speak with one of our Support Services team.

You can help us

There are many ways that you can help us to improve the quality of life for people with blood cancer. From making a donation, to signing up for an event; from volunteering, or joining us as a corporate sponsor - please call 1800 500 088 or go to www.leukaemia.org.au to learn more.

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About 1100 stem cell transplants to treat blood cancer are carried out in Australia each year.

A stem cell transplant is a medical process often used to treat leukaemia, lymphoma, myeloma and other serious blood disorders. It involves replacing immature blood-forming cells (stem cells), that are found in bone marrow, with healthy stem cells. It is from these cells that mature blood cells (comprising red cells, white cells and platelets) then develop.

Type 1—Autologous transplants

In an autologous transplant, a person's own stem cells are collected in advance, frozen and stored and returned to them after high doses of chemotherapy. Most people have a *single* autologous transplant. Others may require two or more transplants over a few months. Autologous transplants generally carry fewer risks than allogeneic transplants, with the degree and severity of complications depending on a person's general health, age and the stage of their disease. The recovery period varies but can take anywhere from a few weeks to a year.

Type 2—Allogeneic transplants

In an allogeneic transplant, stem cells are donated by a stem cell donor. The most suitable donor is usually a brother or sister whose stem cells are a close match to the person being treated. This is called a *related* or *matched sibling donor transplant*. However, only about one in three patients has such a donor, so the donor may have to be an unrelated but matched volunteer. This is called a *matched*, or *voluntary unrelated donor transplant (MUD or URD)*. If an exact match with the person's tissue type cannot be found, a partially matched donor can sometimes be used, but this usually results in increased adverse events. The associated risks with an allogeneic transplant are higher than an autologous transplant and increase with age, so they are generally only offered to people under the age of 65.

Fast Fact: Did you know that people who receive an allogeneic transplant may end up with a different blood type?

Stem cells can be collected directly from a person's bone marrow, from the blood stream, or from the umbilical cord blood of newborn babies (a cord blood transplant). In most cases, stem cells are collected directly from the bloodstream.

Unlike organ transplants, a stem cell transplant is *not* a surgical procedure. The stem cells are given as an infusion through a vein, like a blood transfusion. Once transplanted, the stem cells make their way to the bone marrow where they recommence the processes of forming blood cells.

A **reduced intensity** transplant (also called a *non-myeloablative transplant*) uses lower doses of chemotherapy. This may be a more appropriate option for some older people undergoing treatment, or for people with certain health barriers who cannot tolerate the high level of chemotherapy associated with a standard allogeneic transplant.

The Leukaemia Foundation also publishes the guides: 'Understanding Autologous Transplants' and 'Understanding Allogeneic Transplants'. For copies please call 1800 620 420 or go to www.leukaemia.org.au.

For more information, freecall 1800 620 420
email info@leukaemia.org.au or visit www.leukaemia.org.au