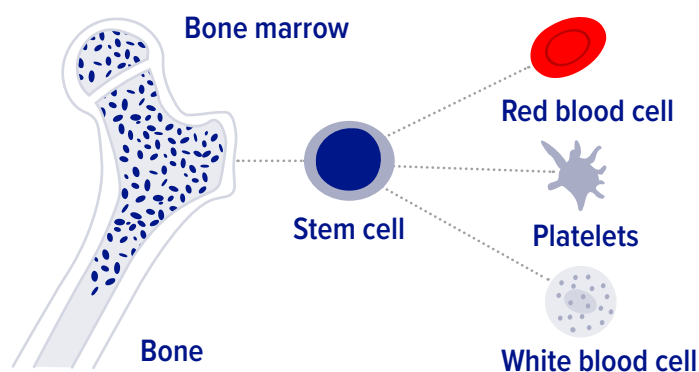


Blood Stem Cell Donation

What are blood stem cells?

- Blood stem cells are found in the bone marrow, which is the soft, spongy part in the middle of bones.
- Blood stem cells produce the body's blood cells. White blood cells which fight disease and infection, red blood cells which carry oxygen, and platelets which help the blood to clot.



What is a blood stem cell transplant (also known as a bone marrow transplant)?

- A blood stem cell transplant is a lifesaving treatment for people with leukaemia, lymphoma, and other cancers, more information can be found [here](#).
- A blood stem cell transplant is a procedure which replaces blood stem cells in people whose bone marrow has been destroyed by large doses of chemotherapy and/or radiotherapy.
- Donated blood stem cells are needed for an allogeneic blood stem cell transplant.

Further information on allogeneic blood stem cell transplant is available [here](#).

Who can donate blood stem cells?

- Younger donors (18-35 years old) are preferred, their blood stem cells result in the best outcomes for blood stem cell transplant patients.
- People with any sort of ethnic or indigenous heritage.
- Males make the ideal donor as they physically have more stem cells.

How do I register to donate blood stem cells?

- Like being a blood donor, donating blood stem cells is at no cost to you.
- A blood or tissue sample is taken for your tissue type, which is used to match donors to patients. The result will be recorded on the Australian Bone Marrow Donor Registry (ABMDR).
- There are Bone Marrow Donor registries in many countries. There is a possibility you may be a match for a patient in another country as the registries will search worldwide for donors. It will be your decision to be a donor.

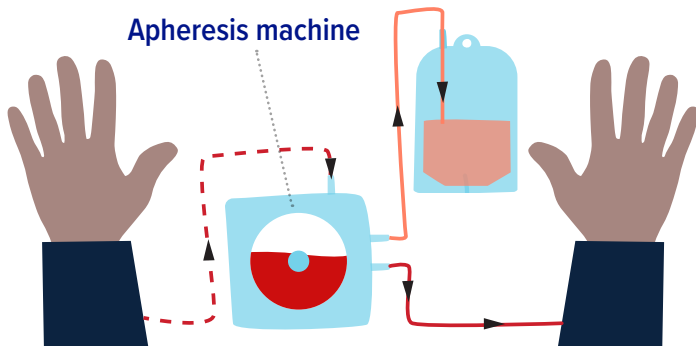
Where do I register to donate blood stem cells?

- If you want to become a blood stem cell donor register your interest [here](#) or [here](#).
- If you would like to donate blood and register as a blood stem cell donor, access further information [here](#).
- If you cannot give blood but would like to register as a blood stem cell donor, please call Australian Red Cross Lifeblood on 13 14 95 for further information.

Further information is available [here](#).

How do you donate blood stem cells?

There are two different ways to donate blood stem cells.

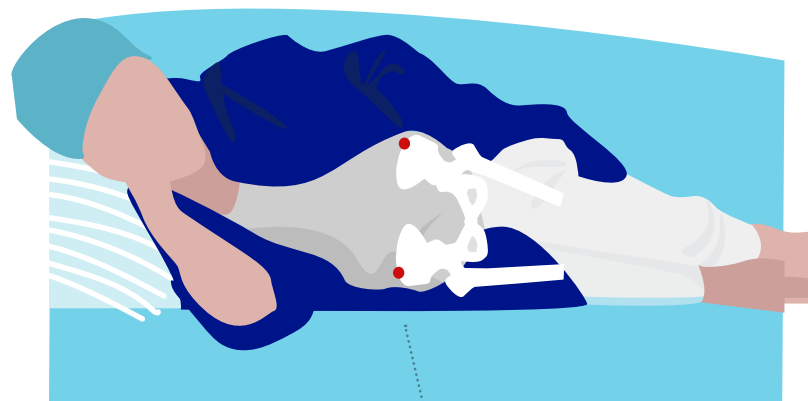


Peripheral blood stem cell donation

- You will receive injections of medication (filgrastim) that are given under the skin (subcutaneously) for several days before the donation.
- The injections increase the number of blood stem cells in your bloodstream.
- Side effects and their management will be discussed with you by the health professionals involved in the donation process.
- Usually you will have 2 cannulas (intravenous tubes) inserted into your veins in your arms. Your blood is taken from one cannula, goes through a machine that takes out the stem cells, and then your blood is returned through the second cannula on your other arm.
- This process is called apheresis, it is generally an outpatient procedure which takes around 4 to 6 hours. You are usually able to go home that day.
- During the collection you may experience nausea, a tingling feeling or chills. These effects can be managed with medication and resolve soon after the procedure is complete.
- You may need to return for a second donation the following day depending on how many blood stem cells are needed.

Bone marrow donation

- Collecting stem cells from bone marrow is done in the operating room.
- You will have an anesthetic, so you will be asleep and not feel any pain during the procedure.
- Needles are inserted into the back of the hip bones near the lower back to draw the stem cells out of the bone.
- This process usually takes 1 to 2 hours.
- After the procedure you will go to the recovery room to be monitored for a few hours and are usually able to go home that day.
- You may feel stiff and sore in the lower back area for a few days after the procedure. You can take medication such as paracetamol for any discomfort. You may have some bruising around the procedure site the week after the donation.



Marrow is taken from the back of the hip bones, not the spine

After the procedure

- Recovery times vary depending on the individual and type of donation.
- Most donors return to their usual activities within days to weeks after donation.

Further information is available [here](#).

Donor Privacy and confidentiality

- Your information is collected and stored to ensure safe matching of potential donors.
- If you are identified as a potential match your name will never be shared with the patient or their treatment team.
- If you are confirmed as a match and agree to donate, only the hospital and health professionals involved in the donation process will know your identity.

Access the Australian Bone Marrow Registry (ABMDR) privacy policy [here](#).

Need to talk? Our Blood Cancer Support Coordinators are available on 1800 620 420 or find out how we can help at leukaemia.org.au

Leukaemia Foundation[®]

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