

Mononuclear cell (MNC) donation



DKMS – here for you as we work to eliminate blood cancer

DKMS is one of the world's leading non-profit organisations helping patients with blood cancer.

Our mission is to:

- encourage more people to join the stem cell register
- ensure everyone who needs a stem cell transplant has equal access to one
- conduct research focused on continually improving the survival and recovery rate of people with blood cancers or disorders.

DKMS globally:

More than
125,000
collections
facilitated
globally
since 1991



TRANSPORTED
CELLS TO

61

DIFFERENT
COUNTRIES



OVER
13 million
STEM CELL DONORS
REGISTERED WITH
DKMS GLOBALLY



DKMS has offices in Germany, the US, Poland, Chile, and South Africa as well as the UK. In India, DKMS founded the joint venture DKMS-BMST together with the Bangalore Medical Services Trust. International expansion and collaboration are key to helping patients worldwide because blood cancer knows no borders.

dkms.org.uk

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We're reaching out again

Thank you again for your amazing stem cell donation! You have given someone a second chance at life.

We're now asking if you'd consider another donation for the same patient – this time of white blood cells called mononuclear cells (MNCs), more specifically lymphocytes. These are infection-fighting cells that play an important role in helping the body recover after a transplant. They can give the patient's recovery an extra boost.

Of course, we understand that you may have questions. That's why we've produced this booklet specifically for our donors who are undertaking an MNC donation. This booklet covers all aspects of your journey through the process – medical assessment, possible side effects and subsequent recovery, along with information on DKMS reimbursement for donors.

On behalf of DKMS UK, the patient you have been matched with and their medical team, we would like to thank you for your commitment to the process so far.

More information

If you would like to chat to us about anything you read in this booklet, please contact your DKMS coordinator on **020 8747 5660** or by email on workup@dkms.org.uk

Your coordinator will be your main point of contact and will be on hand to support you through your donation journey.



Mononuclear cell (MNC), also known as a lymphocyte donation

Why are you being asked to donate again?

The person who received your stem cells needs more help. This could be because:

- they are showing early signs of relapse
- the transplanted stem cells have not yet successfully replaced their own cells.

After a stem cell donation, the patient's medical team keep a close eye on their recovery. They check how many of the stem cells the patient is now producing are from the donor (donor cells). The goal is to have as many donor cells as possible, ideally close to 100%.

If the number of donor cells is low or starts to drop, it could mean the transplant isn't working as well as expected. That's why they may ask you to donate again.

What is a lymphocyte donation?

After a stem cell transplant, the goal is to help the patient build a strong and healthy immune system.

The immune system includes white blood cells that fight infection and cancer. One type of these cells is called lymphocytes.

Sometimes, the patient needs more of these lymphocytes to help strengthen their immune system. To be effective, these cells need to come from the same donor who gave the stem cells – that's you. These compatible lymphocyte cells give the patient the best chance of a successful recovery.



Your medical assessment

You will need to have a medical assessment ahead of the lymphocyte donation. The length of time that has passed since your initial donation will determine exactly what tests need to be repeated.

This is to check you're physically fit and well to proceed with a lymphocyte donation. This is also a good opportunity for you to meet the medical team who will be responsible for your care and ask them any questions you may have.

Your assessment will include the following checks:

Counselling on the donation method and your consent as a donor

Your medical team will have an in-depth discussion with you about the donation method and possible side effects. Once you're comfortable with the information provided, you'll be asked to sign some consent forms.

Physical examination and health history

The doctor will conduct a brief physical examination. They will also measure your height and weight and check your blood pressure and vital signs. You will be asked

questions about your general health as well as any personal or relevant family medical history.

Electrocardiogram (ECG)

This non-invasive test records your heart's electrical activity to rule out any abnormalities.

Urine and blood tests

A nurse will ask you to supply a urine sample. Blood samples will be taken to check your full blood count, biochemistry and for any infections or signs of infectious diseases. If you have spent time abroad, there may be some additional samples requested.



Medical clearance and next steps

The results from your medical assessment will be available between 3 to 7 working days after your appointment. Providing they show you are medically eligible to proceed with the donation, your DKMS coordinator will call you with the good news and confirm arrangements for your donation.

If there are any issues with your results, the doctor will call you directly to discuss next steps. The doctor will advise you of any repeat or additional testing that may be required, in order to identify whether you can proceed as a donor. In this case, your DKMS

coordinator will follow up with you to arrange any testing needed. You will receive a copy of your medical report for your own records.



Lymphocyte donation

When you arrive for your lymphocyte donation, you will be settled into a large reclining chair or a bed. A few blood samples will be taken, after which a nurse will insert a needle into each of your arms – the needles are connected to the apheresis machine. For approximately four hours, your blood will leave your body via one of the needles, and will circulate through the apheresis machine, which will separate your lymphocytes from the rest of your blood cells. These cells will be collected, along with some plasma, while the rest of your blood cells and plasma will be returned to you via the needle in your other arm. Once completed, you will be disconnected from the machine. The nurses will monitor you and ensure you are feeling well. Your cells will be taken to the lab, where cell processing and a cell count take place. The entire process occurs over one day only.

Please note that during the donation, due to the needles in both your arms, you will have

limited mobility. You may wish to bring something to read or a device on which to watch television or films. Don't forget your charger! Nurses will be nearby at all times to assist you with anything you need and to monitor you throughout your donation.



Possible donation side effects

Broadly speaking, donation is a safe procedure. However, during your donation, you might experience some tingling (which is due to the donation method slightly depleting your calcium levels), as well as some bruising at the needle sites. Other side effects can include chills, a temporary decrease in blood platelet count, light-headedness and, in rare cases, nausea. These side effects can be treated with a calcium supplement. Donors who experience light-headedness will be advised not to drive for the rest of the donation day. Most donors are able to return to their usual activities within two days of donating. If your usual activities involve physical exertion, more recovery time may be necessary – possibly up to one week.



Will donating increase my risk of infection?

No. Donating lymphocytes does not increase your risk of infection or cause any practical concerns. The body regenerates cells rapidly, typically within hours to days, ensuring your immune system remains robust. While you may experience a mild drop in platelet count, this does not significantly compromise your ability to fight infections. So, cell loss does not cause any practical concerns.



Central venous line

As we've explained above, as part of the donation process, a nurse will aim to insert a needle into a vein in both of your arms. Sometimes it can be difficult to do this. This can be for a number of reasons, such as if your veins are narrow or quite deep in your arm. If this is the case, the nurse,

or another experienced medical professional, will use a central venous line (CVL) in order to get access. A CVL is a short plastic tube which will be inserted into a bigger vein close to your collarbone or next to your groin. If a CVL is needed, you would receive local anaesthetic before it is inserted to ensure you don't feel any pain. The doctor will discuss a CVL with you at your medical assessment, and you will have the opportunity to ask any questions. CVLs are not frequently required for our donors.



Follow up care

In the days following your donation, a member of DKMS' Donor Follow-up team will be in touch to check on your recovery and hear about your donation experience. In the unlikely event that you require any additional medical care after your donation, the Follow-up team will coordinate with our medical adviser and the

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medical team at the stem cell collection centre, to ensure you receive the necessary care.

As this is a subsequent donation with DKMS, you will already be part of the Donor Follow-up programme. This is when the Follow-up team send you a health questionnaire following your PBSC or bone marrow (BM) stem cell donation at one month, six months, and then annually for up to ten years. Participation in this follow-up programme is optional, and you can choose to opt out at any time.

If you have been transferred to the register and are donating with DKMS UK for the first time, the Follow-up team will just send you a one month health questionnaire.

Additionally, please note that it is recommended not to donate blood for three months after your lymphocyte donation. If you have any questions or concerns at any stage, please don't hesitate to contact us (**020 8747 5660** or **workup@dkms.org.uk**).



Patient updates and potential contact

During our follow-up call with you after your donation, if you have not already received some information about the patient that you have donated to previously, we can share some details with you. We can share the age range and sex of the patient who received your stem cells, and the country in which they are receiving treatment. We will also be able to advise you on any possible communication/contact options available to you if you would like to correspond with the patient. These options depend on the rules and standards set by the country where the patient is based and can vary. It's entirely up to you whether you want to contact them or not.

DKMS has also created a Donor Club on Facebook – to bring our stem cell donors together to connect, chat and share stories. It is a safe place for you share any excitement, worries or questions you have about your post-donation journey.



Subsequent donations

Occasionally, a patient may require an additional donation after the subsequent lymphocyte donation. While a donor can only donate via peripheral blood stem cell (PBSC) or bone marrow (BM) collection a maximum of two times, there is no limit to how many times a person can donate lymphocytes.






For this reason, and provided you are happy for us to do so, we will place your DKMS profile 'on hold' or 'reserved' again for a further one year specifically for this patient. This means your profile will not be considered for other patients during that time. The Follow-up team will discuss your reservation period with you once you have donated, as this can vary. If the patient's medical team think the patient requires additional cells, we will be in touch to check if you are willing and available to donate again.

Depending on the reason for the subsequent donation request, you may be asked to donate via bone marrow collection (BM), via a peripheral stem cell collection (PBSC), or more likely via a lymphocyte collection again. Full details of these methods will be provided by your coordinator and our medical team if another subsequent request is made. You can also find additional information regarding these methods on our website.

As always, the decision to donate remains yours.

Would you like to continue to support DKMS?

Donating your stem cells and lymphocytes is an amazing thing to do. Following your donation, if you would like to, there are lots of ways to get involved with DKMS, helping us give more people with blood cancers or disorders a second chance at life. You could:

-  Register potential lifesavers
-  Join or start a DKMS volunteering hub
-  Raise awareness in your community or workplace
-  Fundraise for DKMS
-  Like and share our social media posts.

Find out more at dkms.org.uk/get-involved

Last but not least, a very big ‘thank you’ from everyone at DKMS!



“Regardless of the outcome, I want to emphasise that, even though Dad is no longer here, that donation still meant the world to us because we had all that extra time together.”

Chelsea - daughter of stem cell recipient.

Reimbursement of personal expenses

DKMS will reimburse any reasonable personal expenses related to your medical assessment and donation. Our online Webexpenses platform is easy to use and makes keeping track of expenses uncomplicated. You will need to upload images of your itemised receipts to accompany the reimbursement claim.

Here are some guidelines to help you understand which expenses we can and can't cover. Details and instructions on how to claim your expenses will be sent to you by our dedicated DKMS Reimbursements team.



Food and drink

Food and drink expenses can be reimbursed up to £35 per day. This will also apply to your companion on the days of donation.



Public transport

CT Travel, our trusted travel partner, can arrange any travel for you in advance. However, should there be any unexpected additional expenses when you

travel to your medical assessment or your donation, we will reimburse any claims relating to standard class public transport costs (e.g., trains, taxis). This will also apply to your companion when travelling to and from your donation.



Mileage and parking

Any mileage undertaken in your personal vehicle relating to travel to and from your medical assessment and/or your donation can be reimbursed at the current tax valid amount of 40 pence per mile.

For example:

Home to airport/station/hotel/hospital and return trip (e.g., 10 miles @ 40p per mile = £4.00 to be reimbursed). If you drive over 100 miles, you will also need to submit a petrol receipt. Any parking costs directly relating to your travel to and from your appointments can also be reimbursed.



Driving in London

If your appointment is in Central London, we will reimburse the Congestion Charge and the

Ultra-Low Emission Zone (ULEZ) charge, if applicable. Please follow payment instructions provided on the TFL website: <https://tfl.gov.uk/modes/driving/pay-to-drive-in-london>

It's important that you ensure all charges are paid in full to avoid penalties. Penalty fee or default charges will not be reimbursed. Please note the Congestion Charge/ULEZ needs to be paid only for the days the car is in use, so if, for example, you drive into London on Monday, do not use the car on Tuesday and drive out again on Wednesday, you would not need to pay Congestion Charge/ULEZ charges for the Tuesday.



Loss of earnings

Up to £200 per day (depending on your normal daily wage) can be reimbursed, if you are not granted paid leave. Please note that National Insurance and tax

will be applied and deducted from this sum.

If your employer asks you to take unpaid leave in order for you to attend your medical assessment and donation, you will need to provide the following:

- Confirmation of dates of unpaid leave, signed by your manager and on company headed paper or by an official work email.
- Your three most recent payslips, which would be used to calculate your daily wage.

If you are self employed, please provide the following:

- Evidence of self-employed status (e.g., UTR/tax reference number, business name and address).
- Evidence of loss of earnings, for example three months' worth of invoices and bank statements.



Precious extra time: Polly's leukocyte donation

Polly from Derbyshire was matched with a seriously ill patient very quickly after joining the stem cell donor register, and agreed to donate right away.

Unbeknownst to Polly, the patient waiting for her stem cells was Syd from Worthing, a self-employed plumber described by his family as a beloved, 'larger than life' character. Syd's daughter, Chelsea, shares, "The years we had after dad's transplant were so special. We made so many memories, travelled together, plus he was there for the birth of my daughter, Molly, and even celebrated her first birthday."

After her initial donation, by PBSC, Polly was asked to donate leukocytes to her then-anonymous patient.

"I'd been told it could happen, but I never imagined I'd be needed again – and definitely not for the same person," says Polly. "I had no idea what a leukocyte even was, but as soon as they said my recipient needed more help, that was all I needed to know. It absolutely felt like giving him his best chance.

"The donation itself felt very similar to my PBSC donation, but also a lot easier and quicker. It also felt somehow even more meaningful because I knew it was for the same person."

Sadly, despite Polly's donations, Syd's cancer returned, and he passed away in September 2024.

"Even though Dad is no longer here, that donation still meant the world to us because we had all that extra time together," reflects Chelsea.

"I'd tell any donor who feels nervous that it's okay to be scared, but it's also one of the most powerful things you can ever do for someone," says Polly. "The team takes such good care of you and talk through everything with you, and being asked again means you are uniquely placed to give that patient another chance at life."



Donor Polly and Syd, who received her stem cells and leukocytes, making memories.

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Published March 2026