



## THE LITTLE GUIDE FOR TRANSPLANT PATIENTS

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## HELLO

If you're reading this, it's because you've been told you need a stem cell or bone marrow transplant. We'd like to help you understand what's going to happen.

We are Anthony Nolan and we save the lives of people with blood cancer or blood disorders who need a stem cell or bone marrow transplant. Every day, we use our register to match remarkable individuals willing to donate their stem cells or bone marrow to people who desperately need lifesaving transplants. This is called an allograft transplant.

We have one of the world's leading research institutes. We spend all day, every

day, discovering more and more about what it is that makes the perfect match, and how we can make even more.

Finding a donor is just the start of what will be a long road to recovery for you and your family. And we're here for the whole journey. Visit our website for information and support. And connect with others on our online transplant community. Visit [anthohnolan.org/patientinfo](http://anthohnolan.org/patientinfo)

## WHAT MAKES A MATCH?

Matching is done based on your human leukocyte antigen (or HLA) tissue type. Your HLA is what makes you 'you' - it's your individual genetic characteristic. It's similar to your blood group, but much more diverse and complicated.

The better the match, the better the chance the new cells will be accepted by your body - this is known as engraftment. The better the engraftment, the less likely it is you'll develop problems after your transplant.

Your HLA is made up of genes and within these we look at five key sites, or loci. Each one of these sites has two alleles (types of genes), making 10 in total. If 9 match up it's a

9/10 match. If all 10 match then you've got yourself a 10/10 match. When it comes to finding a match, the higher the better.

There are millions of different combinations of these genes. There could be thousands of potential donors for you, or it could be a challenge for us to find even one. It all depends on how common your tissue type is.

## THE PERFECT MATCH

### Are there any other factors?

A couple. When a donor is chosen, their age is often taken into consideration. This is because it's thought that transplants involving younger donors have fewer post-transplant complications.

Another factor we consider is whether you test positive for a very common virus called cytomegalovirus (or CMV for short). Ideally we would want to find a donor who tests the same for this virus as you do.

We will also do tests to make sure that the donor hasn't developed any medical problems since joining our register.



## FAQS

### Q. Along with my siblings, will you test my other relatives?

Not usually. However, if your siblings don't match and we can't find a matching donor, your doctors may then consider testing other relatives.

### Q. When can I contact my donor?

Most registers allow patients and donors to communicate anonymously after a transplant. After two years, the communication with your donor will depend on where your donor is from and the rules of their country. Find out more at [anthohnolan.org/contactmydonor](http://anthohnolan.org/contactmydonor)

### Q. I've been told there isn't a match for me. What's next?

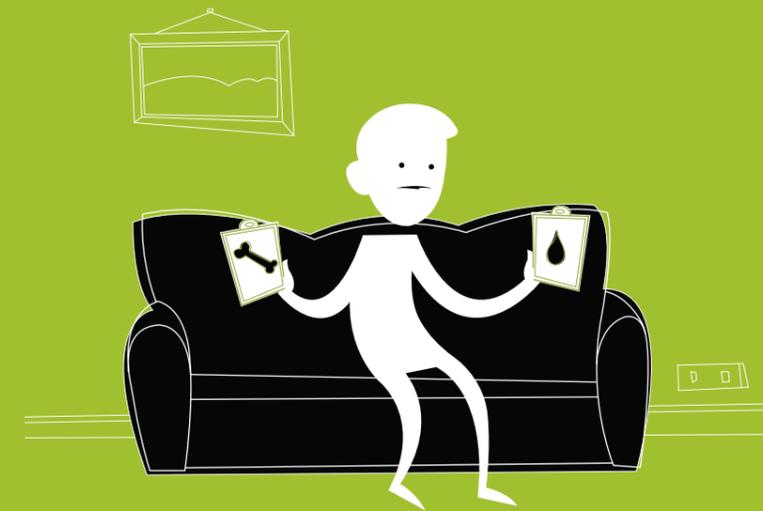
Your consultant may talk to you about looking for a cord blood match.

Cord blood is the blood left inside the placenta and umbilical cord after a baby is born. We run programmes with the NHS where mums-to-be sign up to donate. After the birth, we collect the stem cells from this blood and cryogenically freeze them for transplants. Because they come from a baby, they are less developed. This means they don't have to match the patient quite as closely. Check out [anthohnolan.org/cord](http://anthohnolan.org/cord) for more details.

### Q. Will my donor give blood stem cells or bone marrow?

The two donation methods result in two different products: bone marrow and blood stem

cells. They do the same job. This decision, made by your medical team, is based on what's best for you, the donor and the treatment of your condition.



# THE JOURNEY

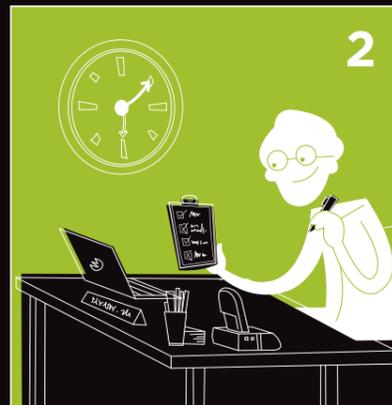
ANTHONY  
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BE A MATCH, SAVE A LIFE

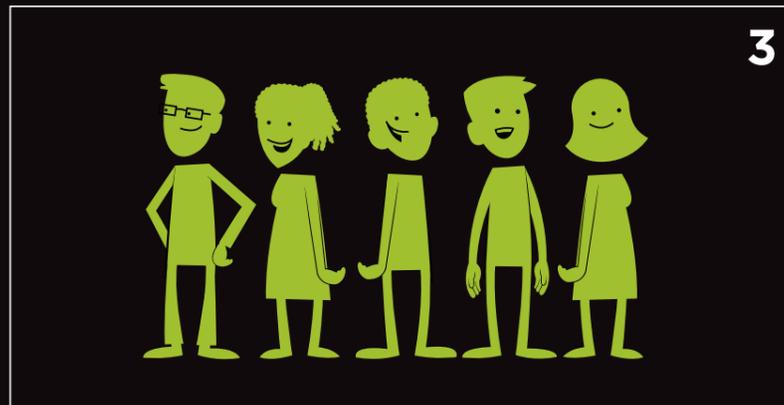
If you've been told that you need an allograft transplant, you probably have a lot of questions. So let's go through what happens next.



**Any siblings?**  
Your hospital may take a blood sample from you and your siblings, if you have any. If your sibling is a match and is healthy and happy to donate, the transplant centre will almost always choose them as a donor.

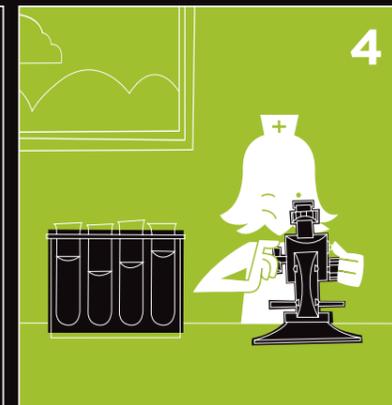


**Searching our register**  
If your siblings aren't a match, your transplant centre will get in touch with us. We'll look at our register to search all the registered donors in the UK. We'll also have a look at what donors are available for you internationally.

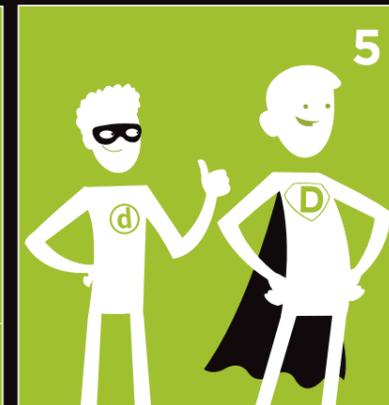


**Shortlisting your donors**  
We'll make a list of potentially matching donors and send it to your transplant centre within 24 hours. Our specialist donor selection team will take a closer look at each of these donors and shortlist the best four, five or six.

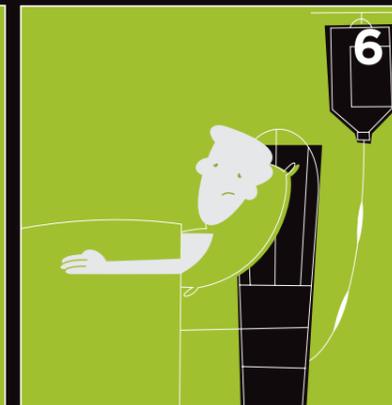
We'll contact each shortlisted donor to ensure they're still available and able to donate. They will then go to their GP to give a blood sample. This will be sent to your transplant centre's labs, where your blood sample will be.



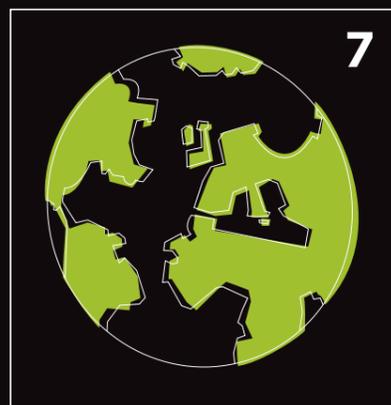
**Choosing your donor**  
The lab will test the samples to find the best match. We know it's hard to wait but this process can take a few weeks. After we've considered all the factors, such as your HLA tissue type, your doctor will choose your donor.



**Making plans**  
Our team will contact the donor to tell them the great news and arrange a full medical check. Once they've passed this check, our team will make arrangements for the donation. We'll also select a back-up donor, just in case.



**Preparing your body**  
Your team will set your transplant date, taking into consideration your treatment and the donor's availability. Before your transplant you'll have a course of treatment to prepare your body to adopt your donor's immune system.



**Your donor's experience**  
Meanwhile, somewhere in the world, your donor is preparing to give their stem cells through one of two methods.



Peripheral blood stem cell donation is most common. Your donor will have injections over four days to produce more stem cells. A machine takes blood from one arm, filters out the stem cells, and returns the blood to the other arm.



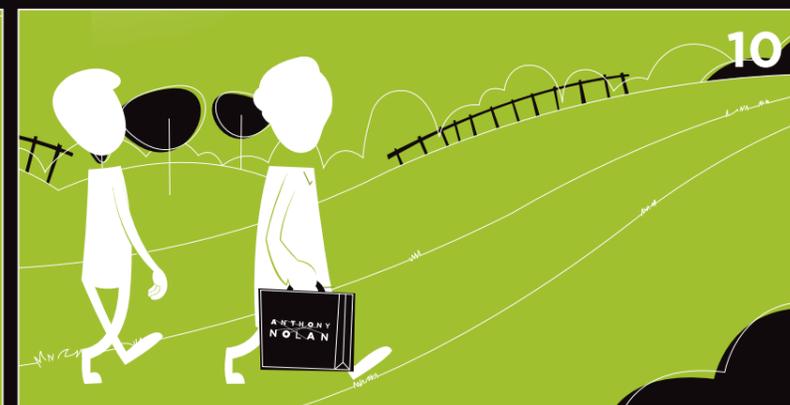
If they donate via bone marrow they'll have a general anaesthetic and a small operation where two needles are inserted into their pelvis to extract bone marrow. Whichever route they go down, they'll be in hospital for at least a day.



**The precious cargo**  
One of our volunteer couriers will collect the stem cells. This could be from New York, New Delhi, or even New Zealand. Or perhaps from just around the corner. The cells last 72 hours after donation. Don't worry, we never miss a deadline.



**Day Zero...**  
When they arrive you'll receive the stem cells through an IV. That's when the magic begins. The cells will kick-start your immune system and deliver you from a very vulnerable state.



**... to Day 100**  
The first few weeks after your transplant can be tough for both you and your family. But don't worry, your medical team will keep a close eye on you. And of course, we'll be here too.

So that's how it all works: from finding a match to having your transplant. It's a long road to recovery. But we'll be with you every step of the way. Get in touch on [patientinfo@anthonymolan.org](mailto:patientinfo@anthonymolan.org).