Precious Cells BioBank and Precious Cells Miracle: Community Cord Blood Registry were founded upon the belief that stem cells should be accessible to everyone. This is our primary objective and one that we are continually working towards.

We offer parents-to-be the opportunity to choose to publically donate or privately store cord blood through one organisation.

We wholeheartedly believe in stem cells because of the life-changing good they have done and will continue to do.

Congratulations and Welcome to Precious Cells

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www.precious-cells.com

What is Cord Blood?

Umbilical cord blood is the blood remaining in the placenta and umbilical cord after a baby has been born. It is a rich source of stem cells and other types of cells, which are capable of treating potentially life-threatening diseases. If cord blood is collected and preserved it can be used in a whole host of therapies and medical innovations such as transplants, plus a world of still unknown possibilities in years to come.

What are my options?

Public Donations

If you’re pregnant, you can donate your umbilical cord blood for use in potentially life-saving therapy or ground-breaking medical research designed to find cures for devastating illnesses.

Your stem cells could be used to treat a patient with whom your stem cells are a tissue match or for further medical investigation and studies.

Private Storage

It is equally your right to choose to store your stem cells for your own exclusive use in case you or your family require stem cell treatment in the future.

Your stem cells will always be a perfect match for you and a likely match for family and close relatives. Storing your own cells also means they are available anytime for you, should you ever need them; potentially eliminating the need to search for a donor match.
A stem cell is a very unique type of cell. It is a cell that has not yet specialised and is therefore capable of differentiating (changing) into many different cell types. It is also able to replicate itself. These two features – differentiation and replication – make stem cells extremely valuable. They enable physicians to use them to treat many diseases, such as leukaemia, sickle cell anaemia, bone marrow damage and metabolic disorders.

Two of the most commonly studied stem cell types are:

**Haemopoietic stem cells (HSCs)**

Haemopoietic stem cells are found in bone marrow and umbilical cord blood and can be used to treat blood disorders and immune system disorders.

**Mesenchymal stem cells (MSCs)**

Mesenchymal stem cells are found in umbilical cord tissue, adipose tissue and teeth. They also form bone and connective tissue. In the future these may be used to repair or replace damaged tissues and organs.

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**What are Stem Cells?**

**Haemopoietic stem cells (HSCs)**

- Stem Cell & Tissue banking involves carefully collecting your own cells or tissue samples and storing them in special cryogenic (frozen in liquid nitrogen at -196 °C) conditions, so that they can be used for future applications and treatments if and when the need arises. We offer two types of stem cell banking: Public Stem Cell Donation and Private Stem Cell Storage.

**Mesenchymal stem cells (MSCs)**

- It will simply be the most valuable thing you can give your child.
  - Hannah Green privately stored her baby Lola’s stem cells with Precious Cells Biobank

- This is a wonderful programme and as my family and I have autoimmune problems I sincerely hope that in the future they will benefit.
  - Sara Marshall publicly donated her baby’s umbilical cord blood stem cells.
What can stem cells treat?

Blood Cancers
• Leukaemia
• Lymphoma
• Myeloma

Immune Disorders
• Severe Combined Immunodeficiency
• Wiskott-Aldrich Syndrome

Blood Disorders
• Sickle Cell Anaemia
• Aplastic Anaemia
• Fanconi’s Anaemia

Metabolic disorders
• Krabbe Disease
• Hunter Syndrome

Solid Tumours
• Neuroblastoma

Current applications for stem cells include the treatment of:

- Brain Injury
- Hearing Loss
- Heart Valve Replacement
- Critical Limb Ischemia
- Stroke
- Type 1 Diabetes
- Liver Disease
- Burns
- Spinal Cord Injury

Future applications for stem cells under clinical trials and investigation:

Private Stem Cell Storage

Storing your baby’s stem cells gives you the peace of mind that should the need arise, there is potentially a personalised treatment available.

These stem cells are a 100% match for your baby and a likely match for close blood relatives. Stem cells are already routinely used in medicines all over the world. With over a thousand human clinical trials specifically involving cord blood, their future use continues to increase which makes the decision to store them a very easy, rational and sensible option for millions of new parents to be.

Why store stem cells?

The decision to store stem cells is a personal one. Many of the millions of people who have chosen to store stem cells have done so for different reasons; whether it be family medical reasons or as a form of insurance.

Unlike donating cord blood, storing your own stem cells under the private storage programme means that they can only be accessed by you (or your child when they reach legal age). This means they can be made available at any time. In addition to storing cord blood, we also store a section of cord tissue, which is a widely reported source of many different cell types including mesenchymal stem cells. We store cord tissue as a potential source of stem cells. When you choose private umbilical cord storage we store cord blood and tissue as standard.

Choosing to store your baby’s stem cells will not interfere in your obstetric or midwifery care.

The choice to use Precious Cells was a simple one, they seemed so friendly and supplied us with all of the information we could possibly want.

Nicola privately stored her baby, Marianne’s cord blood and tissue stem cells.

To discover more visit: www.precious-cells.com/private-storage

Accessing my stem cells

Should you need to access your stem cells, Precious Cells pledges to work with you and your transplant centre, hospital or clinic anywhere in the world to ensure you receive the sample in a timely manner. Furthermore, the way in which we process your cord blood stem cells prior to cryopreserving them means it is unlikely that further processing will be required, minimising the possibility of delays in you receiving your vital cells.

Where can I do it?

We can arrange for the collection of your stem cells at many private and NHS hospitals across the world – not just where members of the Precious Cells Miracle team are based.

For the latest trials and developments visit: www.parentsguidecordblood.org and www.clinicaltrials.gov

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Stem Cell Donation

Why donate?

Donating your baby’s umbilical cord blood stem cells provides an amazing opportunity that could one day help to save someone’s life. It could be the life of someone you know or equally a complete stranger on the other side of the world! Your baby’s umbilical cord blood is a rich source of stem cells, which are only available at the time immediately after birth.

If private storage is not the right option for you, donating these stem cells means that they can be placed on our independently managed registry. Once registered, this will allow the donated cells to become accessible to a suitable patient who requires a transplant anywhere in the world.

Our hospitals

We work within an ever-expanding network of UK NHS hospitals. Working closely with midwifery, gynaecological, and obstetric teams, we are on hand to offer advice and support.

How it works

You can donate cord blood at any one of the growing number of NHS hospitals in which Precious Cells Miracle is based. Our dedicated and specialist team of cord blood technicians are on hand to discuss the process and go through the consent procedure. There is absolutely no charge for donating your stem cells – the cost of this is generously supported with funding by Precious Cells Miracle Community Cord Blood Registry.

The donated stem cell samples collected by Precious Cells Miracle are stored on an independently managed UK-based public registry. The cells are stored in controlled, secure conditions and managed exclusively on behalf of the charity by Precious Cells Group.

Donated stem cells will be made available on this independently managed UK-based public registry, which can be accessed by healthcare professionals. The more samples available, the more chance a patient has of finding a genetic match.

Choosing to donate your baby’s stem cells will not interfere in your obstetric or midwifery care.

I found the service very professional and useful, I was very happy to help where I can to save a life.

Sara Marshall publically donated her baby’s umbilical cord blood stem cells.

To find your nearest hospital visit: www.precious-cells.com/hospitals

It was a no-brainer for me. I think it’s a good thing to do. I lost my dad when I was 13 to cancer. I’m glad to be able to help something that’s close to me. You grow this placenta for so many months. It’s nice to do something with it rather than it being put in the bin. It’s a very simple procedure.

Lucy Simmons, 31, from Croydon, agreed to donate cord blood when she gave birth to daughter Sydney-Belle.
Our Commitments

Our commitments are designed to make sure you receive our best possible service. Our aim is to provide you clarity of the service offer and what we do to ensure your stem cells are safe in our care; just like the many stem cells we already store.

Consent

Whether you choose to donate or privately store your stem cells, we promise not to do anything without your consent. One of our qualified advisors will explain and guide you through this process.

Storage Confirmation and Certificate

Private storage: If your cord blood stem cell unit is suitable for storage, you’ll receive storage confirmation, including your cell counts for the cord blood. You will receive your certificate of storage in accordance with your contract.

Donated stem cells: These are anonymised, therefore no certificate or confirmation is sent.

Cord blood stem cell unit release

Privately stored cord blood stem cell units will only be released upon a formal request from a physician at a recognised transplant centre in addition to permission from the client. Only once the child is eighteen can cells be released upon their request. We pledge to work with your transplant centre, hospital, or clinic to ensure samples reach you in a timely manner.

Processing method

We use Sepax volume reduction technology to concentrate stem cells in cord blood. The final cord blood unit has a volume of 25 mL and is frozen in liquid nitrogen.

Deferred/delayed clamping

We fully support parents’ choice if they wish to have deferred (formally called delayed) clamping. It will not affect your choice to store or donate your baby’s stem cells.

Cleanliness

The processing and storage laboratories used have sterile cleanrooms. All human tissue samples that enter our facility are screened for infectious diseases. Should a sample test positive for a disease, the sample is immediately quarantined. These measures minimise the risk of microbiological contamination.

Dedicated technician training

Precious Cells Miracle cord blood technicians are trained by our own in-house trainer. Our cord blood technicians have each undergone rigorous training prior to making any collections. We ensure that professional collection standards are met and maintained through continual assessment.

Our cord blood technicians are also used for private collections, in addition to an approved third-party network of phlebotomists. Any collectors provided by Precious Cells BioBank and Precious Cells Miracle are fully trained and working under the authority of an HRA licence.

Prior to a collection taking place, we ensure that the relevant premises have been subjected to a risk assessment. The results of this assessment are documented.

Our Commitments

Time

We aim to receive process and store cord blood and tissue as soon as possible immediately after birth. Within the UK, our average time is within 24 hours after collection.

Transportation

We use medically approved couriers to ensure all samples reach the facilities in a secure and timely fashion.
Will donating affect my obstetric and midwifery care?

No. We adhere to guidelines set by the Human Tissue Authority and follow the recommendations of the Royal College of Obstetricians and Gynaecologists and RCM. We never interfere in your obstetric or follow the recommendations of the Royal College of Obstetricians and Gynaecologists and RCM.

We’ve answered some common questions below, but if you have any other questions just get in touch.

What is cord blood?

Cord blood is the blood that remains in the placenta and umbilical cord following the birth of your baby.

What are stem cells?

Stem cells are cells that have the ability to renew themselves and differentiate into other kinds of cells. There are many types of stem cells, some of which are more valuable from a medical point of view than others. Haematopoietic stem cells are found in extremely high concentrated numbers in the cord blood of newborn babies. This would normally be discarded.

Why do you require my consent before the birth of my baby?

As of April 2007, the legislation that came into effect (The EU Directive for Tissues and Cells) states that consent for the use and testing of your cord blood must be obtained prior to the birth of your baby and whilst you are not in active labour. This ensures that you have had plenty of time to say ‘yes’ to any questions you have relating to the collection, testing and storage of your cord blood. This is ‘informed’ consent as you are informed and encouraged to make an informed decision about donating your cord blood to the Precious Cells Miracle: Community Cord Blood Registry or privately storing cord blood and cord tissue with Precious Cells BioBank.

Will donating affect my obstetric and midwifery care?

No. We adhere to guidelines set by the Human Tissue Authority and follow the recommendations of the Royal College of Obstetricians and Gynaecologists and RCM. We never interfere in your obstetric or midwifery care. In addition, it will not affect your decision to opt for delivered (delayed) umbilical cord clamping.

Am I eligible to donate my cord blood?

Most women are able to donate their cord blood, but as with donating blood we must make sure that the donation is as safe as possible for the patient. Therefore, we ask each cord blood donor a series of lifestyle and medical assessment questions to make sure the donation is suitable. Cord blood donors must be aged 17 years or over.

Can I donate or store if I’m expecting twins?

Unfortunately, we don’t collect your cord blood for donation if you are carrying twins or other multiple births at present, however, we may change this in the near future. The option for private storage is still open to you and you can contact our team to find out more.

Can I donate or store if I conceived using IVF?

Yes, you can donate providing the egg and sperm are from you and your partner. We cannot accept a donation of cord blood if we do not have the medical history of the donor who donated the egg or sperm.

Can I donate or store if I have a caesarean (c-section) or an instrumental birth?

Yes. You can donate or store your cord blood and tissue. As long as there is no medical reason why the midwife needs to retain your placenta, we can collect your cord blood and tissue if you are having an elective or emergency caesarean or an instrumental birth.

Can I donate or store cord blood if I am given an anaesthetic drug?

Yes. There is no reason why you cannot donate or store your cord blood if you are given an anaesthetic. We have to gain informed consent from you and we cannot obtain this if you are in active labour or in pain. We will never attempt to gain your consent when you are in active labour or under the influence of sedatives such as Entonox (referred to as gas and air).

Will you inform me if the cord blood unit is unlikely to be suitable for transplant?

For all donated samples, we will not inform you if the sample is not stored due to the nature of the donation programmes. However, if the sample is stored and subsequently selected for release we may need to contact you and your GP to establish further information relevant to you and your baby that the transplant centre may require. Those who choose to store their stem cells privately will be sent a storage confirmation letter which details scientific data pertaining to the status of the sample such as CD34+ (stem cells) count and the total nucleated cells (TNC) count.

What quality control tests are performed to assess the quality of my cord blood?

Numerous quality control tests are performed. These include everything from sterility, viability, cell counts and donor screening to temperature control monitoring and transit duration monitoring.

What would happen to my cord blood unit if you were to go out of business?

Precious Cells BioBank have a disaster recovery plan and stringent insurance in place to ensure that your stem cells are protected if such an event were to occur.

What memberships does the bank have to accrediting bodies such as NetCord-FACT or JACIE?

Precious Cells BioBank are currently working towards NetCord-FACT and JACIE accreditations. As science develops and new standards are introduced, Precious Cells will continue to gain greater accreditations to ensure highest standards of quality, governance and care.

For more information visit: precious-cells.com/faqs
Standards

We are licensed by the Human Tissue Authority (HTA). The HTA is the UK’s Competent Authority for licensing the storage of human tissue and is overseen by the EU Tissues and Cells Directives. We follow the ‘Guide to Quality and Safety Assurance for Human Tissues and Cells for Patient Treatment 2010’. The guide is based on the Human Tissue (Quality and Safety for Human Application) Regulations 2007, and on the standards required under the Commission Directives 2004/23/EC, 2006/17/EC and 2006/86/EC.

We are ISO 9001 certified for quality management.

We actively participate in the UK National External Quality Assessment Service (NEQAS).

We have presented at the World Cord Blood Congress (2015) as a thought leader and key opinion leader in cord blood banking.

We meet the UK Department of Health Code of Practice for Tissue Banks.

We are compliant with the Guidance on the Microbiological Safety of Human Organs, Tissues and Cells Used in Transplantation, and the Good Manufacturing Practice guidelines.

Awards

The Precious Cells Group co-founders won Outstanding Personal Achievement Awards in the 2013 Best Business Awards

Precious Cells BioBank were the regional winners of the Business Innovation in the Federation of Small Businesses Streamline Awards 2013 for London.

About our charity

Precious Cells Miracle: Community Cord Blood Registry is a charity registered at the Charities Commission (1160577).

The charity was formed with the express purpose of meeting the demand for a coordinated public cord blood registry to meet the current unmet need for stem cells transplants in the UK.

Precious Cells Miracle is developing a model that will facilitate the release of high-quality cord blood stem cell units to the NHS and other hospitals around the world, allowing more and more people to access and benefit from stem cell therapies.

Precious Cells Miracle addresses the need for an effective, affordable and sustainable cord blood banking solution.

Bridges the gap between private and public cord blood banking standards.

Allows patients to make an unbiased choice when they choose to either donate publicly or privately.

Our target is to collect 50,000 cord blood units as soon as possible in order to make a significant contribution to the worldwide demand for cord blood units for transplantation.

We are planning to open an additional eight cord blood collection sites across the UK over the next 18-24 months, making it easier for more mothers to donate cord blood stem cells.

Precious Cells Miracle: Community Cord Blood Registry

Registered Charity No. 1160577
If you have decided to go ahead with cord blood and tissue storage, here is your guide to the process, from documentation to the delivery day.

Step 1: Documentation
- Form 1A: Statement of Informed Consent
- Form 1B: Stem Cell Storage Agreement (please retain one signed copy for your records)
- Form 1C: Fees Schedule
- Form 1D: Maternal Healthcare Questionnaire
- Form 1E: Birth Information

Step 2: Deposit Payment
On receipt of your consent form and other documents, the Precious Cells BioBank Team will contact you to collect the initial payment for the stem cell collection kit and account setup.

Step 3: Healthcare Professional
Precious Cells BioBank will assign you a healthcare professional (HCP)/Cord blood Technician/Phlebotomist. This is the person who will contact you directly and perform the collection.

Step 4: Collection Kit
A personalised stem cell collection kit will be dispatched to your address. This kit contains everything your HCP/Cord Blood Technician/Phlebotomist needs to collect your baby’s cord blood and tissue.

Step 5: Your Birthing Plan
Instruct your midwife that you have elected to have your baby’s cord blood and tissue saved and ensure this is written in your maternity notes.

Step 6: Onset of Labour
Pack the collection kit with your labour bag and ensure you take it to the labour suite/place of delivery. Contact your assigned HCP/Cord Blood Technician/Phlebotomist at the earliest moment once your contractions have started and you are formally admitted in for labour.

Step 7: Procurement
A. Hand the collection kit to the healthcare professional in charge of your cord blood/tissue collection.
B. Ensure that your paperwork is fully completed and placed in the collection kit box with your sample(s).
C. Ensure that the green blood test form is placed in the blue envelope with the maternal blood samples and not placed inside the kit box. If the maternal blood samples are not taken at the time of delivery this must be done by the phlebotomist within 7 days of collection of the cord blood and tissue samples.

Step 8: After the Birth
A. Call the designated courier service (the number will be provided with your welcome pack) and arrange for sample to be collected immediately and dispatched to the processing facility.
B. Store the sample in the white box inside the pink Precious Cells BioBank branded box at room temperature until collected.
C. Sign the courier transport documents when you hand the transport vessel to the courier.

Step 9: Home Time & Certification
A. Once your baby’s sample has been successfully processed, you will be notified by a member of the Precious Cells BioBank team.
B. Upon successful processing of the sample, the remaining payments to be settled, as per your Fee Schedule in the signed Client Contract Pack, become payable and your certificate of storage will be sent.
If you have decided to go ahead with cord blood donation, and tissue storage, here is your guide to the process, from documentation to the delivery day.

**Collection Facility**
We will collect the cord blood sample, labels and complete the initial paperwork, this takes (15-25 minutes).

We will complete the paperwork and prepare the cord blood for dispatch.

We will then return the placenta to the midwife for disposal.

**Postnatal Ward**
We will gain your midwife’s consent to see you.
If circumstances allow, we will then complete a donor assessment, consent and take a maternal blood collection which is a blood test.

We conduct a donor assessment interview and if all is in order obtain informed consent and signature for donating, testing, storage, use and disposal of cord blood.

**Collection Facility**
We complete the paperwork and despatch the cord blood and maternal blood to pathology lab.

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If our years of experience have taught us anything, it is that you are likely to have lots of questions about stem cell banking and your options. Our team of qualified advisors are more than happy to talk through the process and discuss your thoughts. Like you, we want the best for your family and for you to be confident in the route you choose.

We look forward to welcoming you to our Precious Family. Call 01895 367 980 to get started.