

Protect Your Family's Future
www.stemology.co.uk

Stem Cell Banking

Umbilical Cord

Only for Expecting Parents



Stem Cells have treated over 85 diseases including Cancers, Leukaemia, Anaemia ,Sickle Cell & SCID



Introduction to Stemology



Imagine you could replace any cells in your body that are diseased with 100% healthy cells.

Imagine re-building your immune system or even creating new organs to replace damaged ones.

Did you know your imagination is soon becoming reality?

Stem cell therapy has already been used around the globe to successfully treat more than 85 diseases including:

- Cancer
- Leukaemia
- Anaemia
- Thalassaemia
- Sickle-Cell Disease and
- Severe Combined Immunodeficiency

Stemology provides information on stem cell banking to expecting couples in the UK. Preserved stem cells can be used to treat children and adults with life-threatening illnesses. We inform you on the entire process and provide you with your options at every step of the way.

This service is becoming increasingly popular in the UK; following other developed countries where it is almost common practice. For example 1 in 4 children in Singapore and approximately 1 in 14 children in the USA store their cells each year.

Umbilical cord stem cells can only be collected at the time of birth. There are only a few minutes after the cord is clamped to collect your baby's all-important stem cells.

In the UK in 2012, more than 440 people died from cancer every day, that's more than one person every four minutes

There are an estimated 30,000 children with cerebral palsy in the UK with 1,800 more diagnosed every year





What are Stem Cells?

- Stem cells create the entire human body: your blood, your bones & all your organs
- They are used to cure serious blood, immune and degenerative conditions

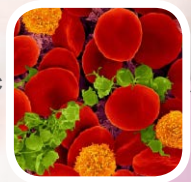
Umbilical Cord Stem Cells

- Your Umbilical Cord contains one of the richest sources of blood & tissue stem cells
- Until now, parents in the UK have been throwing away umbilical cords containing these invaluable, life saving stem cells

Why Store?

- Cancer, Sickle Cell Disease, Thalassaemia, Anaemia, Lymphoma & Leukaemia are amongst the conditions successfully treated with stored cord blood stem cells
- Storing your stem cells ensures that your child has immediate access to them should they contract an illness in later life

Haematopoietic
(Cord Blood)
Stem Cells



Your One Chance

- If you do not store your umbilical cord stem cells at birth, you cannot do it later. The cord blood & tissue stem cells are unusable if not collected within minutes of clamping the cord

Your stem cells are a 100% match to your child and could also be a 100% match for other family members

Storing Stem Cells



**Mesenchymal
(Cord Tissue)
Stem Cells**

Treat Potential Defects

- Cancer
- Anaemia
- Sickle Cell
- Brain Tumour
- Leukaemia
- Thalassaemia

100% Match

Unlike any other treatment available, Stem Cell based treatments give a 100% match to your child

Parents, Siblings & Relatives

Stored Stem Cells could also treat other family members with a great possibility of a 100% match

NHS Approved

Umbilical Cord Cells are routinely used by the NHS for Treatment

Umbilical Cord





Chloe, 5

Condition : ***Cerebral Palsy***

Diagnosed at: ***12 Months old***

- At 12 Months, Chloe was unable to crawl or speak and, after a CT Scan, she was diagnosed with Cerebral Palsy
- Her Parents thought there was no cure
- Their family Doctor told them that matching Stem Cells could provide a cure for Chloe
- Thankfully, Chloe's parents had stored her cord blood at birth and she was treated quickly
- The Cord Blood stem cells cured Chloe's Cerebral Palsy and she is now living the life of a healthy 5 year old girl

Brother ✓

100% Cell Match

Mother / Father ✓

100% Cell Match

Grandparents ✓

100% Cell Match

Chloe's stem cells were used to treat her Cerebral Palsy.

If she had not been diagnosed with CP, her stem cells could have been used to treat her siblings, parents or grandparents with a great possibility of being a 100% match

Upon storage you'll be sent a certificate which will give you 24/7 access to your cells



Stem Cell Case Studies



Joe, 8

Condition: *Sickle-Cell Anaemia*
Diagnosed at: *8 Months old*

- Joe was diagnosed with Sickle Cell Anaemia very early on in life. His condition deteriorated quickly and at 8 months he could not be held or even touched without being in severe pain
- The family Doctor advised Joe's parents that a Stem Cell transplant would be his only hope of long-term survival
- Being from an ethnic background the chance of finding a match was dramatically reduced and Joe's parents could not find a matching donor from the public register
- Thankfully, Joe's mother became pregnant with his brother
- Joe's brother's cells were a 100% match to Joe and the cells were infused into his body, saving his life

Brother

100% Cell Match



Joe's Brother, 6

Joe's newborn brother's stem cells were a perfect match for him and were easily infused to treat his Sickle Cell disease. He is now thriving and living a normal life

Stored Stem Cells provide a 100% match to your child. Siblings have a 1 in 4 chance of being a 100% match and Parents have a 1 in 12 chance of being a 100% match. The chance of getting a 100% cell match from a public registry is less than 1 in 100,000





Cord Blood and Tissue Stem Cells

Storing your baby's stem cells at the time of birth is an amazing opportunity to protect your family against serious illness or disease. Stored stem cells can be transplanted at NHS facilities in the UK and private clinics across the world.

Umbilical Cords contain two types of stem cells:

Cord Blood stem cells - which can create blood cells (HSCs) and

Cord Tissue stem cells - which can create tissue, skin, bone and organ cells (MSCs)

1988 – A New Beginning

The first transplant using umbilical cord blood stem cells was in 1988. They successfully treated a young boy suffering from Fanconi's Anaemia. The cord blood was obtained from his new born sister and the transplant was a complete success. Since then, over 30,000 successful transplants have taken place worldwide

Cord Blood Stem Cells transform into red blood cells, white blood cells and platelets and can cure cancers and blood disorders such as leukaemia

Cord Tissue Stem Cells transform into bone, skin, tissue, nerve, muscle, heart and other organ cells and are the key to future regenerative medicines

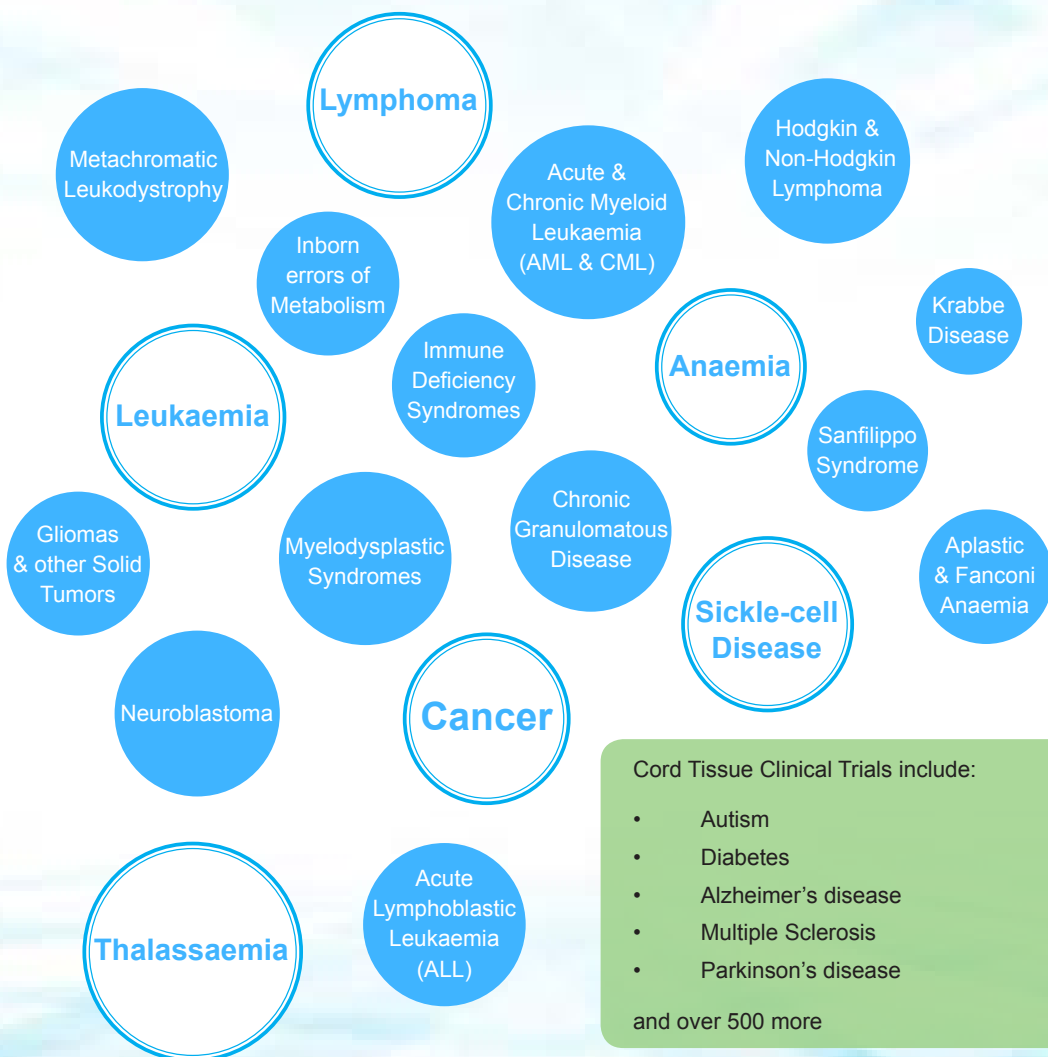
Storing your newborn's stem cells will not harm them at all and could save their life



What can Stem Cells Treat?



Just some diseases that Haematopoietic (Cord Blood) stem cells have been used to treat:



Cord Tissue Clinical Trials include:

- Autism
- Diabetes
- Alzheimer's disease
- Multiple Sclerosis
- Parkinson's disease

and over 500 more



Storing Volume Reduced Blood or Whole Blood

**When preserving blood there are two options:
Whole Blood and Volume Reduced**

We recommend volume reduced services and here's why:

Red Blood Cells

The volume reduction method removes red blood cells from the sample. You are only storing the stem cells. Volume reduction also cleans the blood before storage.

The whole blood method simply freezes the blood as it is. Processing and cleaning is only done when a sample is required.

Removing Red Blood Cells has been proven to leave you with a more viable sample and also has the added benefit of minimising blood type incompatibility if stored cells are used for another family member.

Industry Standards

Volume reduction processing is the industry standard across the world.

Both the NHS and the Anthony Nolan Trust only store volume reduced stem cells, as do the majority of private banks around the world.

Chemical Agents

Volume reducing makes the sample smaller. This means less chemical freezing agent is required to preserve the stem cells.

Simply put, the less chemical agent used, the better viability of stem cells in the future.

To summarise, a whole blood service has a higher chance of giving you a sample which will be unusable in the future, making the whole process a waste of time and money.

As an advisory service, we believe that parents should be given all the available options (hence we can offer whole blood services) but our recommendation remains the volume reduced method.

The table below outlines the core differences between both methods

	Whole Blood	Volume Reduced
Cord Blood is cleaned to remove debris before processing	X	✓
Smaller Quantity of freezing agent used in the freezing process	X	✓
Red Blood Cells are removed prior to storage, leaving more potential to use the sample for siblings, parents & other family members	X	✓
Uses the same processing method as the ANT and the NHS	X	✓

The price difference between a volume reduced and whole blood service is less than £180. For such a small difference in price it's definitely worth it

When booking a private service you have two choices to make:

1. Volume Reduced or Whole Blood Processing
2. Storing Blood Only or Blood and Tissue Stem Cells

There are currently over 2000 clinical trials using cord blood stem cells





What are Your Options?

Private Storage

Private Storage charges a fee to store your cells for your family's use only. You will always own the cells and can request them to be transported to a transplant facility at any time

Private Storage can be organised in 99% of Hospitals and Birth Centres in the UK

As you have stored cells that are a 100% match for your child, these cells can be transported to a suitable facility within 24 hours of being requested

Stem Cells from your child could also match other family members

Public Donation

Public Donation is available in 10 UK Hospitals and is free of charge. Your donation will be used for medical research or will be added to the public donor registry

Donating your cells means they will be owned by the NHS or ANT and you will not have any priority or choice over their use

If a family member needs a treatment they will need to join the public registry and there is no guarantee they will find a matching donor. The timescale for treatment could be unlimited or just not possible. If a match is found, transplants can occur within a matter of weeks

Discard

If you are unable to donate or store privately then your stem cells will be discarded as medical waste. We see this as a great loss but it is, unfortunately, unavoidable in some circumstances

Currently in the UK, 90% of umbilical cords are discarded as medical waste.

The more stem cells that are discarded, the more likely you will not find a match when it's needed. If you are from an ethnic or mixed heritage background it is especially important you store or donate your cells when possible as there is much less chance of finding a donor match from the public registry

Join the 1000's of women that bank their stem cells today



What we do



Storing a stem cell sample could save your child's life


We understand this and ensure that the services we recommend only use the best methods to keep your cells safe

- Unbiased information - We are not a storage facility and our campaign simply provides information to expecting couples in the UK
- Exclusive benefits and discounts - we have secured special discounts and offer vouchers for any couples looking to store privately
- All the companies we recommend are regulated by the Human Tissue Authority and we have personally inspected their facilities and methods
- Free Doctor Consultations. Through our pregnancy events we give parents the opportunity to ask our Doctor any questions they have
- Get information on both Public Donation and Private Storage - We are one of the only UK based sources of this information
- We advise you on the best practices for processing and storage - and also which facilities use them

Cancer incidence rates in Great Britain have risen by 23% in males and by 43% in females since the mid-1970s

Myeloma incidence rates have increased by 11% over the last decade





Storing your baby's stem cells



6 Easy Steps to Store:

Today

- 1/ Return a signed Parent Agreement and pay an initial deposit (approx. 10% of your total service cost)
- 2/ We will deliver a collection kit and assign a healthcare professional for the collection
- 3/ Keep your kit safe until the day of delivery, when you will need to take it with you to the hospital

On the day of delivery

- 1/ Call your assigned healthcare professional as soon as your labour starts and keep them updated
- 2/ After your baby is born the assigned healthcare professional will collect the cells and return the completed kit back to you
- 3/ Call the number on the box (between 8am and 8pm) to arrange a courier who will collect the kit and take it to our laboratory for processing and storage





Pricing

Spread the cost using our payment plans with no additional fees



Stemology offer all-inclusive services with no hidden costs

Whats included:

Umbilical Cord Blood & Tissue Collection Kit

Specialist Stem Cell Phlebotomist

Dedicated Courier Service

Tests:

- Maternal Blood Tests (PCR)
 - CD34+ Cell Count
 - Sterility Tests
 - Viability Tests
 - Full Cell Count
 - Full Breakdown Test Reporting
-

Blood & Tissue Stem Cell Processing & Cryopreservation

Secure Cryostorage

One-to-One Dedicated Co-ordination from our Mother & Baby Care team

Stem Cell Storage Certificate

24/7 Access to Stem Cells for Treatment & Dedicated Support

Cord Blood Only

£1295 - Whole Blood

£1900 - Volume Reduced

Annual Storage Fee - £49

Cord Blood & Tissue

£1890 - Whole Blood

£2495 - Volume Reduced

Annual Storage Fee - £98

To discuss your service or for further Information:

Call us on 020 7096 0747 or reach our team at info@stemology.co.uk

You will need to pay a deposit to secure your service. The rest of the initial fee will only be due after successful storage.

Payment plans are available. Call our customer services line for further information – 020 7096 0747



Commonly asked questions

Q: How long can my cells be stored for?

A: Stem Cells can currently be stored for 28 years.

Many experts believe that your baby's stem cells will be viable indefinitely as they are preserved at temperatures so low that no cell activity occurs while in storage.

Q: How are the cells used in the future?

A: A stem cell transplant is the infusion of healthy stem cells into your body, via a simple injection.

Cord Blood transplants rebuild the whole blood system, treating life-threatening infections and diseases such as Cancers, Leukaemias, Anaemias, Sickle Cell and SCID.

Q: What are my options in regard to my umbilical cord?

A: You have 3 choices when deciding what to do with your umbilical cord:

1. Store it privately - keeping the cells for your family. This is the only chance you will have to store cells which are a guaranteed 100% transplant match to your child.
2. Donate it to a public bank - where it will be used for medical research or to help other people around the world suffering from any of the 85 treatable conditions
3. Throw it away as medical waste - losing the stem cells forever

Q: Will collecting my cord blood harm me or my baby?

A: Most definitely not. Collecting cord blood is risk-free. The cord is not connected to you or your baby when the cells are collected.

Your midwife or doctor do not need to get involved and so can keep their attention on you and your new-born baby at all times.

Q: Who collects the samples?

A: Your collection will be performed by a trained and licensed phlebotomist. Once assigned, your phlebotomist will call you for an initial consultation. You will then have contact details for both your assigned phlebotomist and a backup phlebotomist (in case of sickness etc.)

Q: I want to Delay Cord Clamping, how does this affect collection?

A: Delayed Cord Clamping is compatible with Cord Blood Collection and many of our clients choose to do both together. All of partners' phlebotomists are well aware of the collection procedure in conjunction with Delayed Cord Clamping as well as other birth options.

We usually recommend delaying cord clamping for any time up to 5 minutes as this will not affect the amount of blood which can be collected.

You can organise collection for waterbirths, hypnobirths, natural and c-section births. Cells can be successfully collected from over 95% of birthing scenarios.



Q: Who will match my child's cord blood?

A: Preserved stem cells are always a 100% match to your baby. They have a 1/4 chance of being a 100% match to a sibling, and a 1/2 chance of being a partial match.

Parents have approximately a 1/12 chance of being a perfect match to their child's cord blood stem cells.

Q: Why should I consider private storage?

A: Very simply, the service has no downside.

On one side your child could remain completely healthy and you may not need to use the cells but you never know what the future holds. With Cancer rates increasing all the time, their siblings, you or your partner may need the cells. You simply never know. 28 years is a long time and there are more conditions being cured all the time.

We feel it's better to be safe than sorry and for the relative cost it should really be just a matter of affordability.

Q: When should I book by?

A: As your baby can arrive anytime after your 36th week of pregnancy (and we've seen many born even earlier), it's always best to book early.

Once you've read through this brochure with your partner, give us a call to discuss your questions. We are open 9am – 7pm Monday to Saturday.

You can reach us on 020 7096 0747. Alternatively feel free to email us at info@stemology.co.uk

Q: What if I am expecting twins?

A: If you're expecting twins you won't be able to donate your stem cells but you can get some great discounts on private storage. Call us for more info.

Q: How much does this service cost?

A: Prices depend on the service you choose.

You can store cord blood and tissue or can collect each one independently. Price also depends on whether you require a phlebotomist service.

The most you will ever need to pay up front will be £2550 which will cover collection, processing, testing & worldwide transportation costs. Storage fees are charged annually.

Q: Do you offer payment plans?

A: At Stemology we want banking services to be within the reach of everyone. Banks we work with offer various payment plans for the up front fees applicable to your service.

Q: Why is cord blood processed?

A: Processing Cord Blood removes dead cell debris and also removes red blood cells. In short, it makes your sample more viable for transplant; safer to freeze and easily available to family members without worrying about blood types. The majority of private banks, the NHS and Anthony Nolan all use this method.

Q: I've heard that there is little chance of using my stem cells in the future. Is this true?

A: Absolutely not, recent studies show that the chance of needing a stem cell transplant is now 1 in 200 and, on average, 1 in 3 people will benefit from regenerative therapy in their lifetime. These facts, coupled with the clinical trials underway show a promising future for the uses of your stem cells.

For general enquiries, more information, or for any other enquiries please contact us on:

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