



FUTURE HEALTH
BIOBANK

Stem Cell Banking and Diagnostics



A healthy future is in your hands

What are stem cells?

Stem cells are the building blocks of life, and your baby's umbilical cord is a rich source of these precious cells. With the ability to regenerate and protect the body from within, stem cells are able to develop into many different types of blood and tissue cells.

As a source of stem cells unique to your baby, their umbilical cord blood may one day prove a lifesaver.

Like every parent, you'll want to do whatever you can to protect your child's future health. Now you have the opportunity to do so in a unique way; by storing your child's stem cells.

“When I found out I was pregnant I was absolutely overjoyed. Just a few weeks later someone told us about stem cell banking and a company called Future Health. We'd never heard of stem cell banking before, but the more we thought about it, the more sense it made. How could we not do something that might one day protect our baby's health? ”

Jeanne, Birmingham



Why store stem cells?

Parents' top 4

There are over a million cord blood samples in private storage across the world, and every one of those parents made that decision for a different reason. Here are the most common reasons parents-to-be choose to invest in their baby's future health.



Family illness & regenerative medicine

Cord blood stem cells are used today as standard therapy for more than 85 conditions, including leukaemia, anaemia and bone marrow cancers. Having a perfectly matched, easily accessible source of stem cells could prove an invaluable resource for your baby and family both now and in the future.



Chance of a match

There is no guarantee a public bank will be able to source a matched cord blood sample. Cord blood banking guarantees a 100% match to your baby, a 1 in 4 chance of a match between siblings and around a 1 in 16 chance for parents.



Quick availability

Should the need for treatment ever arise, a privately stored cord blood sample can be accessed almost immediately and without any additional costs. If relying on a public bank, it can take weeks or even months for a match to be located, if at all, and the cost to access each sample is normally upwards of £25,000.



Adoption or donor ovum/sperm

It is not always possible to have access to a biologically related family member following adoption or the use of donor ovum/sperm. Cord blood banking is a unique opportunity to save these stem cells in order to guarantee a 100% match, in case treatment is ever required.



The conditions you're protecting against

A potentially life-saving decision

It's not a nice thought, and it is one that most new parents would rather not think about, but the fact is illness can happen to anyone at any time and the reality is, it may also be life-threatening. The first successful cord blood stem cell transplant to treat Fanconi's Anaemia took place in 1988¹. Ever since, the list of illnesses whereby stem cells are standard therapy has grown dramatically. This includes forms of cancer such as leukaemia and neuroblastoma, as well as conditions of the blood and the immune system.

Today

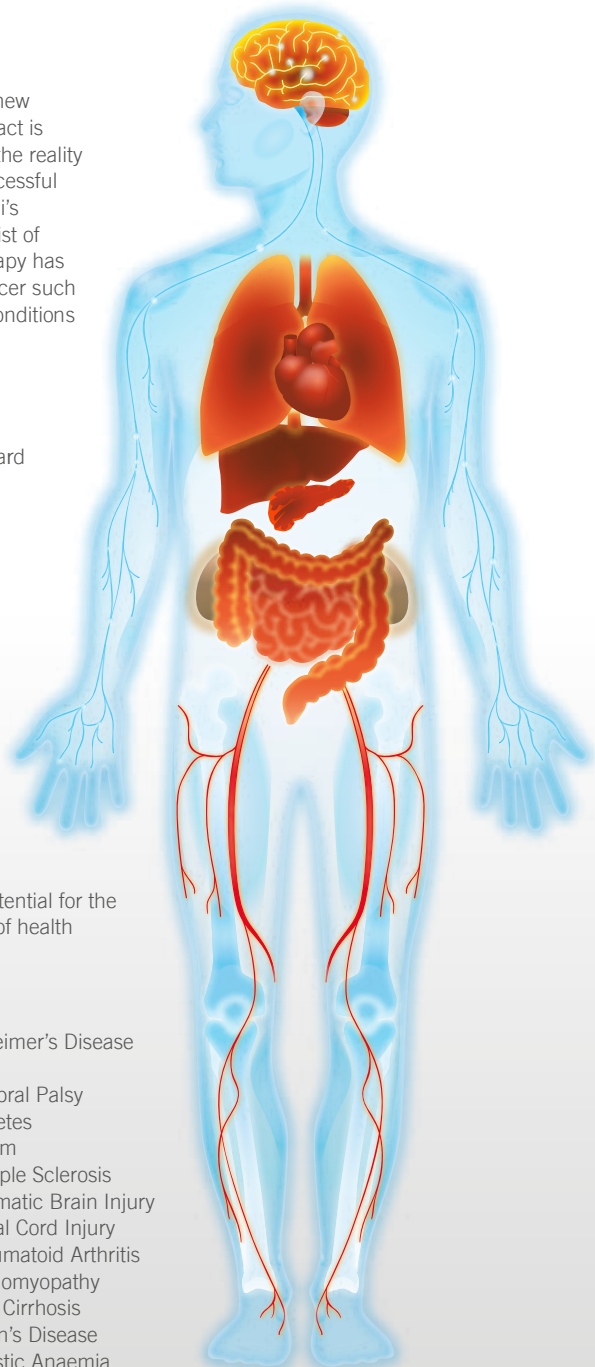
Umbilical cord blood stem cells are now standard therapy for over 85 conditions, including:

- Forms of Leukaemia
- Solid Tumours, such as Neuroblastoma
- Lymphomas
- Anaemias, such as Fanconi's Anaemia
- Thalassemia and Sickle Cell Anaemia
- Blood Cancers
- Krabbe Disease
- Severe Combined Immunodeficiency (SCID)
- Hurler's Syndrome
- Bone Marrow Cancers, such as Myeloma

Tomorrow

Ground-breaking research is increasing the potential for the use of stem cells for an ever-expanding range of health issues, including:

- Alzheimer's Disease
- AIDS
- Cerebral Palsy
- Diabetes
- Autism
- Multiple Sclerosis
- Traumatic Brain Injury
- Spinal Cord Injury
- Rheumatoid Arthritis
- Cardiomyopathy
- Liver Cirrhosis
- Crohn's Disease
- Aplastic Anaemia



For a detailed list of all standard therapies using stem cells, please visit our website:

www.futurehealthbiobank.com

What are my storage options?

To give parents the widest choice possible, several different storage packages are available. Choose from the Standard package (cord blood only), the Premium package (cord blood and cord tissue), or the fully comprehensive Premium+ package (cord blood, cord tissue and Outlook screening test).

STANDARD PACKAGE

- Cord blood processing
- 2 years StemCellCare insurance

PREMIUM PACKAGE

- Cord blood processing
- Cord tissue processing
- 2 years StemCellCare insurance

PREMIUM + PACKAGE

- Cord blood processing
- Cord tissue processing
- Outlook screening test
- 2 years StemCellCare insurance

PRICE PROMISE

If you are offered a cheaper price for a comparable service elsewhere, just let us know and we promise to beat the quote by **£50**.



Visit our website
www.futurehealthbiobank.com,
email us at custcare@fhbb.com
or call us on **01159 677 707**
for our latest prices.

Interest free plans available.

Terms and conditions apply, visit our website for details.

What is the Outlook screening test?

Our Outlook screening test checks your child's predisposition to develop a range of genetic conditions.

What Outlook tests for



Lactose intolerance



Coeliac disease



Bitter taste

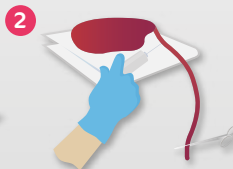


Medication induced deafness

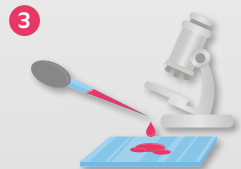
How Outlook works



1 Select our Premium+ stem cell storage package



2 Your umbilical cord blood sample is collected after birth and sent to our lab



3 We'll carry out the Outlook test on a small drop of cord blood and return the results by post

How does it work?

The science behind cord blood banking is complicated, but storing your baby's stem cells really couldn't be simpler. Here's how it works;



Step 1

We send you your collection kit well before the due date, which contains everything you need to collect the sample (make sure you take it with you to the hospital on the big day!)



Step 2

After birth, your consultant (or a phlebotomist provided by us) will extract the sample, and place it back into the collection kit



Step 3

Our medical courier then collects the kit from your hospital or home, delivering it to our Laboratory in Nottingham

Once arrived, we:



Step 4

Check your sample is healthy and viable for future use



Step 5

Process your sample to concentrate the number of stem cells stored, and split into multiple portions for future use



Step 6

Double check the health of the sample and count the number of stem cells extracted, to make sure it's ready and viable should it ever be needed in the future



Step 7

Your baby's sample is then cryogenically frozen in the vapour phase of liquid nitrogen, and stored in our facilities for decades to come



Step 8

Should you ever need to use your sample, we'll take care of everything and can ship it anywhere in the world, free of charge

Testimonial



Almost 4 weeks ago when our baby boy was born, Dougie and I decided to use Future Health Biobank to help us store Locki's cord blood cells.

There were so many reasons why we opted for this insurance policy we hope to never use. I have personal experience on how this treatment could have helped me throughout a few of my big injuries as a professional athlete.

The fact is that Lochlan's mum and dad both spent many years throwing themselves down the mountain, charging and pushing their limits. Knowing our son will likely follow in our footsteps in some way or another means as his parents we want to support and protect him as much as we can.

So opting to bank his cord blood cells means that we know we are giving him every chance physically in life to overcome adversity should he need it. We were so impressed by Future Health's professionalism and the phlebotomist they sent when I gave birth was both incredibly efficient and empathetic to the emotions we were going through in the last stages of birth and I hardly noticed her presence at all.

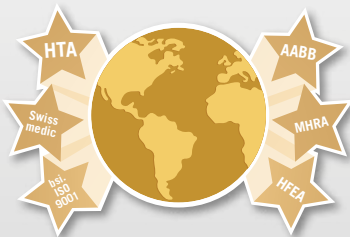
I am writing this because so many people were interested in the reasons we opted to do this and I can't recommend Future Health enough!

Chemmy Alcott

Former British World Cup Alpine Ski Champion & Ski Sunday Presenter



Why choose Future Health Biobank?



The world's most accredited stem cell bank



Proud to store more samples than all other UK banks combined



Two years free StemCellCare insurance

Compare cord blood banks



Key points	Future Health Biobank	Smart Cells	Cells4Life
The world's most accredited cord blood bank	✓	✗	✗
UK's largest and most experienced cord blood bank	✓	✗	✗
Total families stored for	+75,000	+40,000	+30,000
Samples released for treatment	90	16	8
Processing and storage	Future Health Biobank	Smart Cells	Cells4Life
Total cord samples processed and stored	+150,000	+45,000	+35,000
Cord blood samples processed per year	+10,000	+3,000	+2,500
Proven processing technology (samples used for treatment)	✓	✓	✗
Free transportation of sample anywhere in the world if required for treatment	✓	✓	✗
All UK samples always stored in own UK facility	✓	✗	✗
All cord tissue samples cultured to confirm healthy cells present	✓	✗	✓
Awards, accreditations and licences	Future Health Biobank	Smart Cells	Cells4Life
AABB (American Association of Blood Banks) licence	✓	✗	✗
HTA (Human Tissue Authority) licence	✓	✓	✓
MHRA (Medicines Healthcare Regulatory Agency) authorisation	✓	✗	✗
HFEA (Human Fertilisation and Embryology) Licence	✓	✗	✗
UK NEQAS	✓	✓	✓
BSI (British Standards Institute)	✓	✓	✓
Swissmedic Licence	✓	✗	✗
GMP compliant laboratories	✓	✗	✓
Winner of the Queen's Award for International Trade	✓	✗	✗
Corporate highlights	Future Health Biobank	Smart Cells	Cells4Life
Number of international laboratories	2	1	1
International offices	40	21	15
UK Employees	+50	+20	+20
Years in business	16	16	15
Instalment plans without interest or admin fees	✓	✓	✗
24/7 customer care team	✓	✓	✓
Range of pre and postnatal diagnostic tests available	✓	✗	✗

As well as stem cell banking services, Future Health Biobank also offer a range of diagnostic tests, to give parents the greatest possible insight into their family's future health.

OUTLOOK

New Born Screening Test

Every new parent wants a healthy future for their child and to give them the best possible start. With newborn screening tests, your baby can be screened for a range of genetic conditions within their first few months of life. Our Outlook newborn screening test gives you a clear picture of their predisposition to develop:



Lactose intolerance



Coeliac disease



Bitter taste



Medication induced deafness

A newborn screening test is a simple and affordable way to gain peace of mind or - if your child is found to be at an increased/high risk of developing any of the above conditions - to prepare you for their possible medical and/or dietary requirements in the future.

VISION

Non Invasive Prenatal Testing

Vision is a highly sensitive prenatal test that can be carried out as early as 10 weeks into a pregnancy, using just one simple blood draw, to check for a range of genetic abnormalities including Down's Syndrome, Edwards' Syndrome and Patau's Syndrome.

Vision uses Illumina technology from the world's leading DNA sequencing company, making it a safe alternative to amniocentesis or chorionic villus sampling; removing the associated risk of miscarriage. The test measures the number of chromosome copies in the mother's blood, and is available at several different levels:

VISION

- Chromosomal pairs 13, 18, 21
- Sex chromosomes

VISION | +

- Chromosomal pairs 9, 13, 16, 18, 21
- Sex chromosomes
- 6 microdeletion syndromes

VISION | TOTAL

- All 23 chromosomal pairs
- Sex chromosomes
- 9 microdeletion syndromes*

**Additional cost may be applied for 9 microdeletion syndrome screening*

Frequently asked questions

Q: Will my birth plan have to change if I choose to store my baby's stem cells?

A: Your method of delivery will not change if you opt to store your baby's stem cells, we can still collect at a home birth, water birth or C-section. If you choose to delay the clamping of the umbilical cord and delivery of the placenta, this may impact on the volume of cord blood we can collect, but please call us to discuss your options in more detail. Rest assured, the sample collection will not interfere with the birth and you can follow your birth plan as you wish.

Q: Who will collect my baby's stem cells?

A: We will ensure that the person who collects the samples at the time of birth is fully licensed and trained in line with our governing body, The Human Tissue Authority (HTA). Future Health Biobank has an extensive list of procurers who can collect on your behalf, wherever you are in the country.

Q: How long can umbilical cord blood stem cells be stored for?

A: All storage terms offered by family banks in the UK must be evidenced. Current research has shown that cord blood stored, thawed and used after 28 years is still viable and of therapeutic value. Whilst research is still underway to determine the maximum storage period, experts strongly believe umbilical cord blood stem cells could be stored indefinitely.

Q: What if I need the sample, what happens then?

A: In the event you wish to retrieve your sample, we will liaise directly with your designated treatment centre to ensure all regulations are adhered to and the required paperwork is in place, be it for treatment here in the UK or overseas. Once everything has been finalised, we will then arrange the transportation of your sample using a dedicated, specialist medical courier, at no additional cost to you.

Q: If I donate to a public bank, will my baby's cord blood be there for me in the future?

A: It is important to understand that only a small number of samples donated to public banks are stored. Studies have shown as many as 71% of all donations do not meet the established acceptance criteria for public banks² and for the remaining 29% that do, each donation is placed onto the register anonymously. The chance of your sample being available to you or your family in the future is therefore very low.

Q: Will doctors use a person's own stem cells in treatment?

A: For environmental and non-genetic diseases; yes. It is possible to perform an autologous (using a person's own stem cells) transplant for a number of diseases such as auto-immune disorders, solid tumours, acute myeloid leukaemia and some forms of Hodgkin's lymphoma. In fact, autologous transplants are also performed to help replenish the body's bone marrow following chemotherapy treatment for non-blood related cancers.

Q: With the chance of using stem cells so small, is there any point in storing them?

A: Stem cell therapy is a very real possibility for both transplant and regenerative medicine. In 2008, it was estimated that 1 in 200 people will undergo a stem cell transplant before the age of 70³. The transplant data used in this study is now ten years old and stem cell research has continued to develop at an astonishing rate. In fact, it is now estimated that as many as 1 in 3 people will benefit from stem cell based regenerative therapies⁴. Today, cord blood stem cells alone are used in the treatment of over 85 diseases and there are over 300 clinical trials underway.



References

- 1 Gluckman, E., et al. "Hematopoietic Reconstitution in a Patient with Fanconi's Anemia by Means of Umbilical-cord Blood from an HLA-identical Sibling." Diss. Bone Marrow Transplant Unit, Hôpital Saint-Louis, Paris, France, n.d. Abstract. National Center for Biotechnology Information. U.S. National Library of Medicine, n.d. Web. 27 May 2014. <<http://www.ncbi.nlm.nih.gov/pubmed/2571931>>.
- 2 McCullough J and Clay M. (2000), Reasons for deferral of potential umbilical cord blood donors, *Transfusion*, 40: 124.
- 3 Nietfeld, JJ., Pasquini, MC., Logan, Br., Verter, F. and Horowitz, MM. (2008), Lifetime Probabilities of Hematopoietic Stem Cell Transplantation, *U.S. Biology of Blood and Marrow Transplantation*, 14: 316-322
- 4 Harris DT, Badowski M, Ahmad N and Gaballa MA. (2007), The potential of cord blood stem cells for use in regenerative medicine, *Expert Opin Biol Ther.*, 7(9): 1311-1322.



FUTURE HEALTH
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certification