

UMBILICAL CORD BLOOD & TISSUE BANKING

Your guide to storing your baby's precious stem cells
futurehealthbiobank.com

CONGRATULATIONS AND WELCOME TO FUTURE HEALTH BIOBANK



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Future Health was formed in 2002 to provide families across the globe with the opportunity to store their family's stem cells.

Expectant families just like yours have stored their baby's umbilical cord stem cells, knowing should they ever need them they're there, protecting their family for generations to come.

As one of the world's largest stem cell banks, we believe in the power and potential of stem cells and over the years have seen people's lives transformed.

We're delighted to share this special part of your life and hope this guide answers your questions about stem cell banking.

Future Health Biobank

WHAT IS CORD BLOOD?

Umbilical cord blood is the blood retained in your baby's placenta and umbilical cord after they are born. The umbilical cord blood is a rich source of stem cells, called haematopoietic stem cells (HSCs). They have the ability to develop into the different cells within the blood, making them capable of treating potentially life-threatening diseases and illnesses.

If your baby's umbilical cord blood stem cells are preserved, they have the ability to treat around 85 conditions, including some cancers. And that is just today. With clinical trials for a host of other conditions, and as medical innovations develop, there is a whole world of potential.

WHAT IS STEM CELL STORAGE?

Everyone is born with stem cells but they diminish over time as they age and are exposed to the environment. Umbilical stem cell banking is a way of preserving these cells at the earliest opportunity. The process involves carefully collecting your baby's cord blood and cord tissue at the time of birth and processing for storage in our cryogenic facilities.

These cells will always be a 100% match for your baby and a match for their siblings in 25% of cases*. We hope you never need to access the cells. However, should you need them, storing your baby's cells could eliminate the need to embark on a search for a donor match, giving you peace of mind for decades to come.

*25% likelihood of a match suitable for transplant for biologically related siblings.

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WHAT ARE STEM CELLS?

Stem cells are different to all other kinds of cells in the body. These amazing cells help us grow and develop, and can heal illnesses and injury by regenerating into new and different types of cells.

There are two types of stem cells we store from your baby's umbilical cord.

Haematopoietic stem cells (HSCs)

Found in umbilical cord blood. Used in over 85 standard therapies to treat blood and inherited disorders such as anaemia, bone marrow cancers and leukaemia.

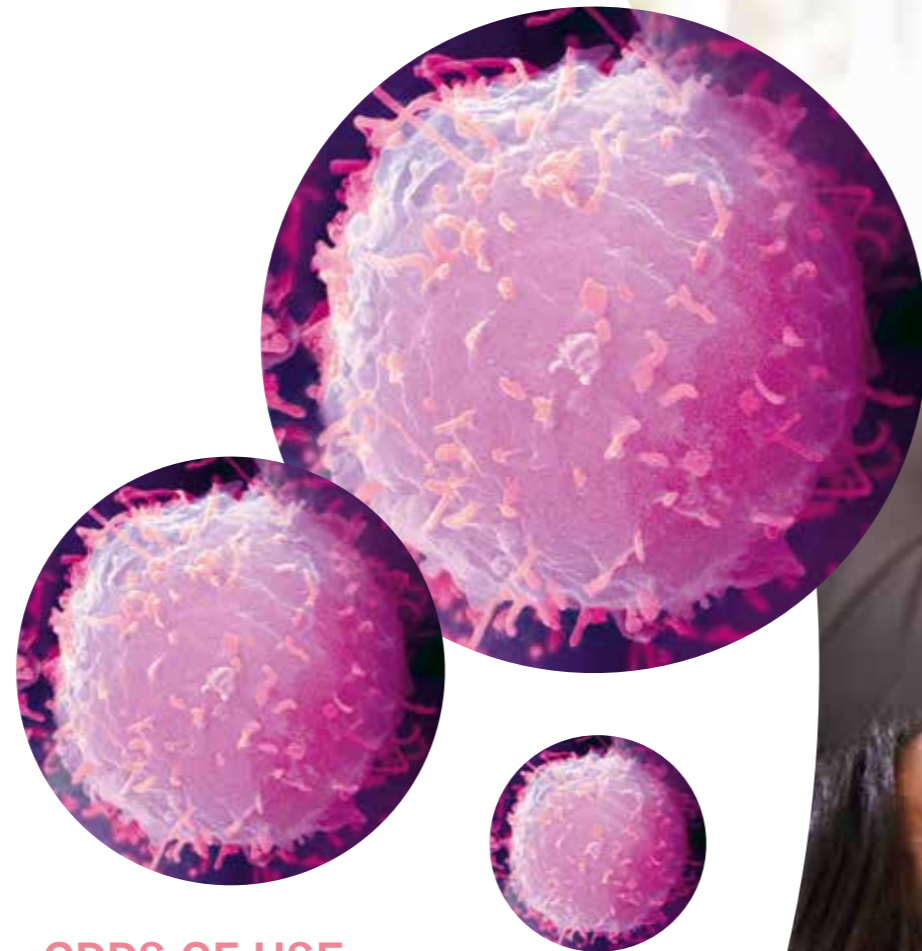
Mesenchymal stem cells (MSCs)

Used in many clinical trials for the treatment of disorders, including spinal cord injury, cardiovascular conditions and autoimmune diseases.

WHY DO FAMILIES STORE STEM CELLS?

The decision to store your baby's stem cells is personal to you and your family. There are many millions of people throughout the world who have chosen to store stem cells and it is fair to assume that they have done so for their own unique reason. However, we frequently find them to be: the family's medical history, heritage, or simply wanting peace of mind knowing the cells are stored exclusively for their family.

Choosing to store your baby's stem cells will not interfere with your obstetric or midwifery care. The process is non-invasive and compatible with delayed cord clamping and placenta encapsulation.



ODDS OF USE

Over 2,000 people in the UK are in need of a bone marrow or stem cell transplant every year¹. In some cases cord blood can be used as an alternative to stem cells from bone marrow.

In 2017, it was estimated in the USA that by the age of 20, there is a 1 in 5,000 chance of a person developing a condition that could be treated by their own cord blood stem cells.²



This has been such a great experience that I would recommend anyone considering cord blood banking to absolutely go for it. Everyone at Future Health Biobank is so informed and helpful, not to mention very good at communicating with me every step of the way.

Amanda Stephen - Future Health customer

Scan the code to read more customer stories



¹ Anthony Nolan. (2022). Facts and Stats. [Online]. AnthonyNolan.org. Available at: <https://www.anthonynolan.org/front/facts-and-stats>

² Verter, F. (2017). Odds of a child having a condition treated by their own (autologous) Cord Blood Stem Cells. [Online]. Parents' Guide to Cord Blood. Available at: <https://parentsguidecordblood.org/en/odds>

WHAT CAN STEM CELLS TREAT?



Here are just some of the 85 standard therapies using cord blood stem cells and current clinical trials using umbilical cord haematopoietic stem cells (HSCs) and mesenchymal stem cells (MSCs)

STANDARD THERAPIES USING CORD BLOOD HSCs



Blood cancers

- Leukaemia
- Hodgkin lymphoma
- Non-hodgkin lymphoma
- Myeloma



Solid tumours

- Neuroblastoma
- Medulloblastoma
- Retinoblastoma



Blood disorders

- Aplastic anaemia
- Sickle cell disease
- Fanconi anaemia
- Diamond-Blackfan anaemia
- Beta thalassaemia major
- Pure red cell aplasia



Immune disorders

- Severe combined immunodeficiency
- Wiskott-Aldrich syndrome
- DiGeorge syndrome



Metabolic disorders

- Hunter syndrome
- Hurler syndrome
- Krabbe disease
- Osteopetrosis
- Sandhoff disease

For independent information on clinical trials visit parentsguidecordblood.org or clinicaltrials.gov

CLINICAL TRIALS



Trials using HSCs from cord blood

- Autism
- Crohn's disease
- Cerebral palsy
- HIV
- Lupus
- Multiple sclerosis
- Sickle cell anaemia
- Type 1 diabetes



Trials using MSCs from cord tissue

- Alzheimer's disease
- Cerebral palsy
- Parkinson's disease
- Spinal cord injury
- Stroke
- Multiple sclerosis
- Type 2 diabetes



PRIVATE STEM CELL STORAGE

Every day throughout the world, babies are born and their parents have chosen to store their stem cells. As a parent, it is one of the first choices you can make for your newborn; an incredible, once-in-their-lifetime decision to make.

THEIR STEM CELLS ARE:

- **A 100% match for them**
- **A 25% match for a sibling**
- **Stored exclusively for your family**
- **Can be used to treat life-threatening diseases including some cancers**

You can choose to store either cord blood stem cells, cord tissue stem cells, or both. Our most popular package is to store both, giving your family more options for the future.

WHERE CAN I DO IT?

We have arranged collections at many private and NHS hospitals throughout the UK - we do this

daily. You'll need to let your midwife or consultant know you intend to collect your baby's stem cells, our team will also guide you through the process too. The process does not interfere with the birth or your care.

ACCESSING YOUR FAMILY'S STEM CELLS

We hope you never have to access your cells, but in the event that you do we will be there every step of the way. Our team are highly-experienced in liaising with transplant centres to ensure your cells reach their destination in a suitable condition to transplant. We will never charge a fee for their release and transportation for either transplant or clinical trial.

We use the volume reduction method to process your cells prior to their cryopreservation which means it is unlikely further processing will be required prior to transplantation.

This is considered to be the gold-standard processing method.



Already a parent and missed the opportunity to store stem cells for your baby? Find out about our tooth stem cell service. Scan here:



OUR COMMITMENTS TO YOUR FAMILY

Your baby's stem cells are precious, we understand you'll want to ensure they're in the best possible place. Here are just some of the key reasons their stem cells are safe with us.



We're the UK's largest privately-owned and most experienced stem cell bank, storing well over 200,000 samples for over 100,000 families.



We've released over 125 samples for treatment or clinical trial to some of the most renowned transplant centres and hospitals throughout the world.



Free sample release. Should you need your stem cells for transplant, clinical trial or testing, we'll transport them, free of charge, anywhere in the world.



We're one of the world's most accredited stem cells banks. Our facilities and processes are highly regulated, licensed and accredited. Future Health Biobank holds MHRA authorisation, AABB accreditation, GDP and BSI certifications and licences from Swissmedic, HTA, OFSP and FCA.



We'll never outsource your sample's processing, all samples are processed and stored at our in-house laboratory and storage facilities*. Even your maternal blood sample testing is completed in-house.



We have comprehensive insurance policies and on-site surveillance. Our storage vessels are monitored 24/7 in real-time using our temperature monitoring system, backed by our team of on-call scientific officers.



We own and operate our laboratory and storage facilities. We have storage sites and a laboratory in Nottingham, UK where Future Health is headquartered. We have an alternative storage site in Switzerland.



We continually invest in our facilities. Recently investing over £1 million in our storage facilities and laboratory equipment. We will continue to invest throughout the duration of your storage with us.



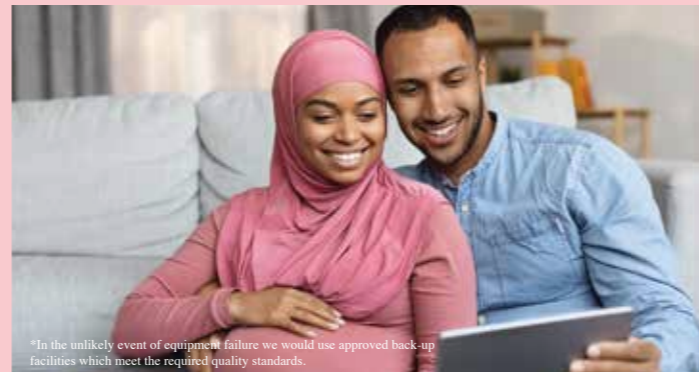
We have a team dedicated to research and development meaning we can stay at the forefront of stem cell technologies and processing methods.



We are entrusted to store stem cells on behalf of the NHS, highly regarded private hospitals and research institutions. Under our Biodock brand, we have thousands of samples in long- and short-term storage at our UK facilities for external organisations.



We offer a choice of packages and payment plans. We believe as many people as possible should have the opportunity to store stem cells so we've create a range of payment plans and packages.



*In the unlikely event of equipment failure we would use approved back-up facilities which meet the required quality standards.

TRANSPORTING YOUR BABY'S STEM CELLS

You have entrusted us with your baby's stem cells. We look after them from the moment the cells are first collected and for decades to come - safeguarding your cells travelling from anywhere in the world.

Our UK-based lab has received and successfully processed cells from 94 countries. Strategically located in close proximity to the UK's largest dedicated cargo airport, we have a dependable process to transport samples to our laboratory by air and road.



OUR SPECIALIST COLLECTION KIT

Our specialist collection kit has been developed to keep your cells safe from the moment they're collected to the moment we receive them. The key kit components include:

- **A data logger** which monitors the temperature of your cells throughout the journey
- **A NanoCool™ engine** that keeps your cells at their optimum temperature throughout the journey
- **Antimicrobial tablet** to reduce or eliminate the growth of unwanted bacteria or fungi on the cord tissue

IN-HOUSE PCR AND SEROLOGY

Not all stem cell banks have the facility to carry out their own serology and PCR tests, we do. This means that all necessary testing can be carried out on-site by the same team who are already looking after your cells. A maternal blood sample is taken when collecting your baby's stem cells, being able to test this on-site can significantly reduce the likelihood of having to do a redraw.

OUR STORAGE FACILITIES

Your baby's stem cells could potentially be stored with us for their whole life. That's why we continually invest in our storage facilities. Our storage vessels have 24/7 monitoring by hi-tech systems.

OUR LABORATORY

Our UK-based, HTA-licensed laboratory is wholly operated by Future Health. Our team of scientists, research and development specialists and quality assurance professionals apply their expertise to process your stem cells to the highest standard. On-site we have three Grade B and 1 Grade C clean rooms all with Grade A laminar air flow cabinets for processing. We have recently invested over £1 million in our laboratory and storage facilities, including new flow cytometers for quality control testing of each tissue type, and new controlled rate freezers for controlled cryopreservation of the samples, new PCR and serology machines to detect blood borne virus within the donor blood samples.



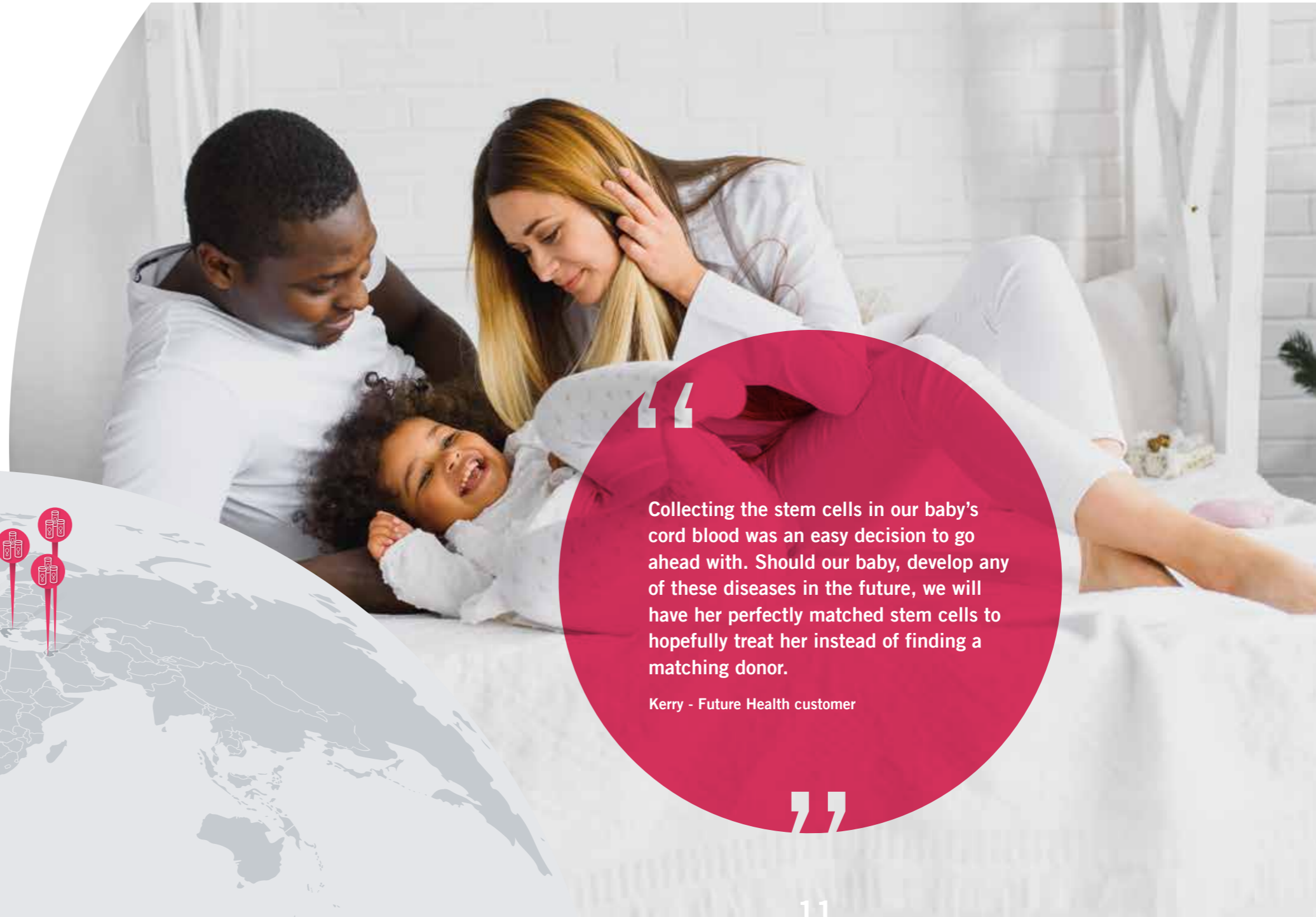
SAMPLE RELEASES

We're proud to have supported families who have requested the release of their child's samples. Cord blood samples processed and stored by Future Health have been released to treat conditions including:

- Cerebral palsy
- Autism
- Fanconi anaemia
- Severe combined immunodeficiency (SCID)
- Leukaemia
- Acute lymphoblastic leukaemia
- Beta thalassaemia major



We have released over 125 samples for transplant and clinical trial to some of the most world-renowned transplant centres*.



“

Collecting the stem cells in our baby's cord blood was an easy decision to go ahead with. Should our baby, develop any of these diseases in the future, we will have her perfectly matched stem cells to hopefully treat her instead of finding a matching donor.

Kerry - Future Health customer

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FREQUENTLY ASKED QUESTIONS

Understandably, you'll have questions about our cord blood and tissue banking service. Here are some of the most frequently asked.

YOUR BABY'S BIRTH

Can I store my baby's cord blood alongside delayed cord clamping?

This is one of the most asked questions. We completely support a family's choice to opt for delayed cord clamping and have stored many stem cell samples alongside it.

Can I store stem cells if we've used donor eggs, sperm or IVF?

You absolutely can, the informed consent process may be slightly different, however, we will support you and provide you with the information you need. Be rest assured we've stored many stem cells for families who used donor eggs, sperm, and IVF.

Can I store stem cells even if I have a vagina, abdominal (caesarean), instrumental, home, or water birth?

We have stored stem cells from babies who have been delivered through these types of birth. This is also applicable to planned and emergency caesarean sections (abdominal births). The collection is designed to complement all forms of birth.

Is the process invasive?

The process of collecting cord blood and tissue is non-invasive, and does not interfere with the birth. We will need to take a maternal blood sample, however your phlebotomist will complete this after the birth and when you're more comfortable. Our third-party phlebotomists receive training from us to ensure your needs are always respected.

Can I still breastfeed?

Yes, most definitely, the process is designed to support your feeding choice.

Which hospitals do you collect from?

We currently collect stem cell samples from over 100 NHS and private maternity hospitals. We also work with midwives to support your choice to have a home birth.

FUTURE HEALTH

How long have you been operating?

Future Health was formed in 2002, we celebrated our 20th anniversary in 2022. Many of our early customers are choosing to renew their storage 20 years on.

How many samples have you released and what for?

We've released over 125* samples for transplant or clinical trials. Our quality assurance and scientific team create a bespoke release plan for each family and are experienced in liaising with transplant centres throughout the world.

Do you offer payment plans?

We have a range of pricing plans and packages to allow you to choose the right one for you. We offer interest-free payment plans that'll help spread the cost too.

What are your accreditations?

As one of the most accredited stem cell banks in the world, Future Health Biobank holds MHRA authorisation, AABB accreditation, GDP and BSI certifications and licences from Swissmedic, HTA, OFSP and FCA.

What happens in the event of financial disaster?

Whilst this isn't a nice thing to talk about, we owe it to our families to let them know how we protect their cells. Each sample is covered by our insolvency protection scheme. This means your sample will be transferred to another suitable HTA licensed facility in the UK, who will fulfill the terms of your original agreement.

PROCESSING AND STORING YOUR BABY'S STEM CELLS

Which cord blood processing method do you use?

All cord blood samples must be processed before storage to remove red blood cells. This avoids the negative side effects associated with whole blood and means the stem cells are treatment ready.

Why is my cord blood sample split?

During processing, each sample is condensed and split into multiple portions, meaning should you require your child's stem cells in the future, only one segment needs to be used, leaving the rest intact for use in future treatments. Each sample is processed individually by our highly experienced and trained scientists. We don't use a fully automated system where multiple samples are processed simultaneously, as processing multiple samples at once could put your sample at risk of contamination.

Where is my stem cell sample stored?

Your sample will be stored at our state-of-the-art headquarters in Nottingham, UK. However, we also own and run a second storage facility in Switzerland to cater to our international client base.

How secure is my stem cell sample?

All of our storage tanks are alarmed and monitored 24/7, 365 days a year. In the event of an emergency, they can run without electricity for up to 5 days, allowing time to relocate samples.

For details of what to do on the day, turn to page 17

*This figure is correct at the time of printing but continues to rise.



OUR FIRST TRANSPLANT SUCCESS STORY

Patient:
Laith Abu Areesh

Illness:
Fanconi anaemia, an autosomal recessive disorder that can lead to bone marrow failure, which is life threatening.

Procedure:
The teenager's younger sister was born in 2010. Her cord blood was collected at birth and processed and cryopreserved by Future Health Biobank. She was a human leukocyte antigen (HLA) match to her brother. The sample of cryopreserved cord blood was thawed out and then infused without any additional processing.

Outcome:
The procedure was a success and Laith had no serious complications. He was subsequently released from the hospital and today continues to lead a normal and healthy life.



OUR ACCREDITATIONS

We understand how important your baby's stem cells are to your family. The trust you've placed in us is rewarded by our continual commitment to invest in our facilities, processes, research, development, training, and accreditations.

Our vast range of accreditations means that your journey with us is treated with the utmost respect from the moment you get in touch. From cyber data protection accreditations to meeting the industry-specific standards we need to process and store your baby's precious stem cells.





“ 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.

Chemmy Alcott
Future Health customer and former
British World Cup Alpine ski
champion & Ski Sunday presenter

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Scan the code to read
more customer stories



YOUR COLLECTION AND THE DAY YOU MEET YOUR BABY

We've made the collection process as simple as possible so you can concentrate on welcoming your baby into the world.

What do I do with my collection kit?

Your collection kit will be delivered to your home on receipt of all paperwork and a deposit payment. On the day you give birth, simply have it with you.

What do I need to do on the day?

As soon as labour starts, all you need to do is call the phlebotomist on the number provided when you signed up. If possible, keep them updated on your labour until they arrive. Your phlebotomist is on call any time, day or night.

Who will collect my baby's sample?

Most often, a phlebotomist will be required to collect your cord blood and tissue samples at the hospital and we will arrange this for you. However, in some cases, your private consultant or midwife may be able to collect the samples for you.

What is a phlebotomist?

A phlebotomist is a professional medical practitioner, nurse or doctor who is qualified to take blood samples from patients. They are necessary to ensure your sample is taken correctly, ready for laboratory analysis and processing.

Will the cord blood/tissue collection process interfere with the third stage of labour?

It is standard practice to only collect the stem cells once the third stage of labour has been successfully completed and both you and baby are safe and comfortable.

Scan the QR code to learn more about what to do on the day



How will my baby's sample be collected?

Once your baby has been safely delivered, your assigned healthcare professional or phlebotomist will collect your baby's cord blood, cord tissue and the maternal bloods before placing them in the collection kit.

How do I send my sample to Future Health?

Your phlebotomist or healthcare professional will hand back your sample in the collection kit. All you have to do next is text 'COLLECT' to our dedicated medical courier to request a collection. They will safely transport your baby's stem cell sample to Future Health's laboratory in Nottingham.

When will I receive the results?

After verifying, processing and storing your sample at the Future Health laboratory, we will notify you of your cord blood results by phone within 7-10 days and confirm your results, including cord tissue, via email within 5 to 6 weeks. You will also be issued with a storage certificate as further confirmation.

If you have any questions relating to the collection day, our customer care team will be happy to answer them.

Email: custcare@fhbb.com
Call: 0115 967 7707

STORAGE PACKAGES

To provide you with additional choice, we have created two types of plan - the first where you can choose to pay a higher upfront fee and smaller annual storage fee, and the second whereby you can pay a lower upfront fee and a higher annual storage cost.

You can choose to split the cost into interest-free payments over 6 or 12 months.

01 STANDARD

Cord blood OR cord tissue storage

02 PREMIUM

Cord blood AND cord tissue storage

03 PREMIUM +

Cord blood AND cord tissue storage AND dietary screening

ALL PACKAGES INCLUDE

- First year of storage
- Sample collection kit
- Account set up
- Dedicated medical courier
- Maternal blood testing
- Full viability testing
- Free release and shipment
- Stored for multiple uses

ADDITIONAL SERVICES

Find out your baby's blood type

You can choose to find out your baby's blood type from their cord blood sample. It requires no extra steps in the process, just let customer care know when signing up. This is not routinely tested for on the NHS.

Store additional segments of cord tissue

Mesenchymal stem cells are being used in many clinical trials across the world.

DISCOVER MORE ABOUT YOUR BABY WITH OUR DIETARY SCREENING

What is a dietary screening?

A dietary screening is an effective, non-invasive way to discover if your baby or child is at an increased genetic risk of developing lactose intolerance, coeliac disease and/or bitter taste sensitivity.

Why is the screening useful?

- Make informed choices on feeding and weaning
- Identify foods to avoid if symptoms develop
- Can help to explain symptoms already present*
- Full scientific report provided*
- Scientifically robust genetic analysis

The test can either be done using a small sample of your baby's cord blood, or via a cheek swab.

OPTIONS TO ADD TO YOUR PACKAGE

- Included in the Premium + cord blood and tissue banking package
- Add to the standard package with your cord blood or cord tissue choice
- Order at a later date as a cheek swab kit



*If your baby or child shows symptoms of lactose intolerance, coeliac disease or bitter taste sensitivity you must seek the advice of a healthcare professional regardless of the result of the test. Your report can be used by a healthcare professional to provide additional insight when considering your child's medical care.

Scan to find out more information:



NEXT STEPS

If you're ready to join over 100,000 families who have chosen to store their family's stem cells with us, you can request a contract or get in touch with our customer care team:

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Scan to get in touch



Scan to request a contract

