



Expecting Parents Guide to Newborn Stem Cell Banking

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Your Guide at a Glance

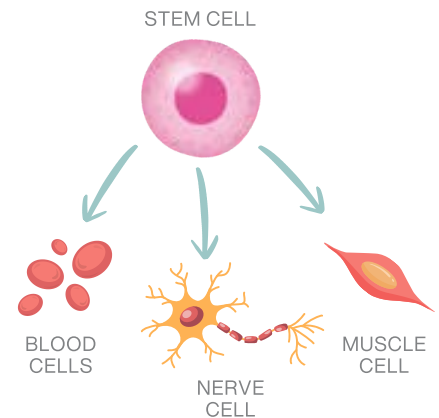
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What are Stem Cells?

Stem cells are a special type of cell that have two important properties. They are able to make more cells like themselves. That is, they self-renew. And they can become other cells that do different things in a process known as differentiation. They serve as the foundation for the body's development, capable of producing over 200 different cell types, including blood, muscle, or nerve cells.

Stem cells are crucial for **understanding and treating diseases**, as they have the potential to regenerate damaged tissues and organs. There are different types of stem cells, including **embryonic stem cells** and **adult stem cells**, each with distinct properties and applications in medicine. However, for expecting parents, the birth of a child presents a unique opportunity to access some of the youngest and most promising stem cells from the **umbilical cord** and **placenta**.



What is Cord Blood?

Cord blood is the blood that is left in the umbilical cord once it is clamped and cut after birth. It is an abundant source of valuable stem cells including Mesenchymal stem cells (MSCs), Haematopoietic stem cells (HSCs), and Very small embryonic-like stem cells (VSELs).¹

Cord blood banking involves collecting the blood that remains in your baby's umbilical cord after birth — a simple procedure performed by your doctor or midwife. The cord blood is then delivered to our laboratory, where it is tested, processed, and securely preserved for long-term storage. This ensures your family has access to a valuable source of stem cells that may be used in approved medical treatments in the future.

Stem cells collected from cord blood at birth are especially valuable because they are fresh, versatile, and have not been exposed to environmental factors, offering exciting possibilities to support your child's well-being. They are also found in the cord tissue, placenta, and amnion.

Major Types of Stem Cells Within the Cord Blood

Stem Cell	What It Is and What It Does	Looking Ahead
Haematopoietic Stem Cells (HSCs) 	The blood-forming stem cells in cord blood. They create all types of blood and immune cells and are already used in transplants for conditions like leukemia, lymphoma, sickle cell disease, and immune deficiencies.	Researchers are finding ways to expand HSCs in the lab so that one cord blood unit can treat more patients. ²
Mesenchymal Stem Cells (MSCs) 	Special cells in cord blood that can grow into bone, cartilage, and fat cells. They also help reduce inflammation and support repair of damaged tissues.	Studies suggest MSCs may be used in regenerative therapies for arthritis, immune disorders, and tissue injuries. ³
Very Small Embryonic-Like Stem Cells (VSELs) 	Tiny, primitive cells found in cord blood that may act as a "reserve" of early stem cells. Scientists believe they may develop into many different tissue types.	Still under study, VSELs could one day be used for organ repair and advanced regenerative medicine. ⁴

What Can Be Treated?⁵

Cord blood stem cells are already used in FDA-approved treatments for more than **80 medical conditions** worldwide, while ongoing clinical trials explore their potential for even more therapies.



Cancers

- Leukemias
- Lymphomas
- Neuroblastoma
- Myeloma
- Ewing Sarcoma



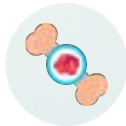
Blood Disorders

- Sickle Cell Anemia
- Fanconi Anemia
- Aplastic Anemia
- Beta-Thalassemia Major
- Rare platelet disorders



Metabolic Disorders

- Krabbe Disease
- Hunter Syndrome
- Hurler Syndrome
- Hurler-Scheie Syndrome
- Osteopetrosis
- Gaucher Disease
- Niemann-Pick Disease
- Tay Sachs Disease
- Metachromatic Leukodystrophy



Immune System Disorders

- Wiskott-Aldrich Syndrome
- Cartilage-Hair Hypoplasia
- Kostmann Syndrome
- Bare Lymphocyte Syndrome
- Severe Combined Immunodeficiency (SCID)
- DiGeorge Syndrome
- Leukocyte Adhesion Deficiency
- Omenn Syndrome
- Common Variable Immunodeficiency



Autism Spectrum Disorder (ASD): Duke University Study

Autologous cord blood infusions have shown improvements in behavior and communication in children with ASD.



Cerebral Palsy (CP): Duke Health Research

Some children with CP experienced improved motor skills and daily functioning after receiving cord blood infusions.

More Clinical Trials Using Cord Blood:

- Autism
- Cerebral Palsy
- Hearing Loss
- Crohn's Disease
- Type 1 Diabetes
- Lupus
- Multiple Sclerosis
- Scleroderma
- Ischemic Heart Disease
- Myocardial Infarction



Who Can Use Your Baby's Cord Blood?⁶



100%

Match to your newborn baby



25%

Chance of a perfect match for siblings



50%

Parents are a partial match

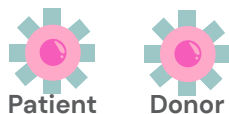
In 1988, the world's first successful cord blood transplant was performed in Paris, where a young boy with Fanconi anemia was treated using cord blood collected at birth from his newborn sister.

Why Store Your Baby's Cord Blood?⁷

HLA matching is the process doctors use to compare human leukocyte antigens (HLA) between a patient and a donor to find the most compatible option for a stem cell transplant and reduce the risk of immune complications.

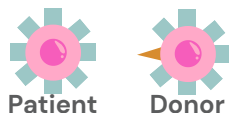
Full Match

All HLA markers are the same between patient and donor.



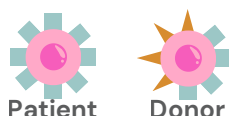
Partial Match

Most, but not all, HLA markers are shared.



Haploidentical Match

Half of the HLA markers are shared, often with close family members.



● Cell ▲ HLA Markers

By preserving your baby's stem cells, you increase the chances of a compatible match not only for your child, but also for close family members.

Cord Blood Facts & Statistics⁸

- 6 million+ cord blood units are banked worldwide, with most stored in private banks and about 800,000 in public banks.
- 1 in 3 people may benefit from stem cell or regenerative medicine therapies over their lifetime as research continues to expand.
- 80+ medical conditions already have FDA-approved treatments using cord blood stem cells.
- 1–2 weeks is all it typically takes to access stored cord blood, compared to months for bone marrow stem cells.
- 85,000+ cord blood transplants have been performed worldwide since 1988.
- ~10% lower risk of GvHD is seen with cord blood transplants compared to bone marrow transplants.
- 4× greater regenerative capacity allows cord blood stem cells to multiply more efficiently than bone marrow stem cells.
- Up to 92% three-year survival rates have been reported for certain conditions treated with stem cell transplants.
- Lower match rates affect many mixed-race and ethnic minority patients, increasing the value of privately banked cord blood.
- 27+ years of proven viability shows cord blood remains effective after long-term storage.

Cord Blood Banking Services

1. Volume-Reduced Storage

This method processes cord blood to extract and preserve the maximum number of haematopoietic stem cells (HSCs), which are one of the valuable stem cell types used in FDA-approved medical treatments. It concentrates these stem cells while reducing the overall volume of the cord blood.

Why it matters

- **Maximum stem cells preserved:** Ensures that the valuable HSCs are stored for potential future use.
- **Concentrated storage:** Reduces the total volume without affecting cell quality or viability.
- **Common method:** Used by many cord blood banks in the Middle East.



2. CellAdvance™

Superior Processing Technology

CellAdvance™ is a premium cord blood storage service designed for families who want the most advanced options available. We are the only provider in the Middle East offering this cutting-edge technology. Our service gives families access to a storage solution with a strong clinical track record.



FDA-Approved Processing Technology

This cord blood processing method uses technology **approved by the FDA** and follows strict clinical manufacturing standards to prepare stem cells for safe long-term storage.



Advanced Processing Technology

Cord blood processed this way has been associated with **engraftment occurring about 20% faster** in clinical comparisons than some other processing approaches, helping the body rebuild critical cells sooner after transplant.



Maximum Recovery of Stem Cells

Preserves the **highest number of CD34+ cells post-thaw** and **strong Colony Forming Units (CFUs) recovery** compared with other processing methods.



Highest Red Blood Cell Depletion

By removing **up to 99% of red blood cells**, the process helps concentrate the stem cells and reduce other components that are not needed for transplant or research use.



Most Published Transplants

Cord blood units processed this way have been used in more than 350 transplants, reflecting a broad clinical experience with these prepared units in real-world treatments.

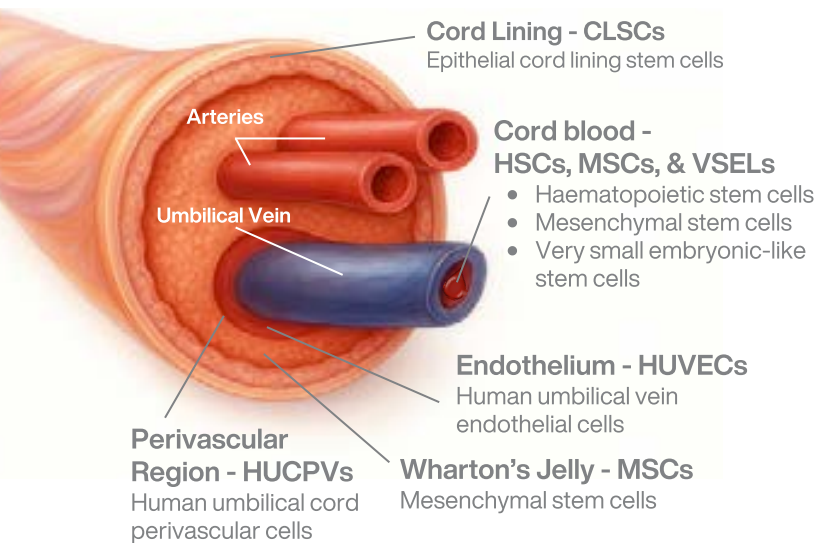
When banking your baby's cord blood, you want the highest possible quality of stem cells preserved — because these cells may one day be needed to support your child's health.

Cord Tissue Banking Services

1. Cord Tissue

Cord tissue is a rich source of mesenchymal stem cells (MSCs), which are being studied for their potential in treating conditions such as stroke, Type 2 diabetes, Parkinson's disease, psoriasis, multiple sclerosis, and more.

Cord tissue banking is the simple process of collecting a segment of your baby's umbilical cord after birth, once it has been safely cut.



Cell Expansion

Cell Expansion is an advanced service that multiplies stem cells from the cord tissue collected at birth through controlled laboratory culturing, increasing the available cell quantity for future therapeutic and regenerative applications.

- ✓ Multiplies stem cells from your baby's cord tissue
- ✓ Increases the number of viable cells for future therapies
- ✓ Maximizes the long-term value of your collection
- ✓ Maintained under strict quality standards

2. Cord Vessel

The cord vessel contains specialised cells, each with unique potential:

HUVECs (Human Umbilical Vein Endothelial Cells): Used in vascular research, with promise in treatments for blood vessel repair, inflammation, and clotting.

CLSCs (Cord Lining Stem Cells): Shown to help heal stubborn wounds, eye injuries, and even regenerate heart and liver tissue in early studies.

HUCPVs (Perivascular Cells): Being studied for use in bone repair and skin tissue engineering.

3. Wharton's Jelly

The thick, protective layer surrounding the cord's vessels—known as Wharton's Jelly—is especially rich in mesenchymal stem cells (MSCs). These cells stand out because they:

Support Regeneration: Able to develop into bone, cartilage, fat, and muscle cells.

Modulate Immunity: Show promise in calming inflammation and treating autoimmune conditions.

Lower Rejection Risk: Less likely to trigger an immune reaction if used in therapy.



Storing your baby's cord tissue alongside cord blood creates a stronger foundation for potential therapies your child—or even your family—may need later in life.

Current Research & Future Potential

Cord tissue stem cells are being actively studied for a wide range of conditions. While many of these treatments are still in clinical trials, early results are showing real promise across multiple areas of medicine.



Neurological Conditions

Conditions under research:

- Autism
- Stroke
- Spinal cord injury
- Traumatic optic neuropathy
- Retinitis pigmentosa
- Parkinson's disease
- Multiple sclerosis
- Cerebral palsy
- Alzheimer's disease

At Duke University, clinical trials using cord tissue stem cells have shown encouraging improvements in children with autism and cerebral palsy. MSCs are also being studied for their ability to repair and protect nerve cells after stroke or spinal cord injury.⁹



Heart and Vascular Disease

Conditions under research:

- Myocardial infarction (heart attack)
- Cardiomyopathy
- Erectile dysfunction

Researchers are exploring how cord tissue stem cells can repair damaged heart tissue and support new blood vessel growth, offering new hope for patients with heart failure and heart disease.¹¹



Skeletal and Musculoskeletal Disorders

Conditions under research:

- Osteoarthritis
- Cartilage repair

Studies suggest MSCs may help regenerate cartilage and reduce inflammation, providing potential new options for patients with joint disease and mobility challenges.¹³



Autoimmune and Inflammatory Disorders

Conditions under research:

- Ulcerative colitis
- Rheumatoid arthritis
- Psoriasis
- Sepsis
- Connective tissue diseases

Because MSCs help regulate immune responses, they are being tested as potential therapies for autoimmune conditions and severe inflammation, including early research in sepsis treatment.¹⁰



Organ Failure and Degenerative Conditions

Conditions under research:

- Liver failure
- Aplastic anaemia

Early research indicates that cord tissue stem cells may support regeneration in damaged organs, including the liver, and could play a role in future therapies for blood disorders.¹²



Metabolic and Endocrine Conditions

Conditions under research:

- Type 2 diabetes
- Ovarian failure

Clinical trials using Wharton's Jelly-derived stem cells are underway for Type 2 diabetes, aiming to restore healthy insulin production and improve patient outcomes.¹⁴



Placenta Banking Services

1. Maternal Decidua

The maternal decidua is the layer of the placenta that develops from the mother's uterus during pregnancy. It is the maternal side of the placenta, where your body connects with your baby's lifeline.

This tissue is especially **rich in stem cells and immune cells** that are different from those found in cord blood or cord tissue.

After your baby is born, the maternal side of the placenta is usually discarded—but it can instead be collected, processed, and preserved for your family.



Regenerative Medicine

Decidua stem cells may help regenerate and restore damaged tissues in the body, offering new possibilities for treatment.¹⁵



Vascular Medicine

Research suggests they can protect and heal blood vessels, which is especially important for heart and circulatory health.¹⁶



Inflammatory Diseases

Decidua stem cells may calm harmful inflammation and promote healing in conditions linked to chronic inflammation.¹⁷



Autoimmune Disorders

Studies show they could help balance an overactive immune system, offering potential support in autoimmune diseases.¹⁸



Orthopedics

These cells show promise in supporting bone and cartilage repair, which may benefit future orthopedic care.¹⁹

2. Chorionic Villi

Chorionic villi are tiny, tree-like branches growing from the chorion (the outer membrane that surrounds the amniotic sac).

These villi extend into your uterus and are in close contact with your blood supply, helping your baby get oxygen, nutrients, and many important biological signals as it grows.

The chorionic villi are **rich in regenerative stem and stromal cells** — cells that can grow, heal, and help repair tissues.



Heart Disease

Early research indicates they could repair damaged heart tissue and improve heart function after injury.^{20,21}



Crohn's Disease

Studies suggest they can help calm inflammation and encourage healing in the digestive tract.²²



Osteoarthritis

Clinical trials have found that injecting these cells into affected joints can ease pain, reduce stiffness, and improve movement.²³



Type 2 Diabetes

These cells have shown the ability to improve insulin production and even lower the need for medication in some patients.²⁴



Ischemic Stroke

Cells from the chorionic villi may help the brain heal after a stroke, reducing injury and supporting recovery.²⁵

Storing both the maternal decidua and chorionic villi preserves a unique collection of regenerative cells at birth, helping protect your baby's future well-being.

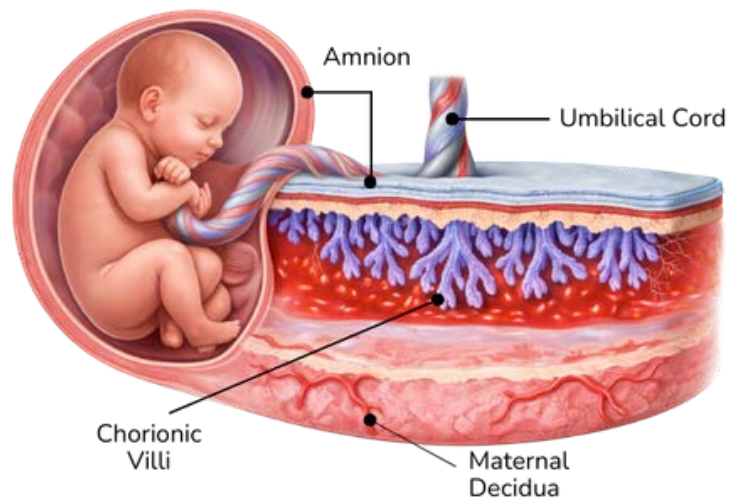
Placenta Banking Services

3. Amnion

The amnion, also known as amniotic membrane, is the innermost layer of the placenta. During early pregnancy, it starts as a protective covering around the umbilical cord and later develops into a thin lining inside the placenta sac.

This delicate layer is rich in:

- **Collagen, fibronectin, and hyaluronic acid** - all of which play important roles in supporting healing and repair.²⁶
- **Growth factors and anti-inflammatory proteins** - helping cells communicate when the body is injured or unwell.²⁷
- **Antimicrobial properties** - shown in studies to help protect against infections.²⁸



Why Store the Amnion?

Unlike other cells, the amnion is non-immunogenic, which means it does not trigger rejection and can often be used safely between family members.

By choosing to store the amnion, you're preserving a natural resource that has been trusted in medicine for over 100 years—one that may help not only your baby, but also parents, siblings, and other family members.

For over a century, doctors have used amnion in medicine:

- **1910:** The first recorded amnion skin graft was performed.²⁹
- **1913:** Studies showed amnion healed wounds more effectively than other methods.³⁰
- **41% of all amnion transplants are for corneal (eye) conditions in the USA.**³¹



Healing Eyes

Amnion has been used in eye care since the 1990s to reduce inflammation, ease pain, and support healing of the eye's surface.³²



Wounds and Ulcers

Amnion supports natural skin repair and healing; studies show significantly faster wound closure compared to standard care.³³



Burn Treatment

Used in burn care for over a century, amnion helps protect damaged skin, reduce scarring, and speed recovery.³⁴



Supporting the Lungs

Amnion cells have been safely used in premature babies with serious lung conditions, showing good tolerance in early studies.³⁵

Clinical Trials³⁶⁻⁴⁰



Diabetes



Dry Eye Syndrome



Heart & Blood Vessels



3D Bioprinting

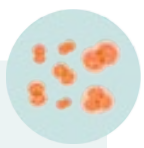


Brain Injury

Exosomes Banking

Exosomes are microscopic particles released by cells that carry important proteins, lipids, and genetic material. They act like messengers, helping cells communicate with each other and regulating many processes in the body, including repair, inflammation, and cellular signaling.⁴¹

- ✓ They are naturally produced by the body and can be found in many cell types.
- ✓ Exosomes carry signals that influence growth, repair, and overall cellular function.
- ✓ Research shows exosomes are being studied for applications in medicine, cosmetics, and tissue repair.⁴¹



Storing exosomes gives you access to a natural biological resource with a range of possible scientific and medical applications.

We preserve exosomes at approximately -80°C , which is the standard for long-term biological preservation. This keeps them intact and biologically active.⁴⁴

Benefits of Storing Exosomes



Regenerative Support

Exosomes are being studied for their ability to promote tissue repair and regeneration in experimental and clinical research.^{42,45}



Cosmetic and Skin Applications

Research shows exosomes can stimulate skin cell activity, supporting tissue renewal, rejuvenation, and repair.⁴²



Immune System Support

Clinical studies suggest exosomes may help regulate immune responses, making them relevant for research into inflammatory conditions and immune recovery.⁴⁶



Research and Innovation

Worldwide clinical trials are exploring exosomes in organ repair, neuro-protection, and tissue regeneration, opening doors to innovative scientific developments.^{47,48}



Personalised Medicine

Exosomes are being investigated as carriers for targeted therapies, offering opportunities for treatments tailored to individual biology.⁴³



Scientific Advancements

As exosome research grows, stored samples can help support future therapeutic possibilities, including disease prevention, regenerative medicine, and personalised approaches.^{43,47}

CellAdvance™

Has Been Used Since 2009 As Superior Technology

Maximum
recovery of
stem cells

Faster
Engraftment

Patient will
spend less time in
the vital stage

Translates to
less time in
the hospital



FDA-Approved Technology Ensures Safety and Quality

The cord blood processing method is FDA-approved, giving families confidence that each unit is handled safely, consistently, and according to regulated standards.



Maximizes Stem Cell Recovery for Future Use

The process captures the highest number of stem cells, including total nucleated cells and CD34+ progenitor cells, which are the most valuable for potential regenerative treatments and therapies.



Preserves Colony-Forming Units for Potency

The greatest number of colony-forming units (CFUs) is preserved, providing an accurate measure of stem cell potency and their potential to engraft in future medical applications.



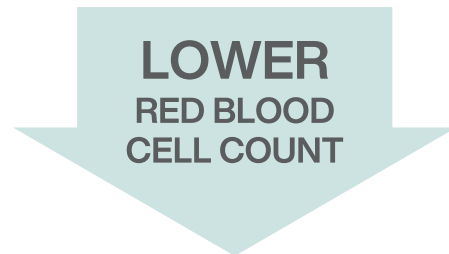
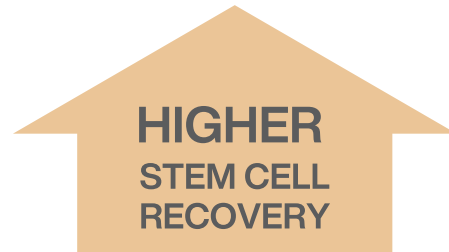
Maintains Functional Clonogenic Potential

Stem cells retain a high ability to grow and multiply, ensuring that the stored cells maintain their functional potential for future therapies.



Consistent Recovery Regardless of Sample Collection Volume

Recovery of total nucleated cells and CD34+ cells is reliable no matter the initial cord blood volume, ensuring every unit meets the same high standard.



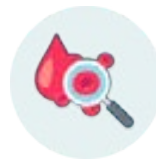
Produces Concentrated, High-Quality Samples

Unwanted cells are removed and stem cells are concentrated, creating a smaller-volume sample that is richer in the most important cells, optimizing both storage and therapeutic potential.



Reduces Red Blood Cells for Cleaner Samples

Up to 99% of red blood cells are removed, producing a purer, more concentrated sample focused on the stem cells most likely to be therapeutically useful.

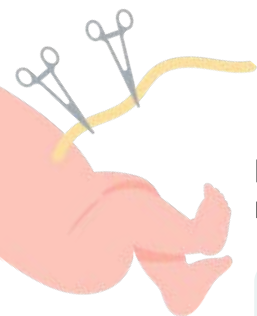


Enhances Potential Engraftment Efficiency

High-quality cells show superior potential for engraftment, supporting faster immune recovery if used in transplant therapies.

Delayed Cord Clamping

Research shows that cord blood banking is still possible with delayed cord clamping, as a 1-minute delay transfers about 80 ml of blood to the baby while leaving over 100 ml available for collection.



The recommended times for delaying cord clamping are:

- World Health Organisation (WHO) – between 1 to 3 minutes⁴⁹
- Royal College of OB-GYNs (RCOG) – 30 seconds to 2 minutes⁵⁰
- The American College of OB-GYNs (ACOG) – 30 seconds to 60 seconds⁵¹

International guidelines recommend clamping within 3–5 minutes to reduce the risk of neonatal complications such as jaundice, polycythemia, and the need for phototherapy.

CellAdvance™ is fully compatible with delayed cord clamping, maximizing stem cell recovery even with lower collection volumes so you can still bank a high-quality, viable, and efficient cord blood sample for the future.

Simple Steps to Cord Blood Banking

Cord blood banking is a simple process that fits seamlessly into your birth plan and takes just a few easy steps.



1. Sign Up / Register

Enroll in our program and choose a plan. Sign the storage agreement to secure your spot.



2. Receive Your Collection Kit

Get a complete, sterile kit with everything your healthcare provider needs for delivery day.



3. Notify Your Healthcare Team

Inform your doctor or midwife and provide step-by-step instructions for easy collection.



4. Bring Your Kit to the Hospital

Take the collection kit with you on delivery day to ensure a smooth, successful collection.



5. Sample Collection at Birth

Your doctor/midwife collects cord blood safely and painlessly after the cord is cut and clamped.



6. 24/7 Sample Pick-Up

Contact our team to arrange round-the-clock pick-up, and your sample will be transported to our lab under controlled conditions.



7. Initial Sample Testing

Technicians assess volume, viability, and total nucleated cells (TNC). Results are shared in 3–5 days.



8. Long-Term Cryogenic Storage

Samples are processed and stored in our secure, licensed facility with an official storage certificate.



9. Ongoing Family Support

We remain available for questions, documentation, or sample access, plus regular industry-related updates.



Why Choose MedCells?

20+ Years of Expertise

With over 20 years of experience, we are a trusted provider of newborn stem cell banking services across the Middle East, offering families established expertise and professional support throughout the banking process.

Superior Processing

Through our CellAdvance service, stem cells are processed using advanced laboratory methods that prioritize cell viability and quality, with outcomes showing engraftment up to 20% faster compared to conventional processing approaches.

Proven Track Record

CellAdvance is backed by over 350 published transplant records, making it one of the most clinically documented stem cell processing services available today.

Advanced Collection Kits

Our advanced collection kits are carefully designed to protect stem cell samples from the moment of collection through secure transport to the laboratory, helping maintain optimal cell quality and viability.

24/7 Customer Care

Our dedicated customer care team is available 24/7 to provide guidance, answer questions, and support families at every step of their stem cell banking journey.

Comprehensive Packages

We offer a full spectrum of stem cell banking services, including cord blood, cord tissue, placenta and amnion, exosomes, and cell expansion—giving families access to both current and future regenerative therapies.

Flexible Payment Options

Families can choose from flexible payment plans and easy online payment options, making it simpler to manage costs while preserving stem cells for the future.



Cord Blood Highlights

Cured by his own cord blood 19 years later⁵²

Xiao An, a patient in China, was diagnosed at age 18 with severe aplastic anemia, a life-threatening autoimmune condition in which overactive T-cells attack the bone marrow and can lead to complete marrow failure. After extensive evaluation, doctors determined that an autologous umbilical cord blood stem cell transplant was a viable option because the disease was acquired rather than genetic. Fortunately, Xiao An's parents had chosen to store his cord blood at birth in 2003, despite limited awareness of cord blood banking at the time.



Nineteen years later, the stored cord blood was tested and found to be in excellent condition, meeting all clinical release standards. In December 2022, Xiao An received the transplant at a specialised blood disease hospital in Beijing, recovered steadily, and was discharged in early 2023, ultimately returning to normal life—setting a national record in China for the longest storage and successful therapeutic use of autologous cord blood.

Treating Krabbe Disease Using Cord Blood Stem Cells⁵³

Erik Haines was suffering from Globoid Cell Leukodystrophy also known as Krabbe Disease. It is a rare disease that affects the growth of the nerve's protective sheath. The person who has it suffers from limb stiffness, muscle weakness and slow mental development. Erik needs a bone marrow transplant, but the doctors were not successful in finding a match. The doctors were able to find a match in cord blood, but it is still not a perfect match. Erik's father decided to go ahead for the cord blood stem cell transplant. Doctors were skeptical at first, but they proceeded with confidence. Now, Erik lives a healthy and normal life.



Cord Blood Transplant to Cure Sickle Cell Anemia⁵⁴

Gabby Carter was suffering from Sickle Cell Anemia. It is a blood disorder that causes red blood cells to change into a crescent shape. This blood disorder deprives her body organs of oxygen, increasing the chance of stroke. The donor who's supposed to donate bone marrow stem cells backed out at the last minute and Gabby's family was hopeless. But the doctors found a close match of cord blood and explained how it can be a possible cure. They went through the transplant process and Gabby now lives a healthy and normal life.



Cord Blood Stem Cells for Chloe⁵⁵

Chloe Levine was a healthy baby when she was born. But soon, her mother started noticing that she couldn't crawl. Her right fist was always closed tightly, she couldn't hold her bottle and she wouldn't talk or murmur any words. She was diagnosed with Cerebral Palsy which affects body movement and muscle coordination. It is incurable, but doctors have various opinions on its treatment with cord blood stem cells. Chloe's parents found out that Duke University scientists have used cord blood stem cells on a boy which has shown some promising results. They contacted Duke University and started the process on Chloe. After the transplant, Chloe is showing tremendous growth. She can now roll over, she can crawl, and she says her nickname 'Coco'.



Frequently Asked Questions

Can I still collect cord blood if I choose delayed cord clamping?

Yes. Our **CellAdvance™** processing method is compatible with delayed cord clamping, allowing you to give your baby the benefits of immediate blood flow while still collecting enough stem cells for future use.

When is the best time to enroll for stem cell banking?

We recommend enrolling during your second or early third trimester. This gives you enough time to receive your collection kit, review the agreement, and coordinate with your healthcare provider.

How is my baby's cord blood tested and stored?

After arrival at our Dubai lab, the sample undergoes initial and advanced testing for quality, viability, and sterility. It is then processed and stored in cryogenic tanks within a secure, DHA-licensed facility.

How long can cord blood be stored?

Cord blood can be stored safely for decades when preserved under controlled cryogenic conditions. Research led by Dr. Hal Broxmeyer has demonstrated that cryopreserved cord blood remains viable after 27 years in frozen storage. In 2018, Australia's BMDI public cord blood bank successfully transplanted a leukemia patient with a donor cord blood unit that had been in storage for 20 years.

Should I store cord blood for all my children?

Storing cord blood for all your children gives your family the best chance of having compatible stem cells in the future. Each child's cord blood is a perfect match for themselves, and siblings have about a 25% chance of being a full match and up to a 50% chance of being a partial match, making it a valuable way to protect your children's health.

Are all cord blood banks the same?

No. The processing method matters. Many banks lose up to 80–90% of stem cells during processing. **With CellAdvance™, you get maximum stem cell retention**—the best foundation for future treatments.

How soon does the courier pick up the sample?

Our courier team is on-call 24/7. Once you notify us after the collection, we arrange immediate pickup to maintain the sample's viability.

What if my family needs the stored stem cells in the future?

If your family ever requires access to the stored sample, we assist with release and transportation to the approved medical facility.

What is the difference between public and private cord blood banking?

Public cord blood banks store donated cord blood for use by anyone who may need it for medical treatment, similar to a blood donation system. Private cord blood banks, on the other hand, store your baby's cord blood exclusively for your family's exclusive use. This ensures that the stem cells are readily available if your child or a family member requires them in the future.

Can I still collect cord blood if I have a cesarean section (C-section)?

Yes, cord blood can be collected during C-sections. The collection process is safe and does not interfere with the surgery or the care of you and your baby.

Will I hear from MedCells after storage?

Yes. We stay in touch through newsletters with updates about scientific advances, company updates, and helpful resources to keep you informed.

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