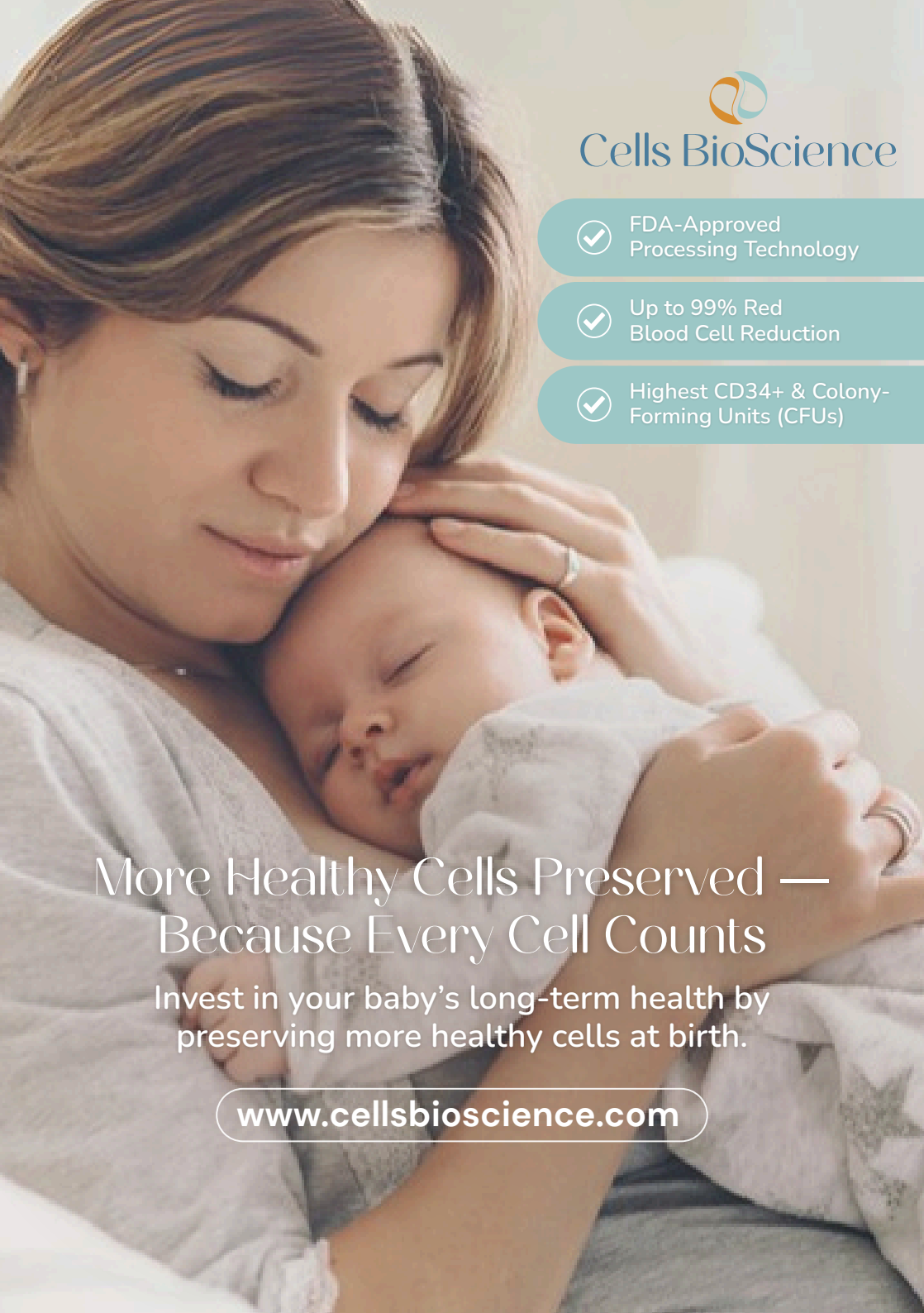

Cells BioScience
FDA-Approved Processing Technology
Up to 99% Red Blood Cell Reduction
Highest CD34+ & Colony-Forming Units (CFUs)
More Healthy Cells Preserved — Because Every Cell Counts
Invest in your baby's long-term health by preserving more healthy cells at birth.
www.cellsbioscience.com

A simple decision today could safeguard your child's health tomorrow

Stem cells found within your newborn baby's umbilical cord can replace damaged or diseased cells with healthy ones. At birth, you have a one-time opportunity to preserve this powerful source of stem cells. Your baby's cord blood stem cells hold the remarkable ability to repair, regenerate, and replace a wide range of cell types—and they may also be a potential match for treating siblings or even parents.

A Trusted Choice for Over 30 Years

In 1988,
the first cord blood transplant was performed.

85,000+
cord blood transplants performed globally.

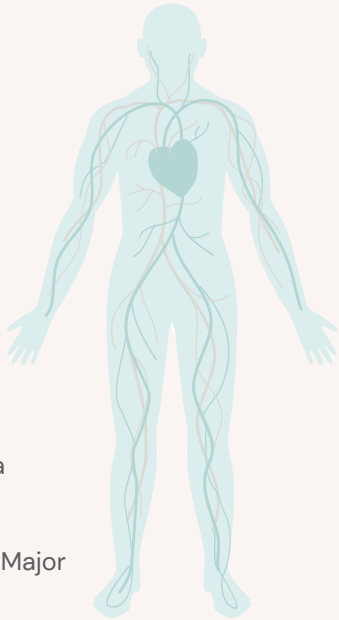
6.75 Million+
cord blood and cord tissue samples stored worldwide.


A lifetime of love
starts with one
powerful choice.

Why Store the Cord Blood

Umbilical cord blood, collected from your baby's umbilical cord and placenta shortly after birth, is a rich source of powerful stem cells. These cells not only play a vital role in today's treatments for over 80 serious conditions but are also being actively researched for their potential in regenerative medicine. Scientists are exploring how these stem cells may one day help repair tissues, reduce inflammation, and restore function in conditions like brain injury, type 1 diabetes, and neurological disorders.

Cord blood can treat more than 80 medical conditions including:



Cancers
Leukemias
Lymphoma
Neuroblastoma
Myeloma

Metabolic Disorders
Krabbe Disease
Hunter Syndrome
Hurler Syndrome
Osteopetrosis

Blood Disorders
Sickle-Cell Anemia
Fanconi Anemia
Aplastic Anemia
Beta-Thalassemia Major

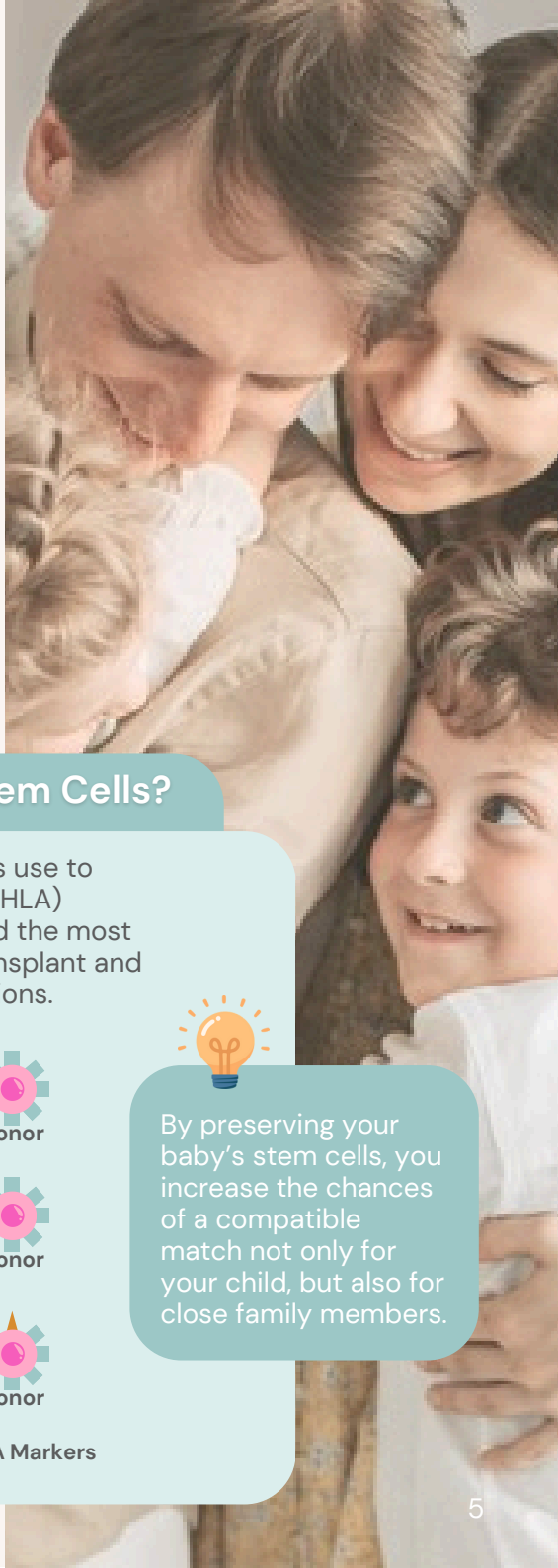
Immunodeficiencies
Wiskott-Aldrich Syndrome
Cartilage-Hair Hypoplasia
Kostmann Syndrome
Bare-Lymphocyte Syndrome

Cord Blood Could Help Your Whole Family

100%
Match to your newborn baby

25%
Chance of perfect match to siblings

50%
Parents are a partial match



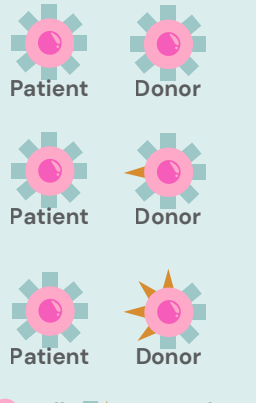
Why Store Your Baby's Stem Cells?

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.



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 Transplant: Key Statistics

Hypoxic births account for 62% of cord blood transplants. In 55% of cases, individuals receive transplants using their own stem cells.

Autism Spectrum Disorder (ASD): Duke University Study

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

ASD affects **1 in 68** children

ASD is **4.5 times** more common among boys than girls (1 in 42 vs 1 in 189)

Cerebral Palsy (CP): Duke Health Research

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

About **1 in 323** kids in the US have CP

Most cases **85-90%** of CP are present from birth, but often the exact cause is unknown

 Sources: CryoCell USA, Cord Blood Registry

Cord Blood Processing Technologies

1. Volume-Reduced

Extracts the Hematopoietic Stem Cells (HSCs) from the cord blood using similar technology to what other service providers in the Middle East offer.

2. CellAdvance™

CellAdvance uses a superior cord blood processing method that removes up to 99% red blood cells to preserve a higher yield of stem cells, supporting better recovery and faster engraftment for potential transplants.

Why Choose CellAdvance™

- **FDA-Approved Processing Technology**
- **Advanced Processing Technology – 20% faster engraftment than any other technology**
- **Maximum Recovery of Stem Cells**
- **Highest Red Blood Cells Depletion**
- **Most Published Transplants**

Why Cord Tissue Matters Too

Your baby's umbilical cord tissue is a rich source of mesenchymal stem cells (MSCs)—powerful cells with the ability to multiply and transform into different types of tissue, including bone, cartilage, and fat. These MSCs are being widely studied for their role in regenerative medicine, with potential applications in treating joint injuries, inflammatory conditions, and even organ damage.

Cord tissue also contains other types of stem cells not found in cord blood, adding even more potential value to storage.

By preserving your baby's cord tissue at birth, you're safeguarding a unique and versatile source of cells that may one day help repair or regenerate damaged tissue—offering long-term benefits for your child's health.

Early trials show promising results using cord tissue for:

- Neurological Conditions
- Heart and Vascular Disease
- Skeletal Conditions
- Inflammatory & Autoimmune
- Regenerative Diseases
- Spinal Cord Injuries

We offer the **most comprehensive cord tissue banking services** in the UAE and other Middle East regions.

Cord Tissue Services

1. Cord Tissue

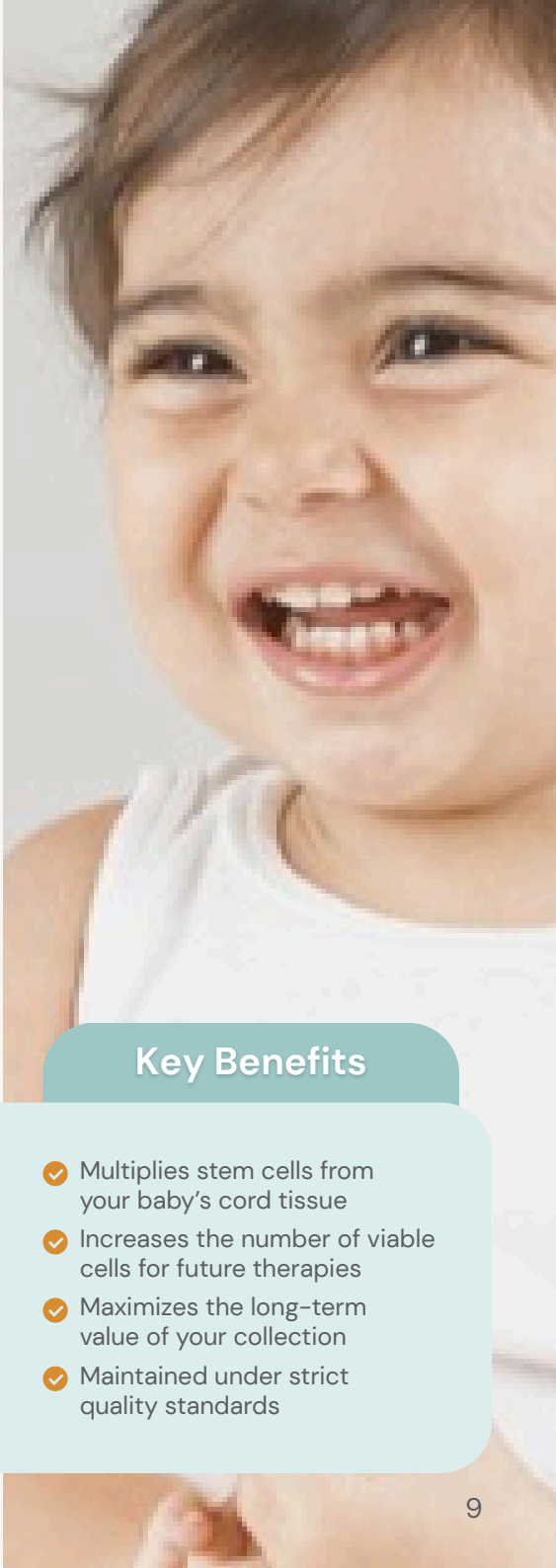
Stores a piece of the umbilical cord which is a rich source of Mesenchymal Stem Cells (MSCs) and other valuable cells not present in the cord blood.

2. Cord Vessel

Contains several unique cell types such as Human Umbilical Vein Endothelial Cells (HUVECs), Epithelial Cord Lining Stem Cells (CLSCs), Human Umbilical Cord Perivascular Cells (HUCPVCs).

3. Wharton's Jelly

Also a rich source of MSCs that can differentiate into various cell types, offering therapeutic potential in regenerative medicine.



4. Cell Expansion

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

Key Benefits

- 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

Maximise Healing Potential: Placenta and Amnion Banking

1. Placenta

Studies show that stem cells derived from the maternal decidua exhibit remarkable therapeutic potential for:

- Regenerative Medicine
- Orthopedics
- Vascular Medicine
- Graft-versus-Host Disease (GvHD)
- Inflammatory Diseases
- Autoimmune Disorders
- Tissue Repair

2. Amnion

Amnion contains growth factors, healing components and anti-inflammatory proteins.

- Lung Fibrosis
- Dry Eye
- Fibrosis

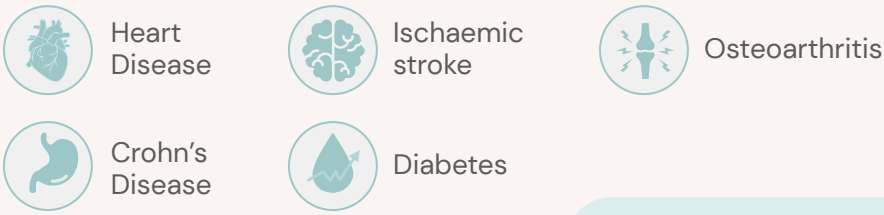
Current Uses

Ulcer Skin Graft Wounds

In the USA, disorders of the cornea account for 41% of all amnion transplants.
(www.ncbi.nlm.nih.gov)

3. Chorionic Villi

Chorionic Villi is rich in regenerative stem cells that are being used in clinical trials for:



Heart Disease
Ischaemic stroke
Osteoarthritis
Crohn's Disease
Diabetes

Even more ways to protect your baby's health at birth.

CellAdvance™ Superior Processing Technology

Higher Stem Cell Recovery

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

Faster Engraftment

Median neutrophil recovery around **14–15 days**, faster than standard methods (~21 days).

Lower Red Blood Cell Contamination

Removes **up to 99%** of red blood cells, producing the cleanest sample with minimal RBC carryover.

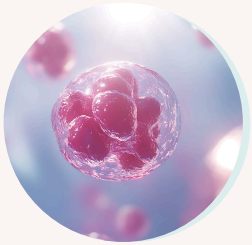
Consistent Across Volumes

Recovery remains stable regardless of starting cord blood volume, ensuring reliable results every time.

Preserve the Potential of Exosomes at Birth

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.



Benefits of Storing Exosomes

Long-Term Preservation
Stored at -80°C to keep exosomes intact and biologically active.

Regenerative Support
Studied for tissue repair, organ recovery, and neuroprotection.

Immune System Support
May help regulate immune responses and support recovery.

Cosmetic & Skin Applications
Can stimulate skin cell activity, supporting rejuvenation and repair.

Personalized Medicine
Investigated as carriers for targeted therapies tailored to individual biology.

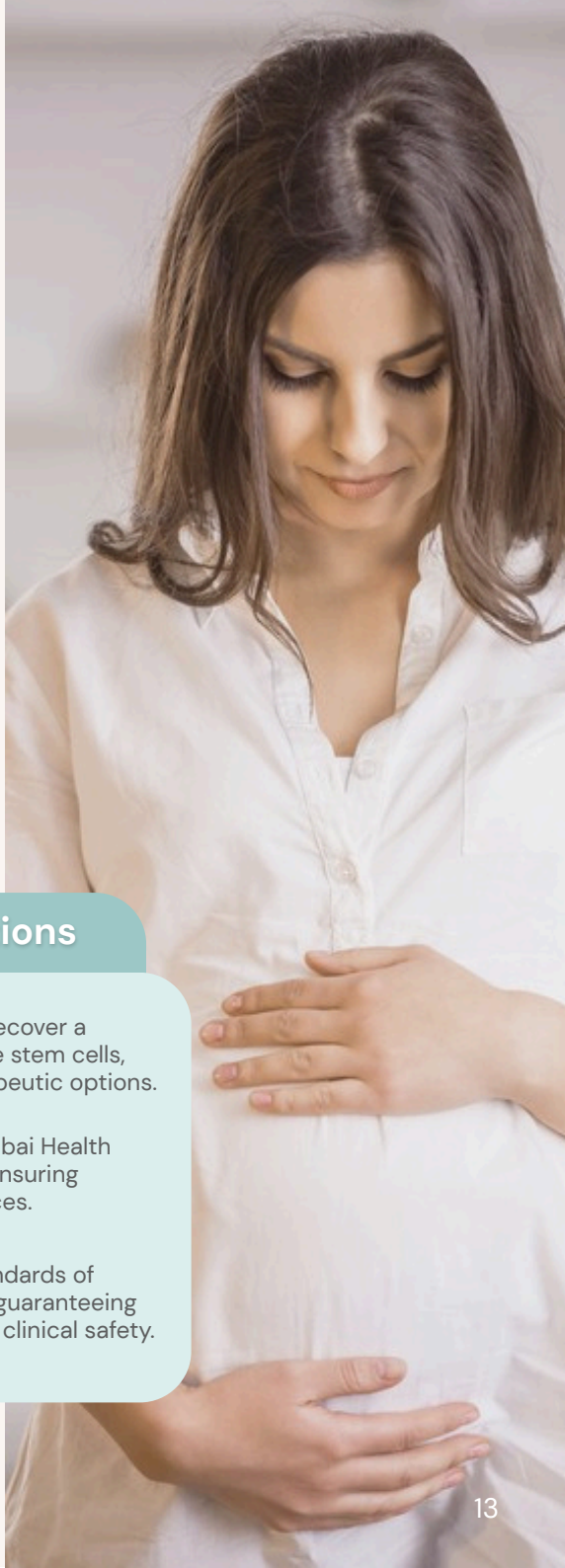
Why Choose Cells Bioscience

CellAdvance™ — Superior Technology

We use FDA-approved cord blood processing technology to safely and reliably preserve your baby's stem cells, maximizing recovery and potential future therapeutic options.

Safe & Secure Storage

All samples are preserved in a sterile, temperature-controlled environment using advanced cryogenic techniques, ensuring long-term protection and viability.



Licenses / Accreditations

FDA APPROVED

Clinically validated to recover a higher number of viable stem cells, increasing future therapeutic options.

هيئة الصحة بدبي
DUBAI HEALTH AUTHORITY

Fully compliant with Dubai Health Authority regulations, ensuring safe and ethical practices.

مدينة دبي الطبية
Dubai Healthcare City

Meets the rigorous standards of Dubai Healthcare City, guaranteeing the highest quality and clinical safety.

Find the Best Option For Your Family

1. Choose Your Package

Option 1
Cord Blood
+Cord Tissue

Option 2
Option 1
+Placenta

Option 3
Option 2
+Cord Vessel
+Wharton's Jelly
+Amnion

2. Choose Your Upgrade / Add-Ons

Upgrade
Cord Blood to CellAdvance™

Add-On 1
+Chorionic Villi

Add-On 2
+Cord Vessel
+ Wharton's Jelly
(for Option 1 & 2)

Add-On 3
+Cell Expansion

Add-On 4
+Exosomes

3. Contact Us for Special Offers

Speak to our team about seasonal offers and discounts.

4. Receive Your Collection Kit

On your delivery day, bring the kit with you to the hospital and we will pick-up the collected cord blood once available. After processing and successful storage, you'll receive a Testing Certificate.

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.

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.

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.

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.

Cells BioScience

Building 24, Ground Floor,
Units 3 & 4, Dubai Healthcare
City, Dubai, UAE

+971 55 902 2881

sales@cellsbioscience.com

SCAN QR CODE
to download a digital
copy of this brochure

Cord blood banking gives your child a unique medical resource that could make a difference in the future.