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Regrow®

Regrow your Cells. Rebuild your Life.

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Preserve Your Love
babycell™
The Life Saving Cord Blood Bank



Mr. Yash Sanghavi
CEO

Congratulations on your pregnancy! Your little miracle will soon make your world more beautiful and happier. As expecting parents, you must be busy preparing for your little bundle of joy, ensuring that you give your baby nothing but the best.

Health is wealth and you now hold the key to providing a lifetime of good health for your baby by preserving stem cells at the time of birth. Stem cell collection and preservation is as easy as flipping the pages of a book. As you learn more about the importance of stem cells and their preservation through this brochure, we hope that you will

MAKE A RESPONSIBLE CHOICE TODAY SO YOUR CHILD CAN THANK YOU TOMORROW.



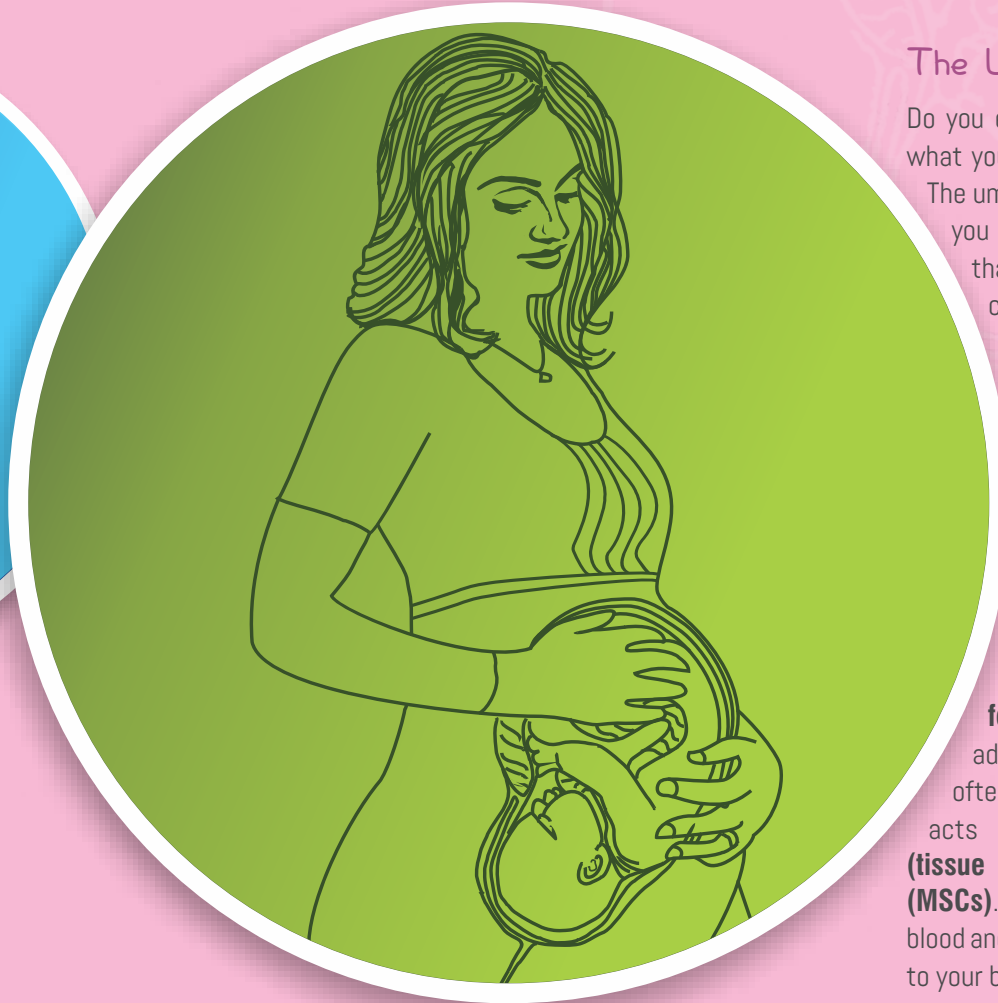
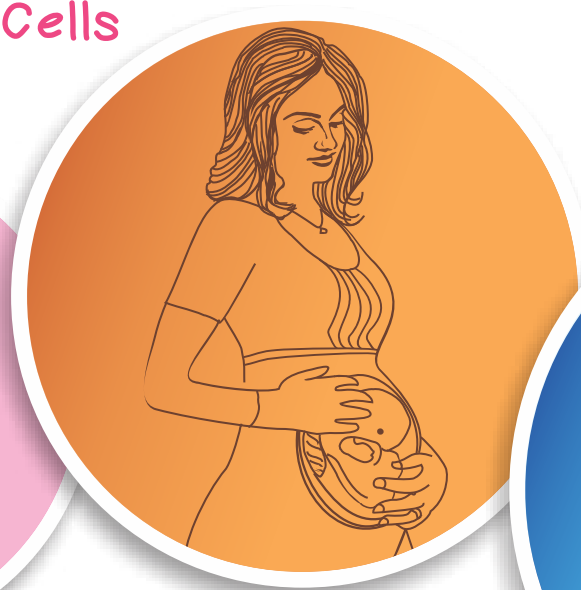
The Life Saving Cord Blood Bank

"I know how sobering and exhausting parenthood is. But the reality is that our children's future depends on us as parents. Because we know that the first years truly last forever."

- Mr. & Mrs. Rai



Know your Stem Cells



What are Stem Cells?

Stem Cells are master cells whose specific function in the body is not yet determined. Every single type of cell in the body "stems" from a stem cell.

Once a stem cell receives a signal directing it to become a specific cell type, it will differentiate and gradually change. This helps stem cells to specialise so they can perform different functions.

Your body undergoes constant renewal to develop, maintain and repair itself throughout life. Because of their ability to specialise, stem cells are used as the basic building material in the body's renewal process.

Where can you find Stem Cells?

A newly fertilised egg begins to divide producing an inner mass of stem cells that form the Embryo. The diving embryo, at different stages of its division, acts as a source of stem cells namely embryonic and foetal stem cells that have varying functions and capabilities.

Once an embryo develops into a full grown baby, stem cells known as Adult Stem Cells reside in the developed tissue (blood, nerves, muscles, skin, bone, etc) where they direct tissue growth and maintenance throughout life.

The embryo and adult tissue are not the only sources of stem cells. Your pregnancy holds the secret to another invaluable source of stem cells.

The Umbilical Cord

Do you ever wonder if your baby can feel what you experience? The answer is **YES!**

The umbilical cord is the lifeline between you and your baby. It is a special bond that allows you and your baby to communicate till the time of your delivery. Though usually discarded as medical waste post-delivery, research has shown that this special lifeline can now be a potential lifesaver for your baby and your family.

The blood that remains in the umbilical cord, after it is cut at the time of delivery, is a rich source of **Haematopoietic (blood forming) Stem Cells (HSCs)**. In addition, the umbilical cord tissue often referred to as Wharton's Jelly acts as a source of **Mesenchymal (tissue & organ forming) Stem Cells (MSCs)**. These stem cells found in the cord blood and cord tissue are genetically unique to your baby and your family and are known to treat over 80 life-threatening disorders. To know more about the benefits of cord blood and cord tissue, turn over to the next page.



Why Cord Blood?

For several blood and immune-related diseases, bone marrow transplants were traditionally used as the standard treatment until breakthroughs in medicine opened cord blood transplants as a superior, more effective treatment option.

Cell Concentration

Cord blood contains almost ten to twenty times more stem cells when compared to an equal volume of bone marrow.

Multiplication potential

Cord blood stem cells are immature cells unlike adult stem cells present in bone marrow and are therefore able to divide and differentiate faster than bone marrow stem cells.

HLA matching

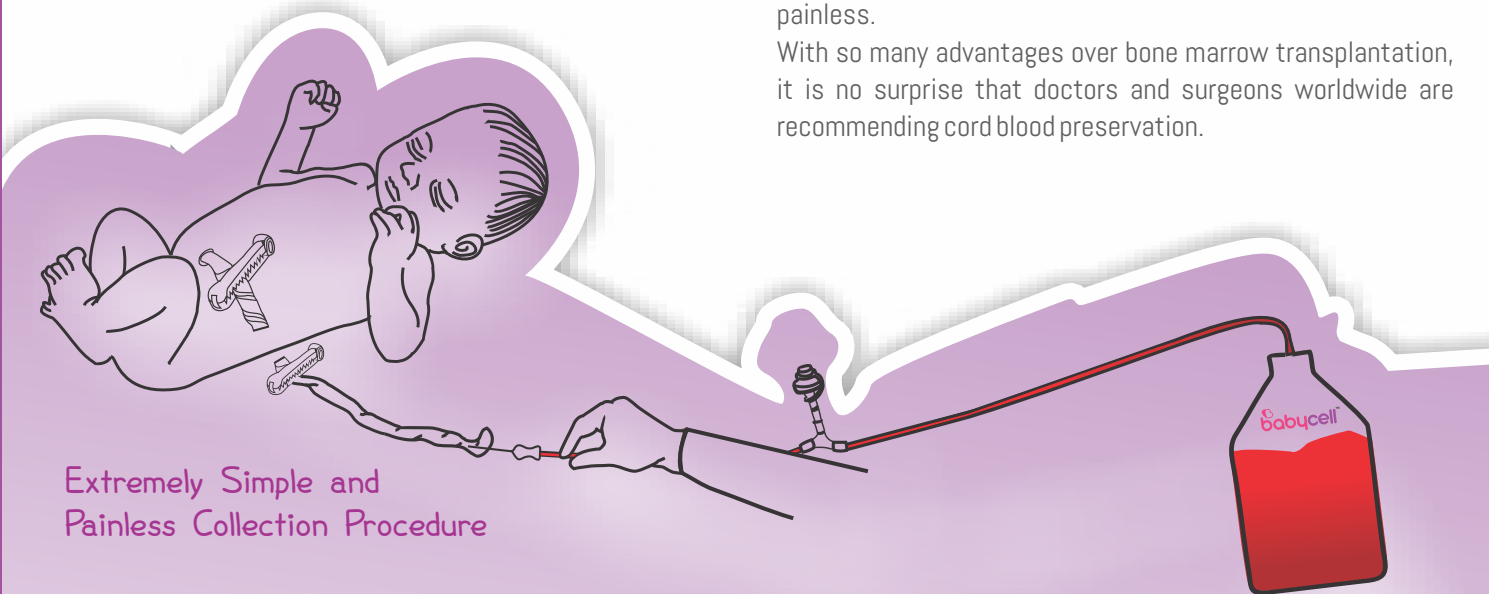
Human Leukocyte Antigens (HLA) are markers present on stem cells that help in their identification. For a successful bone marrow transplant, a full match of 6 out of 6 pairs of stem cell HLA markers is required. However, since cord blood stem cells are immature, the minimum required match is only 4 out of 6 pairs making the sample medically utilisable by a greater number of people as compared to a bone marrow sample.

Immunity

Umbilical cord blood transplants are less prone to rejection by a recipient's body because the cells have less developed features which can be recognised and attacked by a recipient body's immune system. As a result, there is less chance that the transplanted cells will attack the recipient's body, a problem called graft versus host disease.

Collection

Collection of cord blood stem cells is extremely simple and painless. With so many advantages over bone marrow transplantation, it is no surprise that doctors and surgeons worldwide are recommending cord blood preservation.



Extremely Simple and Painless Collection Procedure

The importance of Cord Tissue

Clinical research has shown that **Mesenchymal Stem Cells (MSCs)** from cord tissue have enormous potential to regenerate organs and tissues in the body.

Several clinical trials are evaluating the effectiveness of MSCs in treating various degenerative tissue and organ-related ailments. Results from ongoing clinical trials are very promising and it is not long before stem cell therapy with MSCs will be the medical cure to untreatable lifestyle diseases that could only be medically managed till date.

Apart from the fact that collection and preservation of cord tissue stem cells is equally simple and pain free like that for cord blood; cord tissue preservation compliments storage of cord blood by increasing the scope of diseases that can be treated and provides a broader health security cover for your baby and your family.

Next... find a list of **over 80 diseases** that your family can be protected from if you cryopreserve your baby's Cord Blood and Cord Tissue.



Indications For Cord Blood Transplant

Some Common Indications for Cord Blood Transplantation

- Acute myeloid leukaemia (AML)
- Hodgkin's disease
- Non-Hodgkin's lymphoma
- Sickle cell disorders
- Thalassaemia

Potential Future Applications

- Diabetes
- Heart diseases
- Stroke
- Alzheimer's disease
- Parkinson's disease
- Spinal cord injury

Other treatable diseases include:

Oncological disorders

- Acute lymphoblastic leukaemia
- Autoimmune lymphoproliferative syndromes
- Burkitt lymphoma chronic myeloid leukaemia
- Cytopenia related to monosomy 7
- Familial histiocytosis
- Haemophagocytic lymphohistiocytosis
- Juvenile myelomonocytic leukaemia
- Langerhans cell histiocytosis
- Lymphomatoid granulomatosis
- Myelodysplasia syndrome



“Haematopoietic Stem Cell transplantation using cryopreserved umbilical cord blood is the most optimum solution to treat more patients effectively.” - Dr. Vijay Ramanan, Noted Clinical Haematology Specialist

Haematological disorders

- Amegakaryocytic thrombocytopenia
- Autoimmune neutropenia
- Congenital dyserythropoietic anaemia
- Congenital sideroblastic anaemia
- Cyclic neutropenia
- Diamond Blackfan anaemia
- Evan's syndrome
- Fanconi anaemia
- Glanzmann's disease
- Hypoproliferative anaemia
- Juvenile dermatomyositis
- Juvenile xanthogranulomas
- Kostmann's syndrome
- Pancytopenia
- Red cell aplasia
- Refractory anemia
- Severe aplastic anaemia
- Shwachman syndrome
- Severe neonatal thrombocytopenia
- Systemic mastocytosis
- Thrombocytopenia with absent radius

Immune deficiencies

- Ataxia telangiectasia
- Cartilage- hair hypoplasia
- Chronic granulomatous disease
- DiGeorge syndrome
- Hypogammaglobulinemia
- IKK gamma deficiency
- Immune dysregulation polyendocrinopathy
- Mucopolysaccharidosis, Type II
- Myelokathexis
- Severe combined immunodeficiency
- Wiscott-Aldrich syndrome
- X-linked agammaglobulinemia
- X-linked immunodeficiency
- X-linked lymphoproliferative syndrome

Metabolic disorders

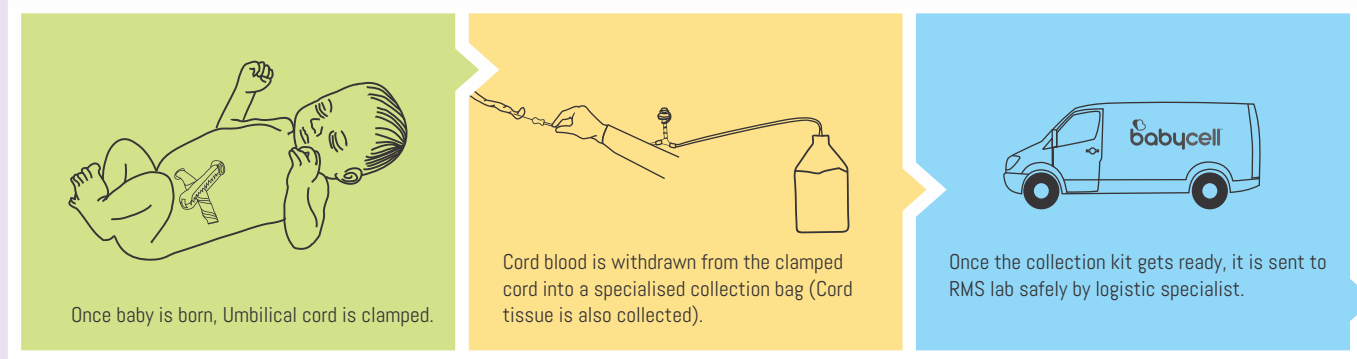
- Adrenoleukodystrophy
- Alpha mannosidosis
- Gaucher's disease (infant)
- Globoid cell leukodystrophy
- Gunther disease
- Hermansky-Pudlak syndrome
- Hurler syndrome
- Hurler-Scheie syndrome
- Hunter syndrome
- Maroteaux-Lamy syndrome
- Metachromatic leukodystrophy
- Mucopolysaccharidosis Types II, III
- Neimann Pick syndrome Types A and B
- Sandoff syndrome
- Sanfilippo syndrome
- Tay Sachs disease



Cord Blood & Cord Tissue Collection

Collection

Once you have enrolled with **BabyCell**, you will receive a collection kit which you must carry to the hospital at the time of your delivery. Once your baby has been delivered, the umbilical cord is clamped and detached from the baby's body. Using a closed sterile system, your doctor will collect the cord blood from the detached cord into a collection bag. Pieces of the cord itself are cut and placed in a separate container. As part of the collection procedure, a sample of the mother's blood is also collected for testing. All contents are labelled and packed in the collection kit.

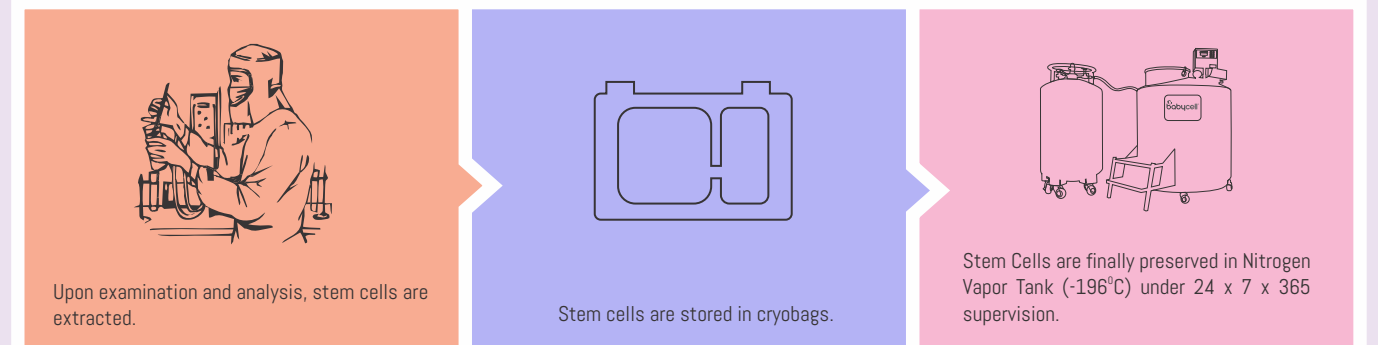


Transportation & Processing

As soon as the collection kit is ready for transport, our logistic specialist will ensure safe transfer of the kit from the hospital to the RMS lab under temperature controlled conditions. Once your kit reaches the lab, our internationally trained biotechnological experts will extract the stem cells from your sample using our specialised technology that allows 98% stem cell extraction. Necessary quality control tests are then performed.

Storage

Your processed cord blood sample is stored in a specialised container called a cassette. MSCs extracted from cord tissue are stored in specialised collection tubes called cryovials. After appropriate labelling, your cord blood and cord tissue samples are exposed to a gradual freezing process that keeps your stem cells alive during storage. Once frozen, the samples are then cryopreserved in separate Nitrogen Vapor Tanks (-196°C) that are under 24*7* 365 supervision.



Retrieval

If your stored samples are required in the future, our retrieval process is extremely simple and hassle-free. All you have to do is contact us along with your doctor's consent and a prescription indicating use of your sample and a specialised cryo-shipper will be used to transport your sample to the required hospital with adequate temperature control. Sample retrieval is absolutely free and can be made available to you at any hospital in India or abroad.





New Born Screening

Does your baby look healthy? Look closely! **1 in every 2497** newborn babies in India suffers from **Inborn Errors of Metabolism (IEM)**.*

IEMs are disorders caused by the body's inability to process certain foods leading to toxic chemical build-up in the body.

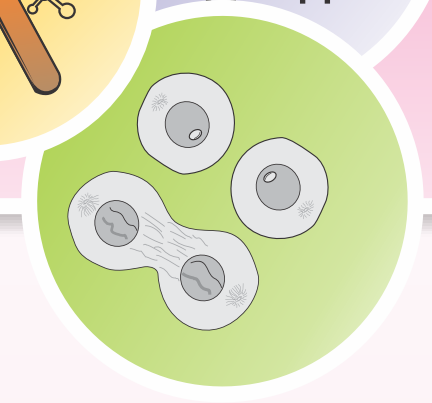
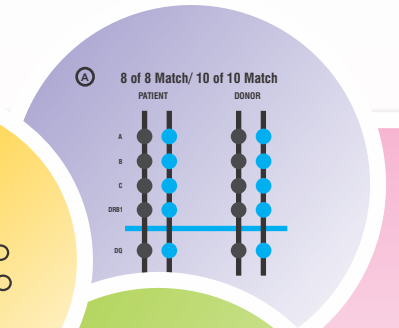
The bad news is that although most babies appear normal at birth, symptoms of IEM do not surface until a few years later and if undetected could lead to lifelong complications including mental retardation, physical disability and even mortality.

The good news is that if IEMs are diagnosed early in life, treatments as inexpensive as a simple dietary change can ensure a normal life for the baby.

At **babycell**, we care for your baby as much as you do and that is why we now provide you with New Born Screening (NBS): A simple testing technique that can check for IEMs in your baby.

OPT FOR NBS & GIFT YOUR BABY A HEALTHY START IN LIFE!

[Bioinformation 4(7):76-77]*



HLA Testing

(Human Leukocyte Antigen Testing)

Can your baby's cells help the rest of your family?

Studies show a 25% probability of HLA matching between siblings. By opting for HLA testing, you can pre-determine the genetic HLA profile of your baby's stem cells and enable your doctor to easily evaluate the utility of the preserved stem cells for your baby's siblings, yourself or even other members of your family. Early HLA testing can help save time if and when a transplant is needed. So why wait till later?

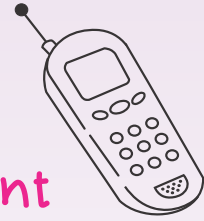
CFU Testing

(Colony Forming Unit Testing)

You must be aware by now that stem cells have the ability to differentiate. But how can you evaluate this ability?

The answer to that question is the CFU Test: a two-week lab test that estimates the differentiating capacity of your baby's stem cells. When you opt for CFU, you have invaluable information that can help your doctor estimate the required dosage of stem cells at the time of transplantation. A CFU is important because it evaluates the therapeutic ability of your baby's stem cells for future use.

TEST EARLY. PLAN AHEAD.



Enrolment

One Phone Call... That is all it takes to secure your enrolment with **babycell**. We understand that your time is precious and to make things simple and uncomplicated for you, we have created a customised enrolment process.

All you have to do is call us at 1800-209-0309 (toll-free) and inform us of your intention to enrol. One of our relationship executive will then visit you at your doorstep with necessary details on the enrolment process. All required proceedings will be taken care of by our executive and in less than thirty minutes you will be part of the **babycell** family.

So Don't Delay. Call Today!



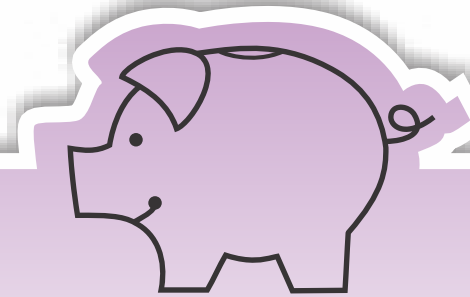
Easy Payment Options

Deciding to preserve your baby's cord blood is like setting up a health account for your baby. By depositing as less as ₹. 9 a day, you can protect your baby and your family from life-threatening diseases for 21 years.

babycell also offers you a **"PICK MY PLAN"** option, where you can create your own payment plan from several alternatives to suit your financial convenience.

With such an affordable investment and such priceless returns, preserving your baby's stem cells is the best bioinsurance you can provide for your family.

To find out more about other payment options, log on to our website at www.babycell.in or talk to our representative at **1800-209-0309** (toll-free).



Now Refer a Friend
and Win Exciting
Cash Prizes!

Banking Health One Baby at a Time



babycell's reliable cryopreservation technique is inherited through its technological collaboration with Sewon Cellontech; Asia's first cord blood bank. Over 1,00,000 units of cord blood have been collectively banked thus far with the help of leading technological expertise since 1990.



babycell has made its presence felt in over 50 locations (both in India and abroad) by providing round the clock, consistent, quality service because you and your baby deserve nothing but the best.



babycell's state-of-the-art Cell Processing and Storage Center (CPSC) in Lonavala is fitted with 24*7*365 monitoring of your baby's sample to ensure temperature, humidity and pressure maintenance at all times. The center's earthquake and flood-proof location allows maximum protection during storage.



babycell is recognised with internationally acclaimed accreditations including GMP, GLP, GCP and ISO 13485:2003 in addition to being the only stem cell company in India accredited by both DCGI & FDA. All accrediting bodies acknowledge the company's maintenance of stringent and high quality cord blood and cord tissue processing standards.



babycell's specialised logistic arrangement with TNT, Blue Dart, and DHL Express guarantees shipping of your sample to the CPSC within 72 hours from the time of collection without any exposure to radiation, or other external contamination causing factors.

Babycell - The difference



Automated systems with QA & QC departments to double check critical steps in cell processing.



Licensed by Indian FDA. Certified by BSI for GMP, GCP, GLP, and ISO 13485.



24x7x365 support of sample collection technicians.



Most economical pricing with low cost EMI payment options with 20 Lacs insurance for each sample.



Medical, Legal and Financial information about the product and company is brought to notice.



Newborn Testing of metabolic, genetic & immunological disorders. Free advice from medical expert on diet & medication on detection.



Panel of transplant specialists to provide consultation relating to stem cell transplant using the stored sample.



India's First to introduce patient specific Cell Therapy for Cartilage and Bone diseases.



Dedicated attention to your needs right from registration to sample requirement.



India's first & only stem cell bank to offer detection of sickle cell disease which can be treated using cord blood.

Where Ideas Meet Reality

It was a single idea that led Mr. Yash Sanghavi, CEO and MD of RMS-Regrow[®], to lay the foundation for one of the India's biggest corporate establishments, through Satyan Pharmaceuticals, a company currently estimated at ₹. 500 crores. 30 years later, his success in the pharmaceutical business coupled with his vision to "contribute in improving human healthcare by delivering safe and effective patient specific regenerative medical treatment" gave birth to RMS-Regrow[®]. Apart from **Babycell** the company also initiated cell therapies namely **CHONDROX**[®] (Autologous Cartilage Implantation) & **OSSRON**[®] (Autologous Bone Implantation) to cater to the orthopaedic health sector, along with wound management.

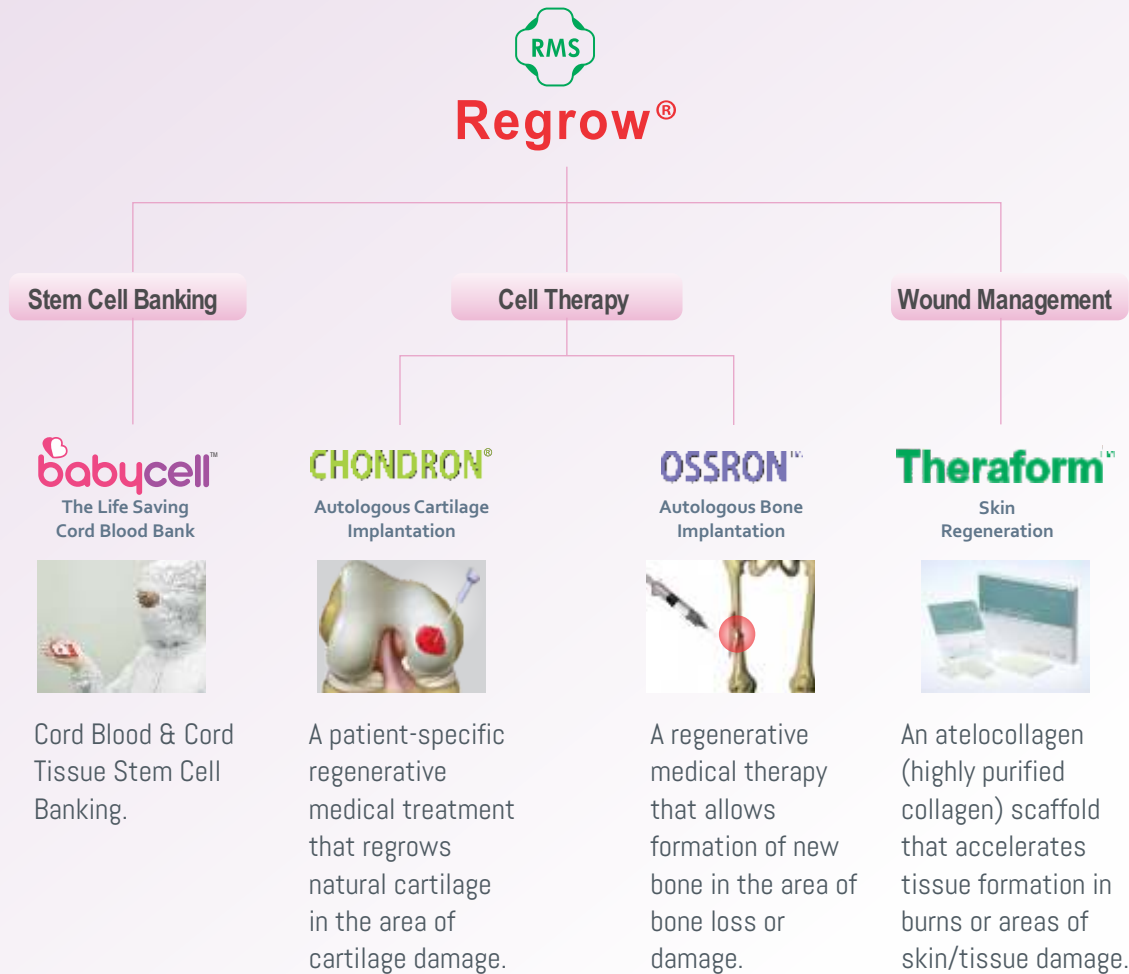
At RMS, innovative research to expand affordable medical application of stem cells is continually encouraged and the fruits of this labour are evident in the launch of several novel medical products that are within the reach of the common man.

Through its various International and Indian accreditations, the company has further assured clients of its consistent compliance to internationally accepted standards of cell processing, storage and cell therapy application.

The company has stayed true to its mission of "achieving excellence in the field of biotechnology through constant innovation and delivery of quality products to the patients of India"; and hopes that through its efforts, India will be a frontrunner in the field of Regenerative Medicine.



REGENERATIVE MEDICAL SERVICES



Success Stories

THE TIMES OF INDIA

Stem cells get budding cricketer back on pitch

Stem cells get budding cricketer back on pitch



THE TIMES OF INDIA

Dying Hip Joint Repaired With Cultured Cells



The Hindu, Business Line

Babycell reports spurt in demand to store umbilical cords



PHARMABIZ.com

India's most comprehensive pharma portal

Increasing number of patients opting for stem cell therapy for treating diverse medical conditions.

Since we started operating in 2009, 2500 people have enrolled with us," said Mr Saraghi. Among Babycell's customers are a vegetable vendor from Visli, TV artists, celebrities and companies. The demand among parents to store their unborn child's umbilical cord cells at birth was only going up, he said, even as the draft guidelines on stem cell research and banking are at the child-birth clinic Cradle in Bangalore. Babycell is in talks to tie up with hospitals for connecting with parents-to-be and with diagnostic labs which would be collection franchisees in Coimbatore, Kachi, Hyderabad, Pune, Nagpur and Nashik. The samples are screened and stored at the Rs 25-crore Lonastalab. Through its technology tie-up with South Korea's Sevan Celltech, RMS provides cell-

PHARMABIZ.com

Increasing number of patients opting for stem cell therapy for treating diverse medical conditions

