



**INFO PACK**  
**Other Important Things  
You Need to Know About  
Your Upcoming Baby**





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# About Cordlife Philippines

- \* There are more than 600,000 parents\* who have entrusted their baby's umbilical cord blood stem cells to Cordlife making it the largest cord blood banking network in Asia.
- \* Cordlife Group Limited, a Singapore Exchange Mainboard-listed company since 2001, has presence in several Asian countries including Singapore, Philippines, Hong Kong and Macau, India, Indonesia, Malaysia, Thailand, Myanmar, Vietnam, Bangladesh, and Brunei.
- \* Cordlife Philippines, a subsidiary of Cordlife Group Limited, is the country's first and only DOH-registered, ISO 9001:2015 certified, and AABB-accredited facility in the country with services such as umbilical cord stem cell banking, non-invasive prenatal test (NIPT), and baby genetic screening.
- \* AABB (Association for the Advancement of Blood & Biotherapies) is an international, not-for-profit association representing individuals and institutions involved in the fields of transfusion medicine and biotherapies. Major centers here and abroad require cord blood units from AABB-accredited facilities.



\*As of May 2022, based on consolidated figures of Cordlife Group Limited and its associates.

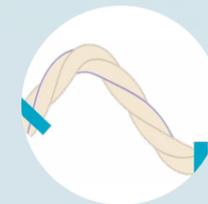
# Your quick start



Moms Up is a free mobile app that offers conceiving, expecting, and parenting tools and resources.



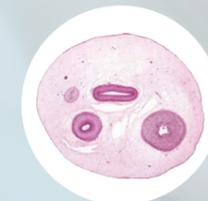
NIPT screens for potential risks related to genetic conditions as early as 10 weeks of pregnancy.



The umbilical cord has the youngest and most active stem cells compared with other stem cell sources.



The country's first-ever community banking program that allows families to help one another in case of a medical need.



Your baby's mesenchymal stem cells can now be multiplied into more stem cells for cellular therapy that can benefit even your baby's grandparents.



When you preserve your baby's umbilical cord stem cells with Cordlife, you can be entitled to free pregnancy insurance, transplant financial assistance, and other medical benefits.



A baby genetic screening that analyzes the risks related to your baby's chromosomal abnormalities that may lead to childhood developmental and behavioral disorders.

I just found out that...

# I'm pregnant



Get the app now!



## Moms Up provides one-stop experience for discerning moms like you!



### TOOLS & TRACKERS

Kick tracker, contraction tracker, pregnancy diary, and many more!



### RESOURCES

Expert-reviewed articles for every mom's guidance.



### COMMUNITY

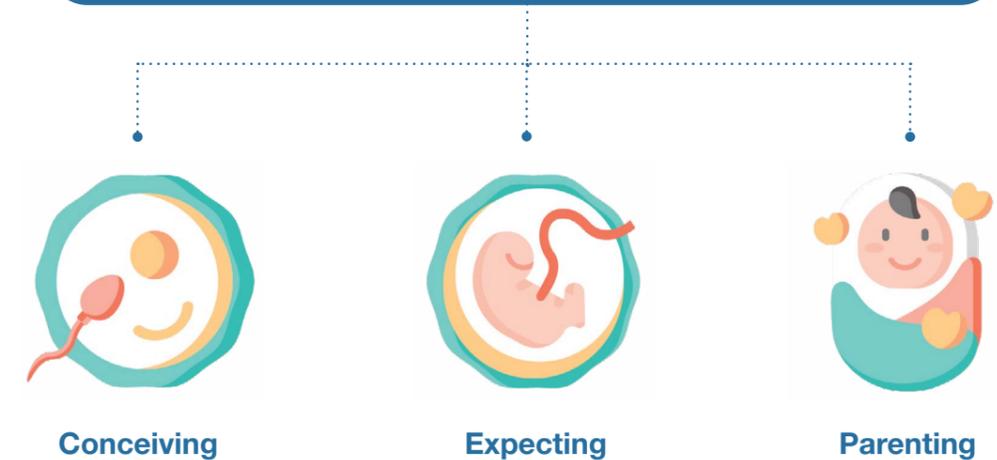
Connect with other moms in the Discussion Forum.



### SHOPPING

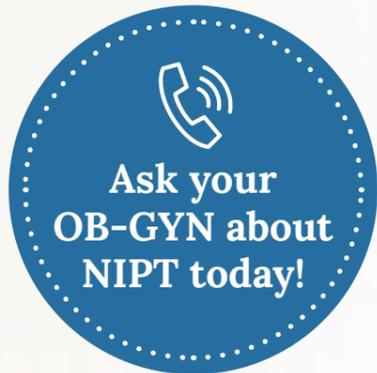
Coming soon!

## Guides you in every stage of your motherhood



I'm on my...

# 10th week of pregnancy



Ask your  
OB-GYN about  
NIPT today!



One of the important things you need to know when you're 10 weeks pregnant is your upcoming baby's potential risks related to genetic conditions.

In 1997, scientists first reported the presence of small amounts of baby's DNA (known as cell-free DNA, or cfDNA) in the mother's blood as early as four gestational weeks\*.

From a simple blood draw as early as 10 weeks into your pregnancy, non-invasive prenatal test or NIPT screens for the most common chromosomal abnormalities that can affect your developing baby's future. This test is done with little or no risk to your pregnancy.

### How to choose the right NIPT?

- ✓ The provider must have proven track record in providing prenatal services and quality marks.
- ✓ The testing laboratory is CAP-accredited and CLIA-certified.
- ✓ The detection rate is at 99.9%.
- ✓ For overall quality customer experience, financial assistance is available for pregnant moms detected with high risk.

\*Jiang F, et al. BMC Medical Genomics, 2012 Dec;5:57.doi:10.1186/1755-8794-5-57

It's my first time to know about...

# Umbilical cord stem cells

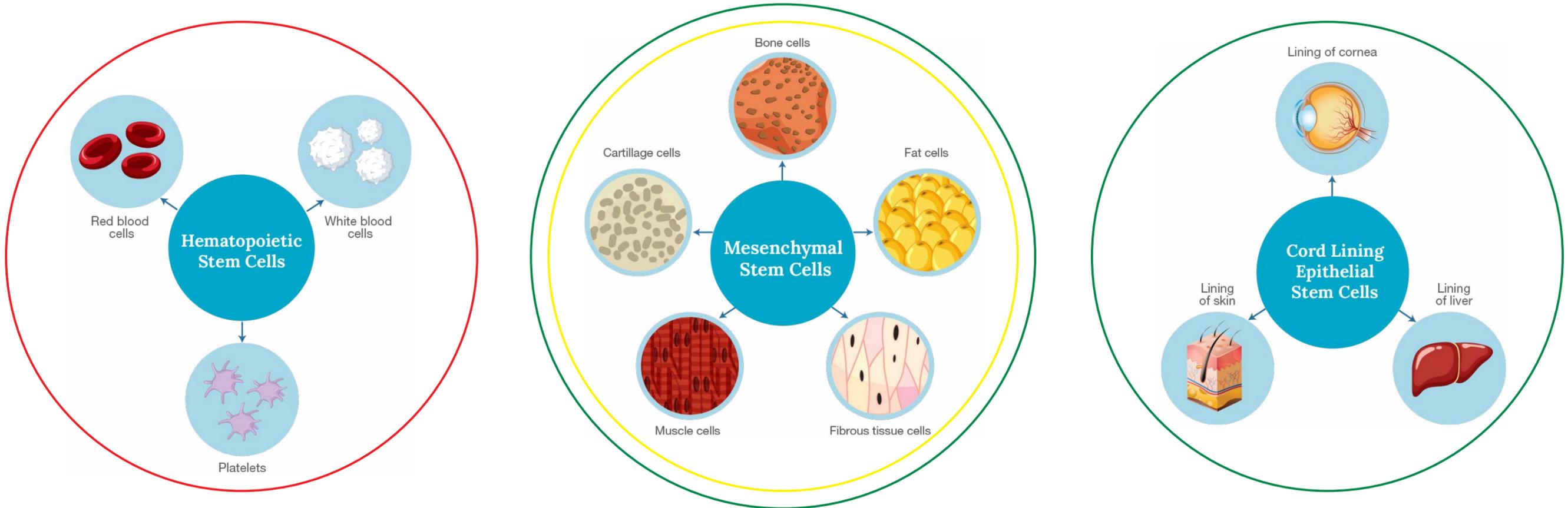
**Your baby's umbilical cord has the youngest and most active stem cells compared with other stem cell sources such as embryo, bone marrow, and peripheral blood.**

Stem cells are specialized human cells that have the capacity to develop into many different cell types in the body like muscle cells, blood cells, and bone cells. Due to factors such as age and medical conditions, the production of stem cells in the body may decrease or may even be impaired.



**The umbilical cord contains cord blood, cord lining, and cord tissue.**

- Cord Blood
- Cord Lining
- Cord Tissue



Cord blood is a rich source of hematopoietic stem cells or HSCs that have the ability to differentiate into **red blood cells** responsible for the **oxygenation of the blood**, into **white blood cells** which assist in **antibody stimulation** and **fight infection**, and into **platelets**, which are involved in the **clotting process**.

**Cord tissue and cord lining** are great sources of mesenchymal stem cells or MSCs that can differentiate into bone, muscle, fat, cartilage cells and fibrous tissues. MSCs can reduce inflammation and can repair, replenish and rejuvenate the damaged tissues and cells. Apart from MSCs, the cord lining also has cord lining epithelial stem cells obtainable with Cordlife's exclusive CellOptima™ Technology.

Preserving all your baby's umbilical cord stem cells gives you access to more medical options in the future.



## What is mesenchymal stem cell banking?

**Your baby's cord tissue has mesenchymal stem cells (MSCs) which can be expanded or multiplied. In stem cell therapies, a specific stem cell dose is required to provide therapeutic effectiveness.**

### **Why preserve expanded MSCs and who can benefit?**

As we mature, the ability of our body's stem cells for self-renewal and capacity to differentiate into various cell types will also age. MSCs from cord tissue are some of the youngest cells that can be collected safely and painlessly at birth and when expanded, can have the potential to renew and regenerate many other cell types in your body. When you preserve these expanded cells, these are suspended in time and will never age. Your baby, you, your husband, your baby's siblings and even your baby's grandparents can benefit because these MSCs are immune evasive\* or the risk of rejection is minimized.

\*Ankrum JA, Ong JF, Karp JM. Mesenchymal stem cells: immune evasive, not immune privileged. *Nat. Biotechnol.* 2014; 32(3):252-260.

## What is Cordlife ALLIANCE?

# ALLIANCE

Cordlife ALLIANCE is a community cord blood banking program that allows members to support one another in addition to protecting their own family. In the event of a medical need and the family's cord blood unit is not suitable to be used, the family can tap into the community bank to search for alternative matching cord blood units from various Asian countries where Cordlife operates. Families that will preserve their baby's cord blood with Cordlife automatically become members of Cordlife ALLIANCE.

## Who can benefit from Cordlife ALLIANCE?



Owner of the cord blood unit

Biological siblings

Biological parents

Biological grandparents



I've started reading about...

# Umbilical cord stem cells

Now that you have knowledge on the umbilical cord blood, umbilical cord lining, and umbilical cord tissue, let's move on to the uses of these stem cells.

The umbilical cord blood can potentially treat 80+ critical illnesses and conditions.



## Cord blood: Standard therapies

### BLOOD CANCERS

- Acute Myelogenous Leukemia
- Acute Lymphoblastic Leukemia
- Chronic Myelogenous Leukemia
- Histiocytic Neoplasms
- Other Myeloproliferative Neoplasms
- Myelodysplastic Syndrome
- Multiple Myeloma
- Plasma Cell Leukemia
- Systemic Mastocytosis
- Waldenstrom's Macroglobulinemia

### SOLID TUMORS

- Hodgkin Lymphoma
- Non-Hodgkin Lymphoma
- Langerhans' Cell Histiocytosis
- Neuroblastoma
- Retinoblastoma



### NON-MALIGNANT BLOOD DISORDERS

- Aplastic Anemia
- Chediak-Higashi Syndrome
- Congenital Dyserythropoietic Anemia
- Diamond-Blackfan Syndrome
- DiGeorge Syndrome
- Evans Syndrome
- Fanconi Anemia
- Glanzmann Thrombasthenia
- Gunther Disease (erythropoietic porphyria)
- Hereditary BM Failure Syndromes
- Hemophagocytic Lymphohistiocytosis
- Leukocyte Adhesion Deficiency
- Paroxysmal Nocturnal Hemoglobinuria
- Pure Red Cell Aplasia
- Sickle Cell Anemia
- Thalassemia Major

### IMMUNODEFICIENCY DISORDERS

- Chronic Granulomatous Disease
- Common Variable Immunodeficiency
- Cartilage-Hair Hypoplasia
- Reticular Dysgenesis
- Severe Combined Immune Deficiency (SCID)
- Shwachman-Diamond Syndrome
- Wiskott-Aldrich Syndrome

### METABOLIC DISORDERS

- Adrenoleukodystrophy
- Gaucher Disease
- Hurler Syndrome
- Hunter Syndrome
- Krabbe Disease
- Lesch-Nyhan Syndrome
- Maroteaux-Lamy Syndrome
- Metachromatic leukodystrophy
- Osteopetrosis
- Sly Syndrome, Beta-Glucuronidase Deficiency
- Wolman Disease

### Cord blood: Clinical trials

- Autism
- Brain Tumor
- Cartilage Repair
- Cleft Palate Repair (Alveolar)
- Cerebral Palsy
- Crohn Disease
- Critical Limb Ischemia
- Diabetes Type 1
- Epidermolysis Bullosa
- Ewing Sarcoma
- Graft-versus-Host Disease (GvHD)
- Hypoxic Ischemic Encephalopathy (HIE)
- Hearing Loss
- HIV
- Ischemic Stroke
- Lupus
- Multiple Sclerosis
- Myocardial Infarction
- Ovarian Cancer
- Rheumatoid Arthritis
- Spinal cord injury
- Scleroderma
- Testicular Tumour

#### References

- Diseases treated page. Parent's Guide to Cord Blood Foundation. <https://parentsguidecordblood.org/en/diseases>. Accessed June 22, 2022
- Potential Future Uses in Regenerative Medicine. Cord Blood Registry Website. <https://www.cordblood.com/science-in-action>. Accessed June 22, 2022

## Cord lining and cord tissue: Mesenchymal stem cells (MSCs)

As of June 22 2022, there are more than 1,000\* clinical trials using mesenchymal stem cells worldwide.

### Mesenchymal stem cells applications

#### TISSUE REPAIR

- Stroke
- Cardiovascular diseases
- Neurodegenerative diseases (eg Alzheimer disease, Parkinson disease)
- Autism, cerebral palsy, global developmental delay
- Spinal cord injury
- Orthopedic indications (osteoarthritis, cartilage, tendon repair)
- Liver regeneration from liver failure
- COVID-19 Pneumonia

#### IMMUNE MODULATION OR RECONSTRUCTION

- HIV
- Diabetes (Type 1 and 2)
- Prevention and treatment of Graft versus Host Disease (GvHD)
- Crohn disease

#### HSCs ENGRAFTMENT SUPPORT

- Shorten time of engraftment
- Reduce immune system complications

\*NIH U.S. National Library of Medicine [www.clinicaltrials.gov](http://www.clinicaltrials.gov) page. Search term used "mesenchymal stem cells". Last accessed June 22, 2022.

## Cord lining: Epithelial cells and epithelial stem cells

With the use of Cordlife-exclusive patented technology CellOptima™, cord lining epithelial stem cells, another type of stem cells found in cord lining, can be obtained.

### Epithelial cells and epithelial stem cells applications

- Ischemic stroke
- Persistent corneal epithelial defect



## How are umbilical cord stem cells collected?

**The OB-GYNE is the designated Healthcare Professional for collection.**

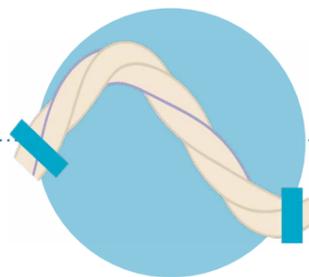
Inform your OB that you will be banking your baby's cord blood, cord tissue, and/or cord lining.



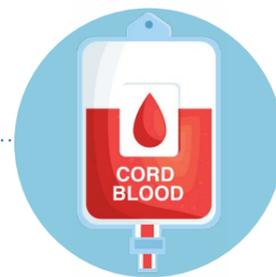
4 tubes of maternal blood



The baby is safely delivered



The umbilical cord is clamped



The umbilical cord blood is collected



A segment of umbilical cord is collected  
*If cord lining is being collected*



Picked up and delivered to Cordlife laboratory



Cordlife laboratory



## 6 easy steps to preserve your baby's expanded MSCs

1



Receive your collection kit upon enrollment with Cordlife via face-to-face or virtual consultation.

2



Inform your OB-GYN that you have decided to do expanded MSC banking.

3



Bring your collection kit to the hospital on the day of delivery.

4



After your OB-GYN has collected your baby's umbilical cord tissue, call us for the pick-up of the sample.

5



The Makati Medical Center-Center for Regenerative Medicine will process the expansion of the MSCs from your baby's umbilical cord tissue.

6



Once the MSCs have been expanded, it will be stored in Cordlife's facility and will be available for your family's use.

How is mesenchymal stem cell (MSC) banking done?

## What are the benefits of Cordlife ALLIANCE?

Cordlife ALLIANCE allows you to enjoy benefits that go beyond the storage of your baby's cord blood stem cells.



### FAMILY PROTECTION AND ALTRUISM

Protect your own family and other families at the same time.



### EXPANDED FAMILY PROTECTION

Safeguard three generations of your family.



### UNLIMITED SAMPLE SEARCH

Unlimited search for samples during the term of the cord blood banking agreement.



### GENETICALLY DIVERSE MEMBER POOL

Get access to a diverse pool of cord blood units from various Asian countries where Cordlife operates to increase the chance of locating a match of the same race and ethnicity.



### PROTECTION AGAINST LOW STEM CELL COUNT

Acts as backup security in case the cord blood unit has low stem cell count or in certain conditions that do not meet the standard requirements.



### FULL OWNERSHIP AND AUTONOMY

Since every family owns their child's cord blood, they can continue its storage for their own family's use or help another family in need of a matched cord blood and be entitled to reimbursement of the expenses paid for the cord blood banking service.



### LOW SAMPLE RETRIEVAL FEES

Simply reimburse the donor and Cordlife ALLIANCE member for the cord blood banking costs in the event that the donor's cord blood is a suitable match. Said amount is significantly lower than the fees to obtain cord blood from a public bank.

## Why do parents bank their baby's umbilical cord blood stem cells with Cordlife?

In addition to 18-year storage of your baby's umbilical cord blood stem cells, Cordlife offers pregnancy insurance, transplant financial assistance, assisted search for matched cord blood, and other medical benefits under Cordlife Care 360° Safeguard Program, which come free with Cordlife's umbilical cord blood banking plans.\*



**Cordlife**Shield

### Cordlife Shield

- ✔ A pregnancy insurance that provides coverage for the pregnant mother and the baby from 7 types of possible pregnancy complications, 16 types of congenital illnesses, and maternal or child death.
- ✔ Provides one-time subsidy of SGD2,000 for pregnancy complications and congenital illnesses and SGD5,000 for maternal or child death, subject to terms and conditions and provisions of the insurance policy.

\*Terms and conditions apply.



**FOR MOTHERS**

- ✔ Protection starts at 18 weeks of pregnancy or upon Cordlife enrollment (whichever is later).
- ✔ Cover 7 pregnancy complications and death.

No.	Type of pregnancy complication	Incidence rate
1	Preeclampsia or eclampsia	1 in 15
2	Death of fetus	1 in 160
3	Abruptio placentae	1 in 100
4	Postpartum haemorrhage (PPH) requiring hysterectomy	1 in 378
5	Disseminated intravascular coagulation	1 in 526
6	Fatty liver of pregnancy	1 in 20,000
7	Amniotic fluid embolism	1 in 8,333

**FOR BABIES**

- ✔ Protection starts at 18 weeks of pregnancy or upon Cordlife enrollment (whichever is later).
- ✔ Cover 16 congenital illnesses and fetal demise.

No.	Type of pregnancy complication	Incidence rate
1	Retinopathy of prematurity	1 in 128
2	Ventricular septal defect	1 in 240
3	Infantile hydrocephalus	1 in 313
4	Cerebral palsy	1 in 345
5	Cleft palate or cleft lip	1 in 700
6	Atrial septal defect	1 in 1,859
7	Down syndrome	1 in 700
8	Congenital deafness	1 in 690
9	Spina bifida	1 in 2,500
10	Congenital blindness	1 in 1,250
11	Tetralogy of fallot	1 in 3,000
12	Congenital diaphragmatic hernia	1 in 3,600
13	Transposition of great vessels	1 in 4,000
14	Anal atresia	1 in 5,000
15	Congenital dislocation of hip	1 in 1,000
16	Absence of two limbs	1 in 135,135





### Transplant Care

A transplant subsidy wherein Cordlife will provide one-time payment of up to SGD50,000 to partially cover medical costs of transplantation for the child whose cord blood unit is stored (autologous use), the child's biological siblings, biological parents or biological grandparents applicable for use in standard treatment at any accredited hospital in the Philippines.



### CordBlood Network

#### CordBlood Network

- Protection for 3 generations of your family
  - Child whose cord blood is stored with Cordlife
  - Legal parents
  - Legal grandparents
- Assisted search for matching cord blood for legal parents and grandparents of Cordlife Child, tapping Cordlife's partner registries in Mainland China

## Cordlife Care 360° Safeguard Program



### **CORDLIFE PLEDGE:**

#### **Our pledge to quality processing and storage standards**

Assures the client of a suitable cord blood unit match or SGD 50,000 lump sum pay-out to defray medical costs if the cord blood unit loses its viability at the point of transplant.



### **CORDLIFE ASSURE:**

#### **Assurance tests prior to HSC transplant**

Fully covers the cost of HLA testing and viability assay of the CB unit prior to HSC transplant.



### **CORDLIFE SECURE:**

#### **Fully prepared emergency**

Cordlife will make reasonable efforts to send your baby's cord blood to Singapore or other place deemed suitable for processing and permanent cryogenic storage in case access to Cordlife's facility is limited. The cost of courier, any additional test(s) as well as the difference in the upfront fee will be fully absorbed by Cordlife.



### **CORDLIFE GUARD:**

#### **Safeguarding you and your family**

Intended to provide coverage against financial loss caused by negligent act, error or omissions committed by Cordlife as a private cord blood banking service provider in the processing and cryogenic storage of the baby's cord blood unit.



# bebegene<sup>®</sup>

Another value-added benefit that comes free with cord blood banking is **bebegene<sup>®</sup>**.

**bebegene<sup>®</sup>** is a baby genetic screening test which analyzes the risks related to the baby's chromosomal abnormalities that may lead to Childhood Developmental And Behavioral Disorders (CDABD).

The test screens for 117 rare genetic diseases which analyzes chromosomal sites related to chromosomal abnormalities via the highly accurate SNP microarray.

## Basic

- ✓ **Chromosomal abnormalities**  
(117 types)

## Standard

- ✓ **Chromosomal abnormalities**  
(117 types)
- ✓ **Disease causing gene variants (2 conditions)**
  - Atopic dermatitis (eczema)
  - ADHD

## Comprehensive

- ✓ **Chromosomal abnormalities**  
(117 types)
- ✓ **Disease causing gene variants (6 conditions)**
  - Atopic dermatitis (eczema)
  - ADHD
  - Asthma
  - Allergic rhinitis
  - Wilson disease
  - Hearing loss



## More of this wonderful journey ahead. Keep going!

You can have our friendly consultant help you understand this info pack better.

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 (02) 8470 175 /  
(02) 8332 1888

**0949 889 3603**  
(for sales related inquiries)

All information accurate at time of printing. DCR No. 3600