cryocord 凯儿库®

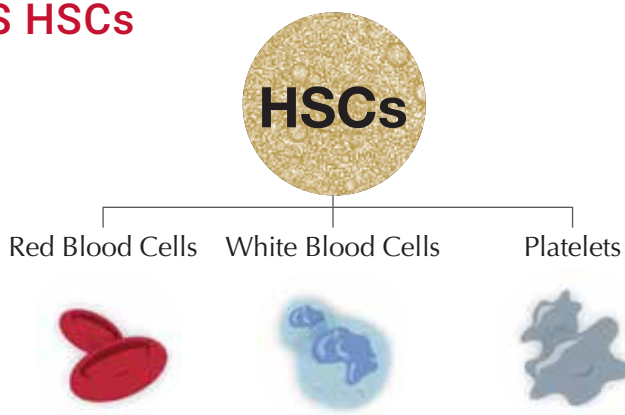
premier stem cell bank

CordBlood | Cord Blood Derived Hematopoietic Stem Cells

CORD BLOOD STEM CELLS

Cord blood is the blood that remains in the umbilical cord and placenta, following birth. It's rich of stem cells, predominantly **Hematopoietic Stem Cells (HSCs)**, which has the potential to generate blood cells and cells of the human immune system.

WHAT IS HSCs



HSCs are multipotent stem cells that have the potential to differentiate mainly into blood components such as red blood cells, white blood cells, platelets, etc.

Red blood cells play an essential role in transporting oxygen whereas platelets are mainly responsible in maintaining the integrity of blood vessels and regulating haemostasis.[1, 2]

White blood cells protect the human body from pathogens and cancer cells.

WHY STORE CORD BLOOD

Primitive Cells

Cord blood is different from regular blood because it is not aged; it has not been exposed to the environment. Thus, stem cells found in the cord blood is the most primitive form of stem cell.

Therapeutic Usage

Cord blood has been used to treat nearly 80 types of diseases with over 45,000 transplants[3] worldwide including treatment of blood related disorders, such as leukaemia[4], sickle cell anaemia[5], thalassaemia[6] and immune system disorders[7].

Protection For Family

The baby will have a source of stem cell that is of a perfect match (autologous transplantation), with 50% probability of match for the parents and 25% probability of match for his/ her siblings.

Once In A Lifetime

There is only once in a lifetime opportunity to collect a baby's stem cells, which is at the time of birth. Otherwise, these valuable stem cells are discarded as medical waste.

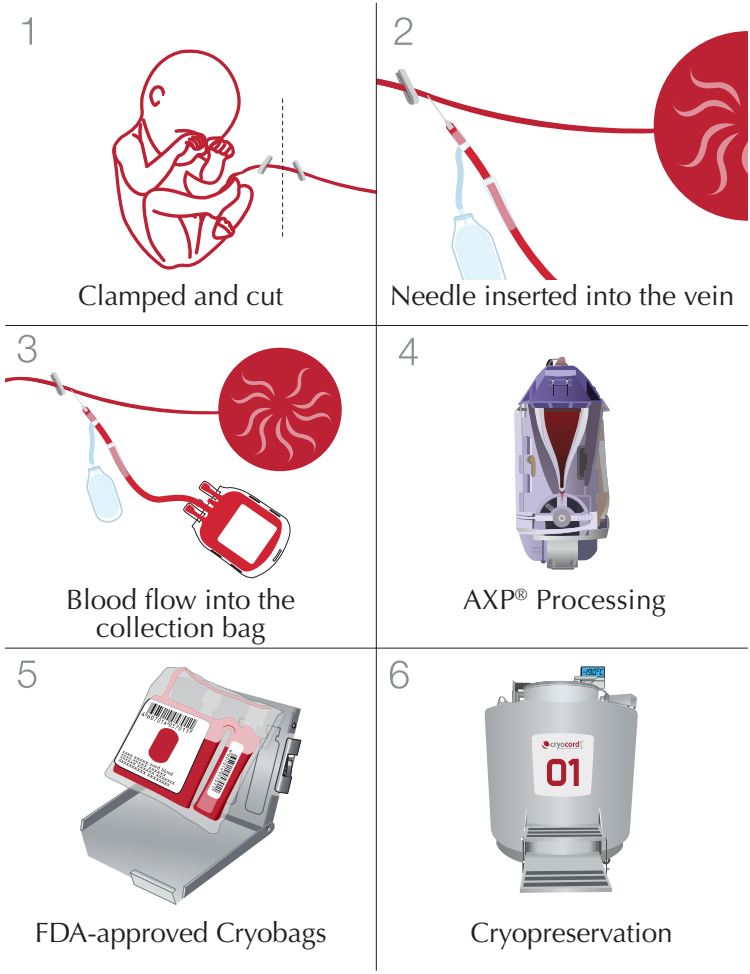
Simple, Quick and Painless

The collection of cord blood is simple, quick and painless. Highly trained medical professionals will collect the sample within 5 minutes, without interfering or complicating the delivery process.

References

1. What Are Red Blood Cells? - Health Encyclopedia - University of Rochester Medical Center. (2018). Urmc.rochester.edu. Retrieved 1 February 2018, from https://www.urmc.rochester.edu/encyclopedia/content.aspx?ContentID=34&ContentTypeID=160
2. Ghoshal, K., & Bhattacharyya, M. (2014). Overview of Platelet Physiology: Its Hemostatic and Nonhemostatic Role in Disease Pathogenesis. The Scientific World Journal, 2014, 1-16. http://dx.doi.org/10.1155/2014/781857
3. Munoz, J., Shah, N., Rezvani, K., Hosing, C., Bollard, C. M., Oran, B., . . . Shpall, E. J. (2014). Concise Review: Umbilical Cord Blood Transplantation: Past, Present, and Future. STEM CELLS Translational Medicine,3(12), 1435-1443. doi:10.5966/sctm.2014-0151
4. Christensen, D. (2005). Umbilical Cord Blood Offers Another Option for Leukemia Patients. JNCI Journal of the National Cancer Institute, 97(4), 253-254. doi:10.1093/jnci/97.4.253
5. Kristianson, N. (n.d.). About Cord Blood. Retrieved January 15, 2018, from http://www.cb-association.org/about-cord-blood'
6. Shah, S. A., Shah, K. M., Patel, K. A., Anand, A. S., Talati, S. S., Panchal, H. P., . . . Raut, S. S. (2015, March). Unrelated Umbilical Cord Blood Transplant for Children with β-Thalassemia Major. Retrieved January 15, 2018, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4275517/
7. Diseases Treated. (n.d.). Retrieved January 15, 2018, from https://parentsguidecordblood.org/en/diseases

ADVANCED PROCESSING



1. After the baby is delivered, the doctor will clamp the umbilical cord and separate it from the baby.
2. A needle will then be inserted into the vein of umbilical cord while waiting for the placenta to be detached from the mother.
3. The blood from the umbilical cord will flow into the collection bag within 5 minutes, without interfering or complicating the delivery process.
4. The blood collected will be processed using the AXP® System, which is approved by the U.S. Food and Drug Administration (FDA).
5. Cord blood stem cell samples will then be stored in FDA-approved cryobags.
6. After a series of quality check, cord blood is then finally stored at vapour phase liquid nitrogen storage tank under temperature -190ºC.

WHY CRYOCORD

cGMP Certified Laboratory
CryoCord laboratory located in Bio-X Centre, a purpose-built facility, houses 10 Class 100 cleanrooms which are certified with Current Good Manufacturing Practice (cGMP) in accordance to Pharmaceutical Inspection Co-operation Scheme (PIC/S) standards by Ministry of Health Malaysia.

Comprehensive Value Added Programmes
CryoCord assures that the commitment will be delivered. Through our value added programmes, the security of stored stem cells are strengthened and secured.

CryoCare Enhanced

***CryoCare Enhanced:** Covers the cost of acquiring a matched stem cell sample for the baby or his/her siblings, or transplantation cost.

CryoSure

***CryoSure:** Guarantees money-back payment in the event your child's stem cells are not viable when there is a need to use for treatment.

CryoFree

***CryoFree:** Guarantees the waiver of annual storage fees for the remainder of the 21 years in the event of either parent's demise.

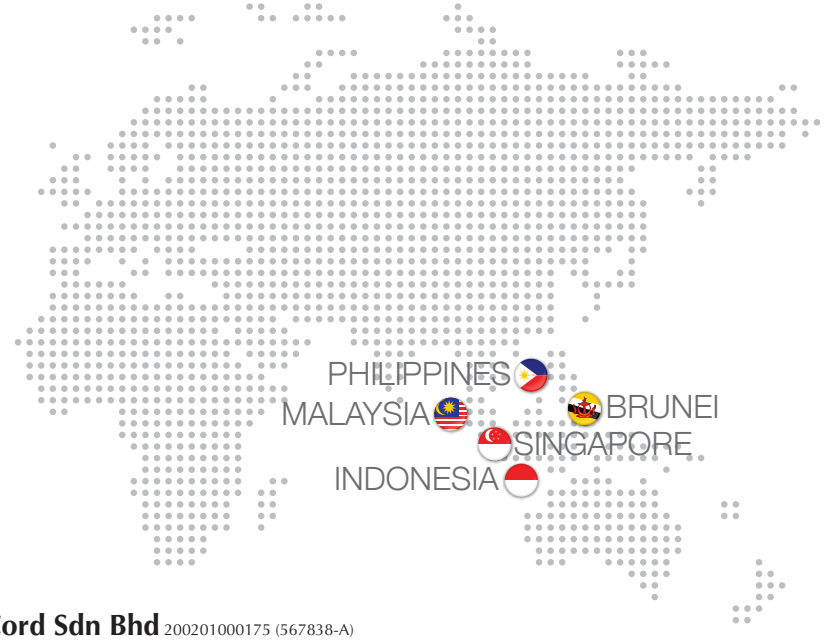
CryoMove

***CryoMove:** Guarantees against the loss or non-viability of stem cells during transportation to and from storage facility.

** Terms & Conditions Apply*

1800 88 3300

24 Hours Hotline



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