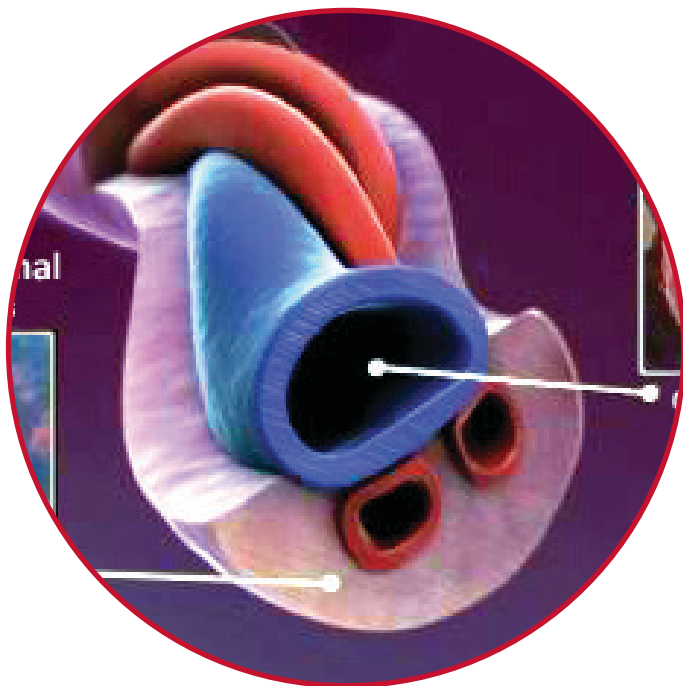


# CORD BLOOD BANKING



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This leaflet provides information to help women attending Fernandez Hospital to make decisions about Cord Blood.

## What is Cord Blood?

Cord blood is the baby's blood that remains in the placenta and cord after birth. After the baby is born, the blood in the placenta and cord is no longer needed and is usually disposed of carefully. Stem cells taken from cord blood can sometimes be used to treat a small number of serious health problems.

## Why is Cord Blood useful?

Cord blood is currently used in the treatment of a small number of illnesses:

- Blood related disorders, such as leukaemia, sickle cell anaemia
- Some immune system disorders
- Some rare metabolic problems

Some scientists believe that cord blood might in the future be used to cure a number of other diseases. Much more research is needed to see whether they are right or not.

## How is Cord Blood used?

A cord blood transplant uses blood stem cells to replace diseased cells with healthy new cells and rebuild an individual's blood and immune system. For the transplant to be a success, the new cells must match the individual's own cells as closely as possible.

In some illnesses, cord blood transplants can be used as an alternative to bone marrow transplants, to treat some disorders. This has been successful mainly in treating young patients for leukaemia. Cord blood transplants have both advantages and disadvantages over bone marrow transplants.

## What is Cord Blood Banking?

Cord blood banking is collecting and storing cord blood for treating a future disease or illness. Fernandez Hospital does not do this. Nor do we recommend it, unless a family has one of the illnesses that cord blood can help to treat.

## Types of Cord Blood Banks

### Public Banks

Some countries have cord blood banks, to which parents can voluntarily donate cord blood, to help others. A public bank stores cord blood for use by anyone anywhere in the world, thus ensuring fair access for all patients requiring stem cell transplantation. It is an alternative to a volunteer bone marrow donor registry.

### Private (Commercial) Banks

People can store cord blood with a private bank in the hope that, in the future, cord stem cells may be useful, should a member of their own family develop a disease treatable by stem cell therapy.

However, the chances of your child ever needing to use his or her own cord blood are extremely small, so there is no guarantee that the cord blood will ever be needed. Nevertheless, you may feel this is worthwhile, like an insurance policy.

Private companies usually charge a fee for collection and long-term storage. Depending on circumstances, some private banks may store cord blood free of charge for certain families where there is a known genetic condition.

If you have not banked with a private bank and your child develops a blood related disorder, immune system disorder or metabolic storage disorder in the future, then you still have other options. These are:

- Cord blood from a public bank.
- Use of other sources of therapy such as bone marrow transplants. There is worldwide collaboration with international bone marrow registries to find suitable matches for patients who require a bone marrow transplant.
- Treatment from a sibling who matches a family member and can give bone marrow.

Fernandez Hospital currently follows the guidelines issued by the Royal College of Obstetricians & Gynaecologists (RCOG), London, UK. The RCOG remains unconvinced about the benefit of storing cord blood with a private bank, for families who have no known medical reason to do so.

## How is Cord Blood collected safely?

### **Cord blood must be collected safely. It is important that:**

- A trained technician who is not involved in your or your baby's care collects the cord blood. It is important that neither your obstetrician nor your midwife should be distracted from looking after you and your baby during and immediately after childbirth.
- There should be no alteration in your 'usual management' of labour, such as the delivery of the placenta or clamping of the cord. Some evidence indicates that immediate cord clamping may be harmful to babies. However, delaying cord clamping can prevent a successful cord blood collection.

### **Cord blood collection may not be advisable or possible if:**

- The baby is premature
- You have a multiple pregnancy
- The cord around the neck needs to be cut early to deliver the baby
- You are delivered by emergency caesarean section
- You are being prescribed certain medication
- You or the father of the baby have tested positive for transmissible infection(s)

## Making an informed decision

If you are considering private banking you should discuss this with your doctor. You may wish to consider the following points:

- Once you have made a decision about banking, you should let your doctor know.
- There are a number of uncertainties surrounding cord blood storage. For instance, who owns the cord blood legally? What are your rights if the facility storing the cord blood breaks down and the cord blood becomes unusable?
- Private Banks are run by private companies. If you decide to bank through a private company, you will enter into a contract between yourself and the company. It is your responsibility to check that you are happy with all the terms and conditions of the contract. Some private companies make additional charges to screen for bacterial diseases.

## Some questions to ask

- Is the bank accredited/licensed for storage of cord blood?
- Has it been licensed by an appropriate Indian Government agency?
- Does the bank follow proper collection procedures?
- What happens if no stem cells are collected?
- Does the bank follow best practice testing regimens and sample storage?
- Where is the cord blood stored?
- Is the transportation to the storage facility checked to ensure the blood is kept appropriately?
- When is the stored cord blood no longer useful?
- What happens to the cord blood when it is no longer needed?
- Who is responsible for screening the blood to ensure that HIV/hepatitis- positive cord blood is stored separately?
- Could my child, or any of my children, use the cord blood, if I am not around?
- What will happen to my cord blood, if the bank is no longer functioning in the future?

## Useful additional information

- A Parent's Guide to Cord Blood Banks. [www.parentsguidecordblood.com](http://www.parentsguidecordblood.com)
- The Society of Obstetricians and Gynaecologists of Canada Patient information leaflet. [http://www.sogc.org/health/pdf/cord-bloodfinal\\_e.pdf](http://www.sogc.org/health/pdf/cord-bloodfinal_e.pdf)
- The Anthony Nolan Trust is a charity which recruits and registers bone marrow donors. <http://www.anthonynolan.org.uk/>
- [www.rcog.org.uk](http://www.rcog.org.uk)

## Is there anything else I should know?

It is really important for you to know that Fernandez Hospital has NO contract of any kind with any private cord blood banks. It is also vital for you to know that we NEVER pass any confidential patient information of any kind to such agencies.

