Is Cord Blood Banking Necessary?

Description

Becoming first-time parents sure comes with lots of stuff (and costs) to think about. One of the key concerns we had was whether we ought to store our baby's cord blood – our gynae and relatives were for it, but the sentiments online were mixed.

We've always heard that storing a baby's cord blood was expensive, but when we enquired, the costs were honestly much lower than what we expected. At just \$5,000+ to store our baby's cord blood for 21 years, that works out to be **less than \$20 a month** – even lesser than what we pay for (financial) insurance!

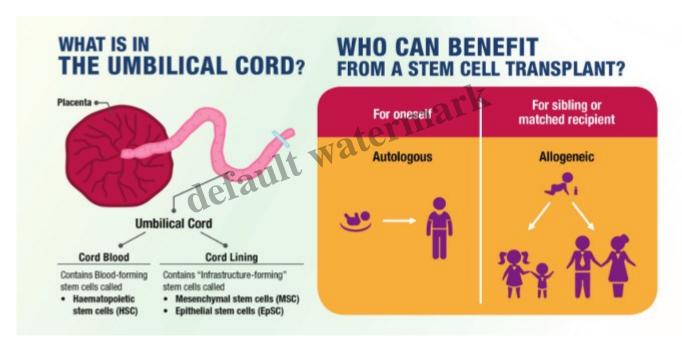


Image credits

Stem cells have the immense potential to treat cancers and blood disorders, and have shown promising results thus far in many clinical trials which are ongoing for regenerative therapies. This is largely due to their unique ability to transform into specialized cells which are able to perpetually create more copies of themselves.

At present, over 35,000 cord blood transplants have already been performed around the world to treat various diseases. In fact, I see it as a form of insurance (like what I told my husband when trying to convince him that the cost was worth it), except that it is even better than typical (financial) insurance because whereas those can only cover or offset costs, this form of biological insurance has the potential to treat and cure the condition!

When we asked around, it turned out that most Singaporean parents choose either to:

- store with a private bank
- donate it to the public bank

– discard it entirely (what a waste!)

However, our journey towards deciding whether to bank our child's cord blood (and later on, WHICH company to choose) wasn't as straightforward as we thought it would be.

We met up individually with the sales representatives of Cordlife, Stemcord and Cryoviva, and even spoke to Singapore Cord Blood Bank (SCBB), but received such conflicting advice that we were honestly stumped whether or not to privately store or donate it. It didn't help that when we asked around, there were many who shared that they donated their baby's cord blood to SCBB instead of choosing to store it privately.

But when I dug further, it turned out that SCBB rejects most of the donated samples. Read more here on why I didn't think donating my baby's cord blood to SCBB was a good idea after speaking with SCBB, Cryoviva, Stemcord and Cordlife.

<u>This article</u> also provides another point of view that encapsulates ours. This line really resonated with me:

Why pay a few thousand dollars to privately bank your baby's cord blood when you can donate it for free to a public cord blood registry? If your child ever gets sick, you can just look for a "match" in the public registry and it should be there, right? Wrong.

Wait, isn't cord blood banking a scam?!

After spending weeks researching on this issue, I most certainly do not think so.

Science and technology has developed so much such that today, stem cells from cord blood has been proven useful in the treatment over over 80 diseases. The figure was less than half just a decade ago. With over 800+ clinical trials ongoing around the world, and as scientists continue to find new ways of using stem cells for treatment, just imagine how much more potential we could discover in the near future. Some new areas where research into cord blood stem cells is currently being done include brain injury, juvenile diabetes, cerebral palsy, congenital heart defects, hearing loss, liver disease, spinal cord injury, and more.

The umbilical cord blood and lining contains three types of stem cells – haematopoietic, epithelial and mesenchymal stem cells – which have shown immense potential in not just treating various diseases, but also aiding the repair of injured tissues and organs.

Of course, it is still fairly early days, but the cord blood banks are already saving lives (SCBB and Cordlife have had many cases of successful transplants) and as research continues, it is very likely that in the future, more ways of using cord blood to treat more diseases may be found. Don't forget that these undifferentiated cells contain a powerful ability to specialise into different cell types, which is where their promise of treating diseases lie in.

The science is exciting! Who knows what the future will bring, and what more we will discover? I don't want to have to rule out the possibility for my child and my family just because we decided not to bank

it to save a few thousand bucks – like what my husband said, he'll rather forgo one family holiday and spend the money where it matters...for health.

Can't stem cells be used from other sources aside from cord blood?

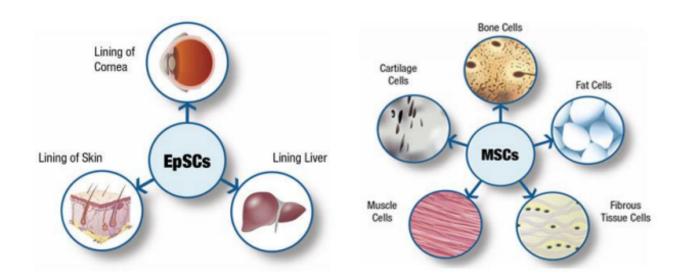
Indeed, haematopoetic stem cells can also be obtained from the adult bone marrow, but not all transplants work out either. On the other hand, cord blood stem cells require a less stringent HLA matching compared to bone marrow stem cells, and also a lower risk of developing graft vs. host disease.

The cost is also significantly different – it can cost up to \$64,000 to procure a matching unit for bone marrow or public cord blood banks (or up to \$40k provided you're lucky enough to find a match in SCBB locally), whereas it costs nothing if you had banked it privately for your own family's use.

Should I store just the cord blood, or the cord tissue as well?

This was another difficult decision we had to make, because it meant paying more if we wanted to store more than just the cord blood stem cells. So I did more research and spent hours on Google Scholar to understand more about the three types:

	Haematopoietic stem cells	Epithelial stem cells	Mesenchymal stem cells
Can differentiate into	Healthy red blood cells, white blood cells and platelets	The soft tissues that connect, support or surround certain structures or organs in our body including the lining of the cornea, skin and liver	Structural tissues – bone, cartilage, muscle, fibrous tissues, and fat.
Can be used to treat	Blood diseases or cancers such as leukaemia, immune- deficiencies, metabolic disorders, refractory anaemia, tumors, bone marrow failure, etc.	Soft tissue repair (eg. diabetic surface ulcers, burns on skins), organ lining regeneration (liver, pancreatic or gastrointestinal lining), and even eye (to replace cornea membrane)	Tissue repair (eg. in stroke patients, heart failure, Alzheimer's disease, Parkinson's disease, spinal cord injury, repair of the bone, catrilage and/or tendon, liver failure), immune modulation (HIV, type 1 diabetes, Graft vs. host disease)
Source	Cord blood	Cord lining	Cord tissue (Wharton's jelly)



Some other common concerns we found online (on Hardwarezone forums) were:

- 1. During labour, if the gynae missed something and the cord blood is not sterile, it will be rejected and you will still need to pay —> this is not true, as there is no payment if your cord blood is not viable for storage.
- 2. Why not donate it to the cord blood bank which is free, and you'll get the cord blood within one year if you need it? -> This is not entirely true as it may have already been discarded (without your knowledge!) or used by someone else. Read what I discovered about SCBB here.
- 3. If you do not have hereditary blood problems, chances are, you will not need it -> not true, as certain blood disorders develop as a result of the environment. Moreover, if one's blood condition is hereditary, then all the more their cord blood will NOT be suitable for usage, since it would have already contained the genetic defect anyway!
- 4. They are so freaking expensive...they use the fear of humans to make them sign up -> "expensive" certainly is a subjective term, but for as low as \$19 a month, if you can afford it, I think it is a small price to pay for such biological insurance. Even my monthly premiums for hospitalisation insurance costs wayyyy more than that, and my ISP cannot *treat* me (it can only waive off my financial bills), whereas cord stem cells offer me at least a chance of treatment or even a cure!

If you can afford to go on holiday or spend on expensive tuition for your kids, I believe one can most definitely afford to do cord blood banking.

All in all, I do NOT think cord blood banking is a scam at all, and in fact, after spending hours researching on whether to store or even donate, I'm even more sure that for any parents who can afford it, private cord blood banking is the way to go.

The last thing you'll want is (lest anything happens in the future) for you to have looked back in regret

and think, if only I had banked my child's cord blood!

I know I don't want to have, or live with, that sort of regret.

Next up, I'll be comparing between the different options and plans for cord banking in Singapore!

With love, Budget Babe

Category

- 1. Family
- 2. Pregnancy

