

## Guide to **critical questions** when evaluating newborn stem cell banks:

**Is the bank able to provide a LIVE stem cell count (not total nucleated cell count) before preserving my child's cord blood and cord tissue?**  
Why does the number of LIVE stem cells matter?

Total Nucleated Cell (TNC) count is misleading as it does not provide a LIVE stem cell count, viability measurement, or indicate if the cells counted are dead or alive. Stem cells account for about 1% of TNC count.\*

Live stem cells are the only count that matters because physicians request a specific number of live mesenchymal stem cells (MSCs), not TNC, for their patients. At VitalCells, we know it is imperative to know how many live cells your child has access to throughout their lifetime.

**How many cord tissue MSC samples have been released for a client's personal use?**

There have been 0 releases of cord tissue MSCs from traditional cord blood storage facilities, regardless of saving the cord tissue for over 15 years. VitalCells is the only company that provides the technology and access to our clients' personal MSCs in conjunction with their medical provider.

**Can my child use their cells with a medical practitioner of choice if requested?**  
What kind of access does my child have to their own stem cells?

Other banks often limit the usage of a child's stem cells based on the inclusion criteria for a clinical trial, and each trial has different criteria. When medical researchers conduct a trial, they recruit participants with appropriate health problems and medical histories, based on what they are hoping to study. \* Your child might be eligible for one trial and not others.

At VitalCells, access to your personal stem cells is NOT limited to clinical trials. We also provide recommendations to medical professionals and permit use with a practitioner of your choice.

**Does the company isolate, extract, and grow LIVE stem cells before preserving and are they able to continue growing more in the future for the lifetime of my child?**

Traditional cord blood storage banks that offer cord tissue storage only freeze a segment of tissue without extracting MSCs, leading to limited culture expanding capabilities of these cells in the future. There are only 1-3 million live MSCs in an umbilical cord—if the cord tissue is frozen whole instead of isolating the cells first, fewer viable (live) MSCs will be available after thawing with frozen tissue. \*

Research studies have shown that MSC viability from fresh cord tissue is 8x better than from frozen cord tissue. \*

Many clinical studies safely administer at least 1 million live MSCs/kg of body weight per treatment. \* With these guidelines, it is unlikely there will be sufficient live stem cells for even one treatment without expanding the cells. You should take comfort in storing your child's cells at a bank that has the technology to grow the cells TODAY and potentially more in the future for repeat access. This is the VitalCells difference.

**How does my child access their cells and are there any limitations?**  
Why is this important to know?

According to the largest family cord blood bank, "there are currently no uses of cord tissue stem cells," \* which results in children not having access to their cord blood and tissue MSCs when stored in traditional cord blood banks.

This is misleading. While there are no FDA approved uses, there are thousands of research papers and clinical trials underway using MSCs from cord blood and cord tissue.

Most importantly, MSCs are being released daily from autologous (personal) stem cell banks like VitalCells.



Newborn Stem Cell Educational Videos

\* References available upon request.

Visit [www.vitalcells.com](http://www.vitalcells.com) for more information