Complete 2015-16 Global Cord Blood Banking Industry Report

Description: The global cord blood banking industry has matured substantially over the past few years, creating both serious threats and novel opportunities. Serious threats to the industry include:

- New accreditation requirements that have increased the cost structure of cord blood banks
- A decline in cord blood transplants in 2013, within the U.S. and other geographical regions
- Low rates of turnover for stored cord blood units
- Expensive cord blood transplantation procedures, costing from $200-300K each
- Difficulty with educating obstetricians about cellular therapies
- Poor press coverage in many regions worldwide, including major news outlets

Other uncontrollable factors that could threaten the industry include: new legislation, changes in transplant reimbursement, continually evolving accreditation requirements, the potential for competitive approaches to be shown as more optimal, patent challenges for processing or transplant technologies, changes in public perception of private vs. public banking, shift in policy recommendations by influential medical organizations, and changes in government support.

Marketing pressures are also impacting the industry, with the term “cord blood” becoming one of the 20 most expensive search terms on Google, reaching more than $20 per click for global search traffic and close to $40 per click for U.S. search traffic.

However, there are also emerging opportunities, including:

- The potential to expand market size through increasing public awareness
- New clinical trial data supporting applications for hematopoietic stem cells (HSCs) from cord blood and mesenchymal stem cells (MSCs) from cord tissue
- Improving public perception toward stem cell therapies
- Substantial deal-making within the industry, including mergers, acquisitions, and funding rounds
- The potential for cross-organizational collaboration through formation of Cord Blood Industry Associations (occurring in within U.S. and South America)
- A trend toward diversification within the industry, with cord blood banks effectively becoming stem cell banks through the storage of cord blood, cord tissue, and in some cases, placental tissue, amniotic fluid, and more.

Within this rapidly evolving ecosystem, those who choose to commit to understanding current opportunities and threats will be positioned for a substantial strategic advantage.

While these factors vary somewhat by market, there is a substantial advantage to having a global understanding of the market. You need to understand successes and failures by region to be fully informed of your competitive environment. You need to have a firm understanding of emerging trends that could expand to new regions and impact your business model. In addition, research advances, clinical trial findings, and technology advances do not know international boundaries. They are shared nearly instantly from region-to-region.

The cord blood market is global in nature and understanding dynamics limited to your region is not sufficient for making strategic, informed, and profitable decisions.

Furthermore, cord blood banks now exist in every developed country, as well as within most developing nations. With approximately 500 cord blood banks operating worldwide, maturation of the global cord blood market means that each cord blood bank is now fighting harder for market share.

Currently, the U.S. cord blood banking industry is the most mature cord blood banking market in the world, having the:

- First company to offer cord blood storage (1995)
- Largest total number of industry participants (both public and private)
- Greatest number of cord blood units (CBU) stored
- Most cord blood units banked relative to population
However, other regions have contributed major events as well. In 2008, a Taiwanese company, HealthBanks Biotech Company Ltd. became the first company to offer cord tissue storage; it was not until July 2010 that the first private U.S. cord blood bank began offering the service (Cord Blood Registry). Since then, the trend of cord tissue storage has had a significant impact on the cord blood banking industry, with a large percentage of cord blood banks worldwide offering the service.

In China, the government shocked the cord blood industry worldwide when it announced that only one cord blood bank would be allowed to operate within each province, and official government support, authorization, and permits would be required. While the China Cord Blood Corporation has since earned permits for three of the seven Chinese provinces (holding majority share of the Chinese cord blood market) and is now competing as one of the fastest growing cord blood banks in the world, several other providers of cord blood services disappeared when this legislation was passed.

In Italy and France, it is illegal to privately store one's cord blood, which has fully eliminated the potential for a private market to exist within the region.

In Ecuador, the government is now creating the first public cord blood bank and has instituted laws such that private cord blood banks cannot approach women about private cord blood banking options during the first six months of pregnancy. This has created a crisis for the private banks, and there are now only two remaining in Ecuador.

Clearly, it is vital to understand the market dynamics and risks, as well as the emerging opportunities within different regions of the world.

Since the first stem cell transplant occurred more than 50 years ago (1957), there has been a nearly exponential increase in stem cell transplants, and in late 2012, the millionth stem cell transplant occurred, a landmark event in stem cell medicine (1). Cord blood stem cells have distinct advantages over other sources, including that they are:
- Younger
- More adaptable
- More pure

These traits result from cord blood stem cells being the earliest (non-controversial) stem cells that can be extracted from a living human, and therefore haven't been exposed to viruses, chemicals, or pollutants in the environment that can alter cell function.

While bone marrow stem cells are the most commonly recognized type of stem cell used in transplant, cord blood stem cells are increasingly showing advantages over other stem cell sources, including reduced immune reactions (such as GvHD) and a greater flexibility for HLA-mismatched cord blood units to be used in transplant. Although cord blood banks began offering their services in the United States in the mid-1990's, it is within the past ten-years that the percentage of cord blood transplants has significantly increased.

Today, it is clear that the stem cells contained within cord blood banking have the potential to improve and save lives. Since the first cord blood transplant was performed in 1988, stem cells derived from umbilical blood have been used in more than 30,000 transplants worldwide. However, many expectant parents still do not fully understand the significance of cord blood storage.

Awareness Levels Remain a Substantial Limitation to Market Potential

A study published in the 2006 Journal of Reproductive Medicine showed that a third of expectant parents are unaware of the option to preserve cord blood. Of the two-thirds who have some knowledge, 74% describe themselves as "minimally informed." The study also identified that 84% of prenatal patients expected their obstetricians to be able to provide them with information on the subject of cord blood banking; however, only about 14% were educated about cord blood banking by their nurse or obstetrician.

Unfortunately, a January 2014 Parent Survey (600+ responses from recent and expectant parents), identified that these percentages have shifted very little since 2006, despite attempts in most countries worldwide to encourage healthcare providers to offer prenatal patients balanced information on public and private cord blood banking options.
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