## The Tourist Trap: Stem Cell Edition

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There are more ways to get scammed than you can count, but the worst of them are those that risk your life and health. Every year, thousands of people travel to clinics in hopes of receiving stem cell treatments, many of whom are seeking lifesaving cures for crippling and terminal diseases or to avoid aging. However, what are being advertised as "lifesaving cures" typically provide little improvement and come with high risk of tumors, worsening of current symptoms, major financial impacts, or even death.

The Food and Drug Administration (FDA) is responsible for protecting the U.S. public from dangerous products from many types of industries—including the stem cell industry. The FDA ensures public safety through product investigations (like clinical trials), lengthy approval processes, commissioning of external experts to assess data, and strict regulations [6]. Currently, there is an extremely short list of FDA-approved stem cell products (found <a href="here">here</a>, all of which use stem cells derived from cord blood [6]. Cord blood is a source of blood-forming stem cells that are currently FDA approved to treat blood cancers, including leukemia, as well as other blood disorders. The FDA regulates cord blood depending on its intended use, source, and the level of processing.

However, the FDA clearly states that cord blood is not a miracle cure and that patients should be skeptical of its uses outside of blood stem cell regeneration [7].

Despite the limited number of FDA-approved stem cell products, there are still a plethora of clinics in the U.S. and in other countries around the world opting to use unapproved stem cell treatments. Many of these clinics use stem cells derived from fat tissues, bone marrow, umbilical cord blood, or the placenta. The clinics that offer these unapproved therapies often do not employ a single physician [1]. These clinics promise the ultimate experience for treatments, claiming they are willing to go to great lengths to assist people with booking trips, transportation, language barriers, financing, and payment plans.

Based on the average listing prices from clinics available online and patient reports, stem cell therapy prices may range from \$4,000 to \$50,000 [2]. Clinics will also upsell patients during their visits with additional unnecessary medical products.

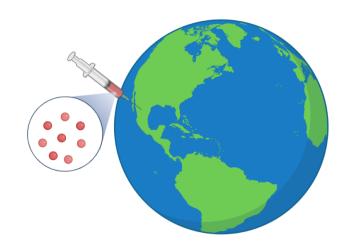
According to a recent stem cell tourism victim who sought treatment for progressive heart failure at a clinic in Ensenada, Mexico, the clinic gave her an additional kidney diagnosis that had never been discussed or diagnosed by her U.S.-based physician [4]. They recommended stem cell treatments for her kidneys as well as her heart. The patient had originally turned to the clinic as a last-ditch effort to stop the progression of her worsening heart failure. After purchasing stem cell treatment injections for both her

kidneys and heart, they went on to coax her into additional "energy boosting stem cell treatments" during her visit [4].

The kidney and heart stem cell treatment received by this patient is an example of a treatments that is experimental at best and potentially lethal at worst. Other people have not been so lucky. In 2010 a woman died following an injection of stem cells into her kidneys at a clinic in Thailand—the stem cells developed into a massive tumor [8]. In 2019 a report was published describing a 38-year old man who developed a large tumor on his spine following a stem cell treatment in Portugal—the tumor is inoperable and his health is now steadily declining [9]. Unregulated stem cell therapies, foreign and domestic, have caused significant harm to their victims (a non-exhaustive list can be found <u>here</u>). The patient who visited the Ensenada clinic suffered no ill effects that could be traced back directly to her treatments. However, she now needs a pacemaker due to the ongoing heart problem, has yet to display any form of kidney problems, and has not felt any changes in energy levels several years post-treatment [4]. Luckily, she did not suffer the post-treatment fates many others have faced, including complete vision loss, bone-like growths in eyelids, pneumonia, heart attack, necrotizing facial tissues, lesions, tumors, and death [3].

Occasionally, these clinics face legal actions through personal lawsuits from injured patients or surviving family members. Sadly, it seems that these cases often reach a quick settlement with no real judicial decision and without mandated changes

against these manipulative practices
[3]. The settlements do little to protect
future victims and, in some cases,
clinics will simply change their name
to continue to prey on vulnerable
patients without the association of
their previous medical atrocities [5].



The FDA and many scientists have put together an important list of recommendations for those who still dare to pursue this high risk, little-to-no-reward stem cell excursion scam [6]. Anyone considering stem cell therapy should always consult first with a licensed physician. It is important to know that the treatment offered will not be FDA approved. Patients should also investigate the clinic's compliance with the local and federal laws (pertaining to safe business practices and the legal use of their therapies) in its respective country. Any government oversight or regulations covering said products should also be researched. All this information may be vital for patients to pursue legal action against the clinics or to receive healing treatments once the harm has been done.

Patients should always ask questions and do their own research on the clinics, products, and cell lines they are considering. Thorough experience checks on employees and the presence of a licensed physician at the clinic should be a minimum requirement

[6]. Even with all the above precautions considered, unregulated stem cell therapies should not be pursued as it could result in the death of yet another stem cell tourism victim.

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