CryoSave

The family stem cell bank

Stem cells have never been younger than now

Regenerative power in every cell.


Embrace a future of possibilities,
by storing your client's stem cells
Now you can provide your clients with an invaluable resource and preserve the biological potential of their own cells for the future.

CryoSave now offers the processing, expansion and storage of Adipose-Derived Stem Cells (ADSCs).

What are Adipose-Derived Stem Cells?

Adipose-derived stem cells (ADSCs) are stem cells found in fatty tissue. Stem cells are like blank slates with the potential to develop into various specialized cell types. In the case of ADSCs, this means they can potentially become cells like bone, muscle, fat, cartilage and even nerve cells.

In the field of regenerative medicine, the focus has historically been on mesenchymal stem cells (MSCs) harvested from bone marrow, umbilical cord blood and tissue. However, the bone marrow approach has two drawbacks. Firstly, bone marrow contains less mesenchymal stem cells than adipose tissue. Secondly, the harvesting procedure itself is often invasive and painful, requiring needles inserted into the bone.

As the demand for faster and more accessible treatments increases, adipose-derived stem cells (ADSCs) have emerged as the most valuable alternative. These stem cells are obtained from fatty tissue, which is a much more abundant and readily available source compared to bone marrow. Liposuction procedures can be used to collect ADSCs with minimal invasiveness. Additionally, ADSCs offer the advantage of being versatile. They have the ability to differentiate into various cell types, making them potentially applicable for a wider range of therapeutic uses. These key characteristics make ADSCs exciting candidates for future advancements in cell-based therapies, because:

Abundance and Easy Access:
ADSCs can be readily harvested from adipose tissue, which the human body has plenty of and easy access to. This ease of access facilitates their use in various clinical settings.

Immunomodulatory and Anti-Inflammatory Effects:
ADSCs possess immunomodulatory properties, meaning they can regulate immune responses. This feature is crucial for tissue repair and regeneration, as it helps modulate inflammation and promotes healing.

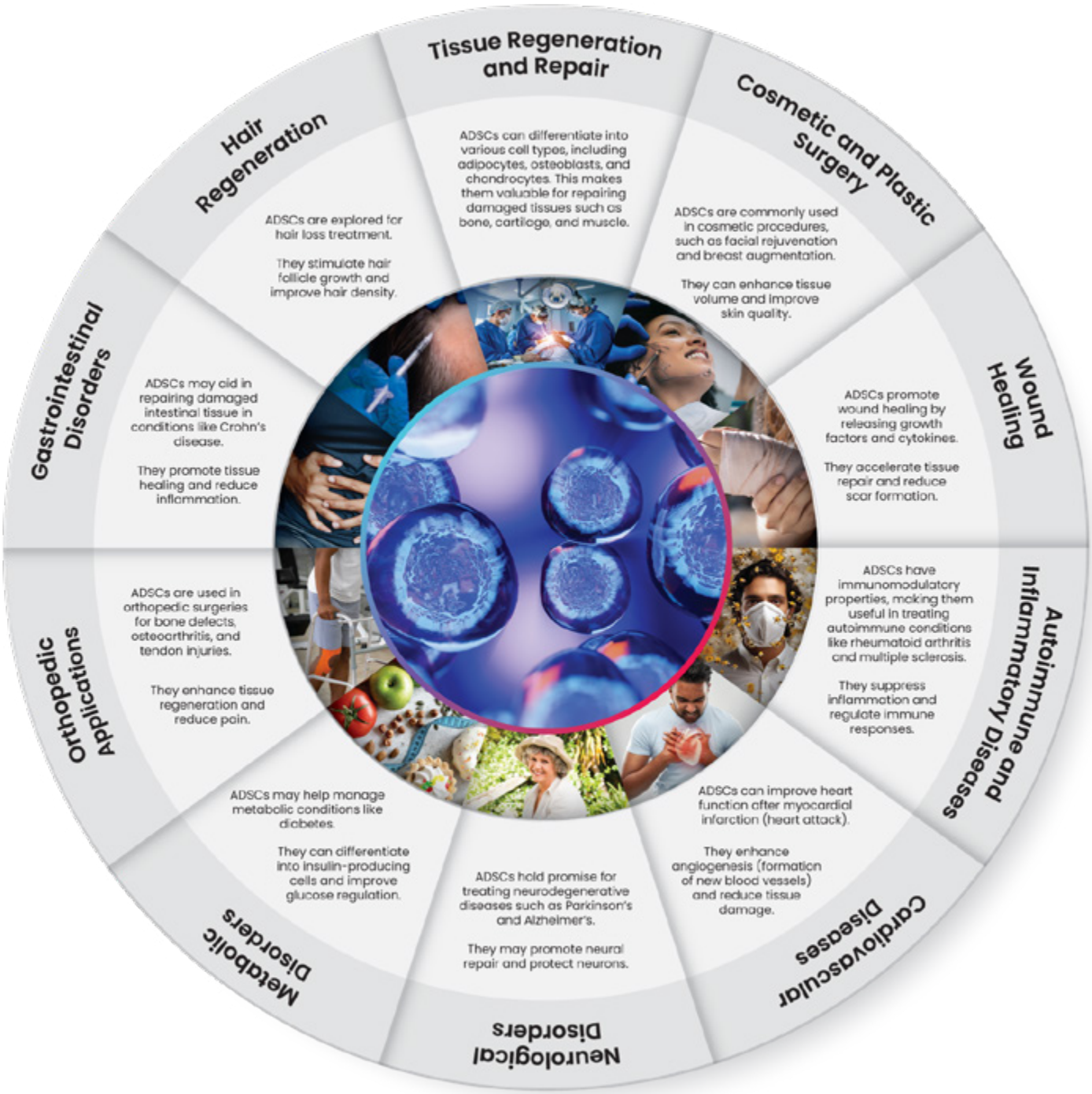
Autocrine and Paracrine Functions:
ADSCs secrete various bioactive molecules, including growth factors and chemokines. These factors contribute to tissue repair by promoting cell survival, angiogenesis (formation of new blood vessels), and tissue remodeling.

Differentiation Potential:
ADSCs can differentiate into various cell types, including those from mesodermic, endodermic, and exodermic lineages. This ability allows them to participate in tissue regeneration and repair processes.

Potential applications for Adipose-Derived Stem Cells (ADSCs):

Conditions that can be treated with ADSCs range from traumatic injuries to neurodegenerative and endocrine metabolic disorders, and postsurgical reconstructions. ADSCs also show huge potential in aesthetic treatments for anti-aging.

Adipose-derived stem cells (ADSCs) have shown promise in various applications within the field of regenerative medicine. Some of these applications include:



What CryoSave offers

CryoSave South Africa (Pty) Ltd (or "CryoSave SA") has been cryopreserving cord blood (and tissue) stem cells for South African and international clients for more than 20 years.

CryoSave SA is an independent Stem Cell Establishment, licensed by the South African National Department of Health for the collection, processing, cryopreservation, storage, and distribution of stem cells. ***CryoSave is internationally accredited by the Association for the Advancement of Blood & Biotherapies (AABB).***

CryoSave wants to invite medical specialists in various fields, to partner with us to ensure that more people have access to non-invasive treatments, as well as benefit from treatments to slow down the ageing process. ADSCs have diverse applications across medical specialties, ranging from wound healing to tissue regeneration. Collaborative efforts among specialists can maximize the benefits of ADSC-based therapies in clinical practices, as follows:

Plastic and Reconstructive Surgeons

- ADSCs are commonly used in plastic and reconstructive surgery. They can enhance tissue regeneration, improve wound healing, and aid in procedures such as breast reconstruction after mastectomy or facial rejuvenation.
- Plastic surgeons often utilize ADSCs for autologous fat grafting, where they transfer a patient's own fat (containing ADSCs) to enhance volume and contour.

Orthopaedic Surgeons

- ADSCs play a role in orthopaedics by promoting bone and cartilage regeneration. They are used in treating conditions like osteoarthritis, joint injuries, and fractures.
- Orthopaedic specialists may use ADSCs in combination with other therapies for joint repair and tissue regeneration.

Rheumatologists

- ADSCs have shown promise in autoimmune diseases such as Crohn's disease, systemic lupus erythematosus (SLE), and multiple sclerosis.
- Rheumatologists may explore ADSC-based therapies to modulate the immune response and reduce inflammation in these conditions.

Cardiologists

- ADSCs have been investigated for cardiovascular applications, including repairing damaged heart tissue after a heart attack.
- Cardiologists may collaborate with regenerative medicine experts to explore ADSC-based treatments for heart disease.

Neurologists

- ADSCs hold potential for neurodegenerative diseases. Their secretome (paracrine factors) can support neuronal survival and regeneration.
- Neurologists may explore ADSC-based therapies for conditions like Parkinson's disease, Alzheimer's disease, and spinal cord injuries.

Vascular Surgeons

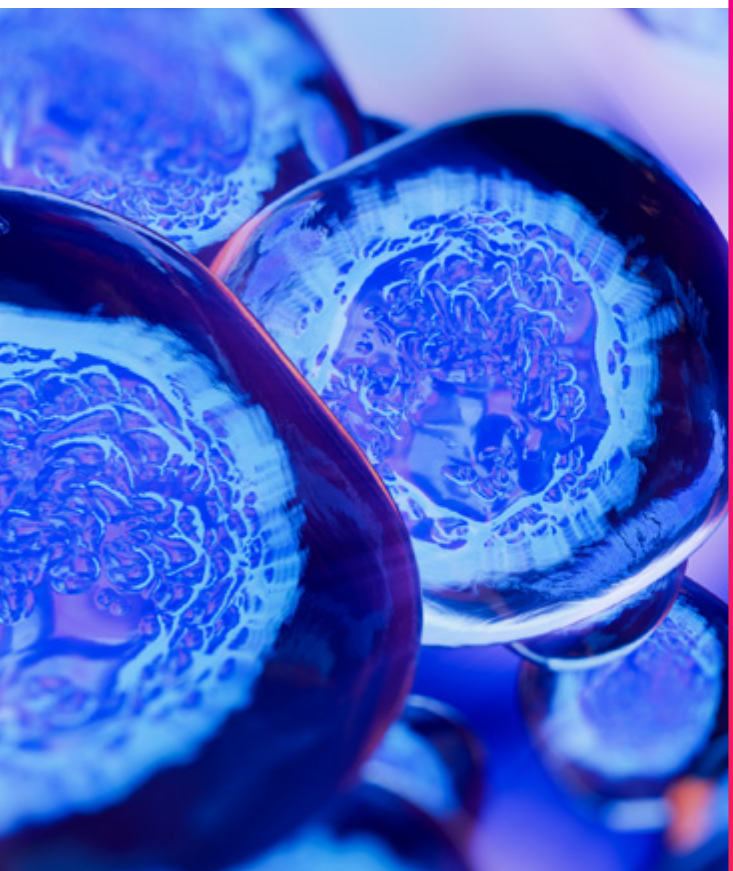
- ADSCs can contribute to vascular repair and angiogenesis (formation of new blood vessels).
- Vascular surgeons may consider ADSC-based approaches for patients with peripheral artery disease or non-healing wounds.

Endocrinologists

- ADSCs may play a role in metabolic diseases, such as diabetes. They can enhance tissue repair and improve insulin sensitivity.
- Endocrinologists may explore ADSC-based interventions to address metabolic dysfunction.

Dermatologists

- ADSCs are used in aesthetic medicine for skin rejuvenation, scar reduction, and hair restoration.
- Dermatologists may incorporate ADSCs into treatments for skin aging, acne scars, and alopecia.

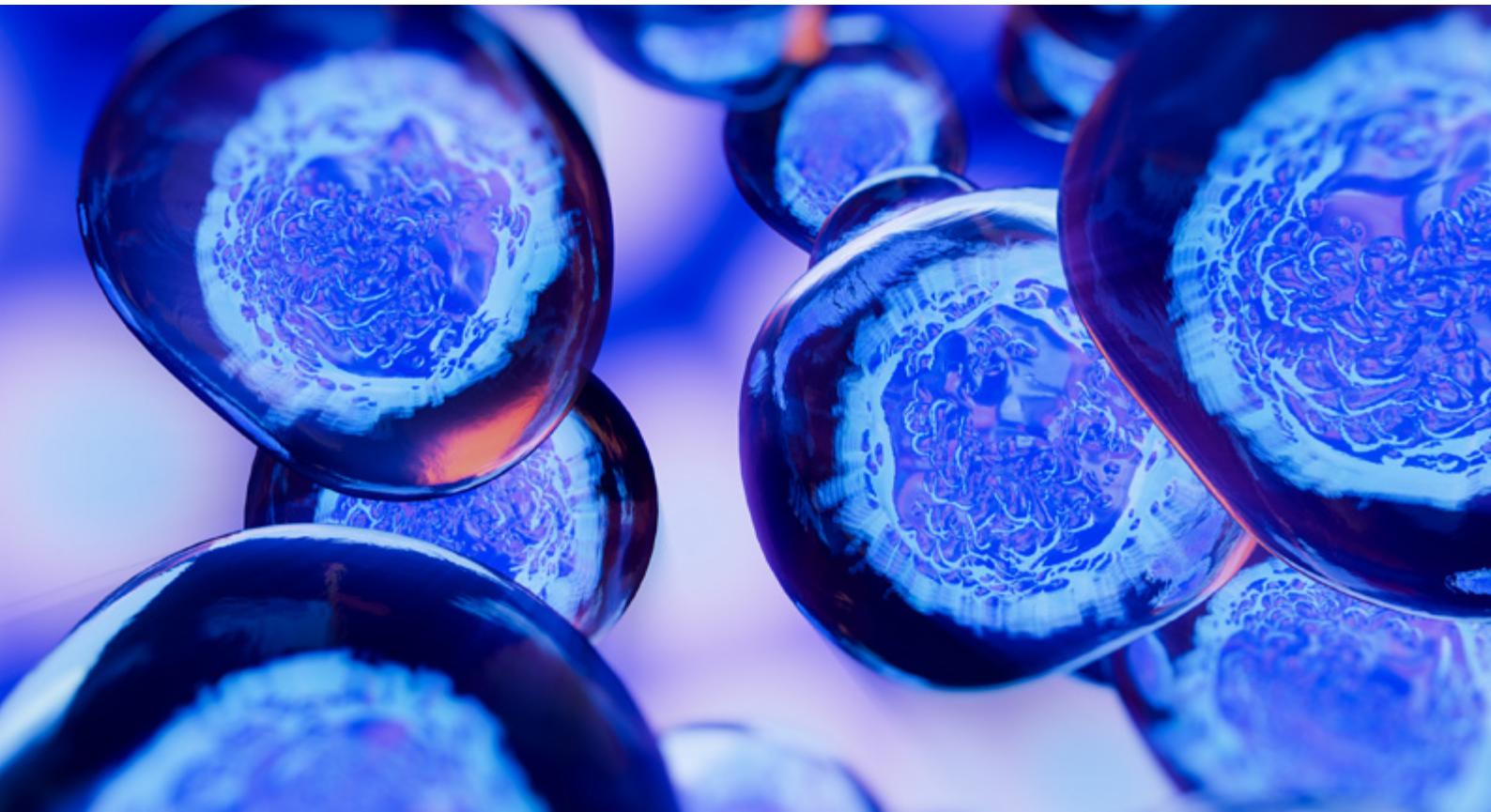


Partner with Us: Expand Your Patients' Regenerative Medicine Options.

By working with us, our partners and their patients will benefit from the processing, expansion, and cryopreservation of their adipose derived stem cells to be used whenever and as many times as required.

CryoSave will offer the following services

1. One of our medical professionals will do the adipose collection using our collection kit.
2. CryoSave will arrange sample collection and ensure its secure transport to our state-of-the-art laboratory for processing and storage.
3. Processing of the sample, including Stromal Vascular Fraction (SVF) separation.
4. Tests will be done for infectious diseases, such as: Cytomegalovirus IgG, Cytomegalovirus IgM, TPHA – Syphilis, HIV combo screen, HBV - Hepatitis Bs Antigen screen, HBV - Anti-Hepatitis B core total, HCV - Anti-Hepatitis C screen, Nucleic acid tests (HIV, HBV, HCV).
5. Isolation and expansion of the ADSCs.
6. Characterisation of the stem cell population and viability.
7. Cryopreservation of the samples.
8. Release of the samples to the treating medical professional.



Our Medical Partners can choose the specific sample preparation, sample sizes, and tests required, based on the application of such samples. We can provide short-term as well as long-term storage. Once the sample is required for application, the sample is distributed to the relevant medical facility.

Our process

1. **Medical Partner Sign-up**
   Patients will sign up with CryoSave, as per the registration documentation that will be made available online and to our medical partners. Once signed up, CryoSave will inform the medical partner to proceed with the collection.

2. **CryoSave Collection Kit**
   CryoSave will provide pre-labelled collection kits to all our medical partners or courier directly to the patient.

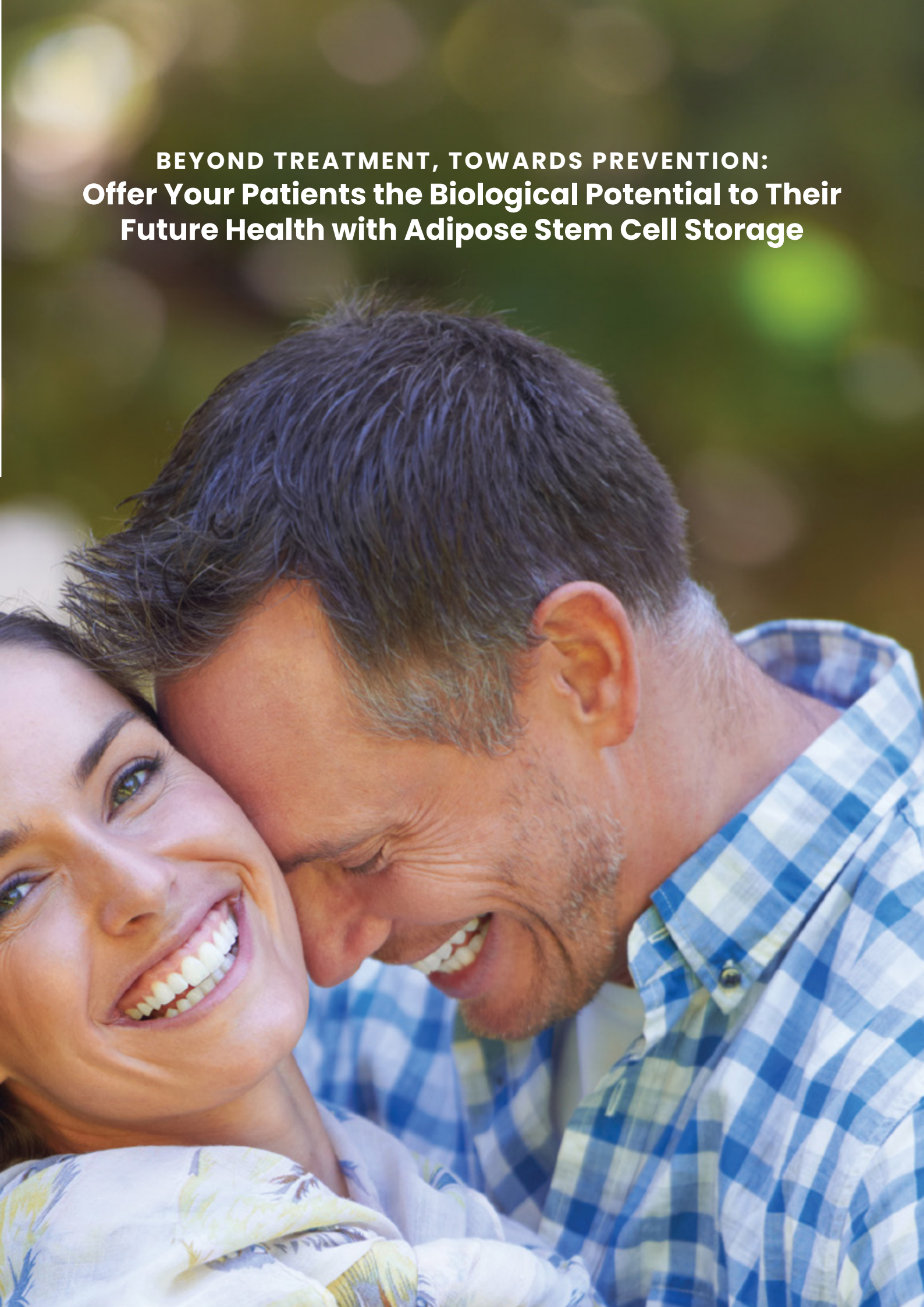
3. **Sample collection**
   Once the medical partner has collected the sample, CryoSave will collect the sample from the Medical Partners facility.

4. **Processing, Expansion and CryoPreservation**
   Our state-of-the-art laboratory will process, expand and cryopreserve the samples as per volumes required.

5. **Release for application purposes**
   Once the specimen is required for application, CryoSave will release the sample and deliver it to the specified facility.

CryoSave's comprehensive services ensure seamless integration into your practice, from collection kits tailored to your specialty to state-of-the-art processing, expansion, and cryopreservation techniques.

Empower your clients with the tools to preserve their biological potential and explore a world of therapeutic possibilities.



BEYOND TREATMENT, TOWARDS PREVENTION:

Offer Your Patients the Biological Potential to Their Future Health with Adipose Stem Cell Storage

A brief history of the business

CryoSave South Africa was part of a cord blood bank group that was the 5th most influential and the 6th biggest cord blood bank globally. In 2020 CryoSave South Africa signed agreements with two large stem cells banks, CSG-Bio and CryoSave Dubai and PBKM in Poland as part of a collaborative effort. Our stem cell bank is approved to acquire, process, preserve, store and distribute stem cells (authorisation in terms of regulations R183 of RG No. 9699 of 02 March 2015) - Authorisation No. J1/2/4/6 SCB-002052014. Authorisation was granted by the Director General of the Department of Health of South Africa and is effective till modified or repealed.

Future-Proof Your Practice: Partner with Us to Deliver Excellent Stem Cell Solutions

About CryoSave South Africa

CryoSave is committed to providing the highest standards of stem cell processing and storage combined with high-quality products and services. We strive to act with the highest level of integrity and respect for people, society, and the environment.

Your decision to choose CryoSave is more than just about stem cells. It's about your clients aspirations for a secure and healthy future. That's why CryoSave has made this invaluable technology and our all-inclusive stem cell banking services available to our medical partners.

We offer medical professionals the opportunity to access cutting-edge scientific applications at the best value. This is our way of becoming an extended part of your practice, by contributing to your secure future and the future of your clients. The CryoSave South Africa Laboratory is a fully functional processing and storage facility with a Quality Management System which is AABB accredited and ISO 9001 certified. This facility has the full capability to process and store adipose-derived stem cells, as well as umbilical cord blood and tissue stem cells. These processes form part of the international material and safety regulations according to the AABB standards and conforms to international accreditation guidelines of ISO 9001, AABB, as well as relevant South African Acts and Regulations, on a continual basis.

Adipose-derived stem cells (ADSCs) are the most valuable alternative to bone marrow stem cells due to their abundance, ease of access, and potential to treat a wide range of conditions from wound healing to neurodegenerative diseases.

THE FUTURE OF REGENERATIVE MEDICINE IS HERE:

Partner with CryoSave for Comprehensive Adipose Stem Cell Solutions

Contact us.

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