



## Regenerative Medicine

Regenerative medicine represents a new paradigm in human health because the vast majority of treatments for chronic and life-threatening diseases focus on treating the symptoms, not curing the disease. In fact, there are few therapies in use today capable of curing or significantly changing the course of a disease. New regenerative medicine is changing this by engineering, growing, and regenerating tissues and organs using biological processes similar to those normally used in humans.

Benefits of AxoBioFluid® AxoBioFluid® is a human allograft fluid derived from the amniotic layer of the placenta. The two primary cell lines which reside in the amnion are human mesenchymal stromal cells (hMSC) and human amnion epithelial cells (hAEC). Both of these cells are considered to be pluripotent stem cells. AxoBioFluid® contains growth factors released while amniotic cells are grown in culture such as epidermal growth factor (EGF), vascular endothelial growth factor (VEGF), and transforming growth factor – beta (TGF- $\beta$ ). These proteins are essential for significant therapeutic benefits when used as a treatment for various injuries and degenerative conditions

AxoBioFluid® is immuneprivileged, anti-inflammatory, anti-fibrotic, pro-vascular, and cytoprotective because of the cells being sourced from the amnion. These secreted factors also signal endogenous progenitor cells to promote regeneration and repair of damaged or degenerated tissue. Relevant Conditions • Degenerative disorders such as osteoarthritis • Joint pain • Inflammatory conditions such as: • Bursitis • Tendonitis • Fasciitis • Soft tissue injuries such as: • Ligament & Tendon sprains • Muscle tears

### **Amniotic Stem Cell benefits include:**

- Amniotic stem cell therapy is very safe and effective.
- Amniotic stem cells rely on naturally occurring anti-inflammatory agents and contain NO STEROIDS.
- Amniotic stem cells help lubricate the cartilage since they contain hyaluronic acid (a natural lubricant of the joint)
- Amniotic stem cells contain growth factors which stimulate tissue growth.

Most patients may not feel improvement for at least 3 weeks and possible 6-8 weeks. Once you feel improvement, you will notice continued improvement expanding over 6 months.