

The Next Wave In Regenerative Medicine

- Derived from the powerful Wharton's Jelly of the human umbilical cord
 - Known for its growth factors, high molecular weight hyaluronic acid, structural proteins, cytokines, and extracellular vesicles, including exosomes
- Provides structural support for tissues and joints
- Exciting alternative in regenerative medicine therapy
- Can be used widely within orthopaedic, sports medicine and pain management practices

Regenerative Therapy

Regenerative medicine is game-changing with its healing qualities. Now with BioIntegrate's™ GeneXSTEM¹ Injectables, you can harness powerful properties of Wharton's Jelly (WJ) derived from human umbilical cord tissue.

Wharton's Jelly has the unique characteristics of providing structural support in the body. As a special tissue, it also insulates its surrounding structures.

Wharton's Jelly products contain growth factors, cytokines, extracellular vesicles, including exosomes and other essential components necessary for regeneration. It consists of high amounts of extracellular matrix components, which are mainly collagen, hyaluronic acid and proteoglycans.² In addition, it is an amazing reservoir of many peptide growth factors that are essential to healing and growth.³

We believe products from umbilical cord tissue can be used as alternatives to NSAIDs & steroid injections and help assist with pain in the field of musculoskeletal injuries.

¹ GeneXSTEM™ Injectables are minimally manipulated human tissue allografts derived from umbilical cord tissue for homologous use. They are not dependent upon the metabolic activity of living cells for its primary function. They comply with the HCT/P 21 CFR 1271 Regulations and Section 361 of the Public Health Service Act.

² Sonolewski K, Bankowski E, Chyczewski L, Jaworski S. Collagen and Glycosaminoglycans of Wharton's Jelly. Neonatology. 1997;71(1):11-21.

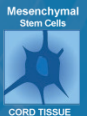
³ Sonolewski K, Malkowski A, Bankowski E, Jaworski S. Wharton's Jelly as a reservoir of peptide growth factors. Placenta. 2005;26(10):747-752.

Advantages of GeneXSTEM™

1. Using GeneXSTEM™ is less invasive when compared to platelet rich plasma (PRP), bone marrow aspiration, or adipose tissue extraction. No harvesting of tissue is required.
2. Umbilical cord related products have higher concentrations of growth factors, peptides, hyaluronic acid and extracellular vesicles, including exosomes compared to PRP and amniotic based products.
3. Wharton's Jelly has a high anti-inflammatory property due to its large concentrations of growth factors and cytokines.
4. Wharton's Jelly contains high levels of hyaluronic acid which assists in lubricating, supporting & aiding mobility in joints and tendons.

Studies report that mesenchymal stem cellular tissue products isolated from umbilical cord tissue are more effective than those isolated from adult cells.¹

¹ Caplan, AI, 2007. Adult MSC for Tissue Engineering vs Regenerative medicine Jnl of Cellular Physiology



BioIntegrate's™ High Quality Processing

All BioIntegrate™ umbilical cord tissue products are obtained from full-term, normal C-section deliveries from consenting donors. These non-embryonic tissues undergo comprehensive medical, social and blood testing prior to procurement. After stringent screening, the tissues are procured, processed, and tested in accordance with standards established by the American Association of Tissue Banks (AATB) and FDA requirements. We take every precaution to minimize potential risks of infectious disease transmission by performing infectious disease testing at a certified lab in accordance with the Clinical Laboratory Improvement Amendments of 1988 (CLIA) and 42 CFR part 493 and the FDA. BioIntegrate™ tests each step of its product along the way to ensure the highest quality safety standards are met and executed.

Wharton's Jelly Human Umbilical Cord Products Can Be Most Effective

Find out how you can use GeneXSTEM™ Injectables as an alternative to assist with musculoskeletal injuries, ailments involving soft tissue and joints in both acute and chronic settings.

Call us at 1-800-544-BIO7 to learn more or visit us at BioIntegrate.com.





About BioIntegrate™ LLC

BioIntegrate™ is a regenerative medicine company, manufacturing and distributing products derived from Wharton's Jelly of the powerful human umbilical cord.

We are dedicated to researching and providing solutions that help others benefit from the most cutting edge therapies available today in biologics and regenerative medicine.

GeneXSTEM™ Injectables can be widely used within the orthopedic, sports medicine and pain management industries.



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