







About Wharton's Jelly

Regenerative Labs Wharton's jelly allografts are regulated under section 361 of the Public Health Service Act (PHS) and 21 CFR Part 1271. ProText™ is processed to preserve the structural integrity and original relevant characteristics of Wharton's jelly as observed in the donor and is intended for homologous use only. Regenerative Labs' products are ethically derived and do not contain any material obtained from an embryo or fetus. Regenerative Labs birth tissue allografts are derived from healthy, consenting mothers after full-term, live, planned, Cesarean section (C-section) deliveries.

Advantages Of Wharton's Jelly

This connective tissue contains high amounts of extracellular matrix components including collagen types I, III, and V, elastin, and fibronectin that provide a natural scaffold to facilitate cellular adhesion^{1,2}. Wharton's jelly primarily provides cushioning and structural support to the umbilical cord but also contains a natural source of long-chain hyaluronic acid as well as numerous cytokines and growth factors. Studies have described placental tissues to be "immune privileged" as they rarely evoke an immune response in the body, reducing the risk of adverse reaction⁴.

	GROWTH FACTORS	COLLAGEN TYPES I & III	CYTOKINES	PROTEO-GLYCANS	HYALURONIC ACID
 WHARTON'S JELLY (WJ)					
STEROID					
HYALURONIC ACID (HA)				●	●
PLATELET-RICH PLASMA (PRP)	●		●	●	
BONE MARROW ASPIRATE CONCENTRATE (BMAC)	●		●	●	

1. Sobolewski K, Bańkowski E, Chyczewski L, Jaworski S. Collagen and glycosaminoglycans of Wharton's jelly. Biol Neonate. 1997;71(1):11-21. doi: 10.1159/000244392. PMID: 8996653.
2. Velarde F, Castañeda V, Morales E, Ortega M, Ocaña E, Álvarez-Barreto J, Grunauer M, Eguiguren L, Caicedo A. Use of Human Umbilical Cord and Its Byproducts in Tissue Regeneration. Front Bioeng Biotechnol. 2020 Mar 10;8:117. doi: 10.3389/fbioe.2020.00117. PMID: 32211387; PMCID: PMC7075856.
3. Gupta A, El-Amin SF 3rd, Levy HJ, Sze-Tu R, Ibim SE, Maffulli N. Umbilical cord-derived Wharton's jelly for regenerative medicine applications. J Orthop Surg Res. 2020 Feb 13;15(1):49. doi: 10.1186/s13018-020-1553-7. PMID: 32054483; PMCID: PMC7017504.
4. Deus IA, Mano JF, Custódio CA. Perinatal tissues and cells in tissue engineering and regenerative medicine. Acta Biomater. 2020 Jul 1;110:1-14. doi: 10.1016/j.actbio.2020.04.035. Epub 2020 May 14. PMID: 32418650.