

The naturally occurring factors that aid in a product's ability to deliver on the promise of regenerative medicine are diverse - it is important to understand the totality of component factors found in each tissue type

Tissue Source		PHARMA	PERIPHERAL BLOOD	PLACENTA			UMBILICAL CORD		BONE MARROW	ADIPOSE
Product		Steroid, NSAID Synthetic HA	Platelet Rich Plasma (PRP)	Amniotic Fluid	Amniotic Matrix	Amniotic Membrane	Umbilical Cord Blood	Umbilical Cord Matrix	Bone Marrow Aspirate	Lipoaspirate
GENERAL CYTOKINES	Fetuin - A			●●	●	●	●	●●●	●	●
	Interleukin 37			●	●	●	●	●	●	●
	Macrophage Colony Stimulating Factor		●	●	●	●	●	●	●	●
	Serpin A4		●	●	●	●	●	●	●	●
	Syndecan - 4			●	●	●	●	●	●	●
GROWTH FACTOR CYTOKINES	Bone Morphogenic Protein - 7			●	●	●	●	●	●	●
	Complement Component 5a			●	●	●	●	●	●	●
	Fibroblast Growth Factor		●	●	●	●	●	●	●	●
	Platelet Derived Growth Factor - AA		●●●	●	●	●	●	●	●●	●
	Thrombospondin - 2		●	●	●●	●	●	●●●	●	●
HOMEOSTATIC CYTOKINES	Cystatin - B		●	●	●	●	●	●	●	●
	Galectin - 9		●	●	●●●	●	●	●●	●	●
	Granulysin		●	●	●	●	●	●	●	●
	Lipocalin - 2		●	●	●	●	●	●	●	●
	Intracellular Adhesion Molecule 1		●	●	●	●	●	●	●	●
SCAFFOLDING PROTEINS	Adhesion G Protein				●	●	●	●		
	Collagen 1, 2, 3				●●●	●●●		●		
	Elastin				●	●		●		
	Fibronectin				●	●		●		
TISSUE COMPONENTS (OTHER)	Mesenchymal Stromal Cells (MSC)							✓	✓	✓
	Viable MSCs							●●●	●	●●
	Exosomes - naturally occurring		✓	✓	✓	✓	✓	✓	✓	✓
	Hyaluronic Acid (HA)	●●●		●	●	●		●●		
	Biologically Young Source			✓	✓	✓	✓	✓		

✓ - yes
 ● - indicates lowest concentration
 ●● - indicates medium concentration
 ●●● - indicates highest concentration

• Number of dots reflect relative factor amounts as compared to other tissue types. All data represented on this grid is informed by either or all available literature, external validation and internal testing.
 • Empty data fields indicate quantities either found in trace amounts, or quantities not specified in literature.
 • Citations and references on file with Predictive Biotech.