

#### | Maximizes Platelet Recovery

Enhanced Tissue Regeneration

### | Minimizes Pro-Inflammatory WBCs

Extended Pain Relief

(€1023 |GMP | KÐA | ISO13485 |US Patent 8343426B2

# What is Leukocyte Poor PRP (LP-PRP)?

- Leukocyte-poor platelet-rich plasma (LP-PRP) is derived from peripheral blood that contains a rich source of growth factors to stimulate soft tissue healing and repair.
- It is defined as a safe, biocompatible, autologous biological product engineered from patients own's blood.

#### Normally,

- Whole blood is made up of,
- Leukocyte-poor PRP contains,



Therefore LP-PRP contains,

- Oncentrated amounts of healing factors such as PDGF, VEGF, FGF and EGF.
- $\, \circledast \,$  Enhanced bioactive proteins and growth factors such as IGF-1, TGF-  $\!\beta.$
- $\, \ni \,$  High amounts of stem cells markers vital for tissue regeneration and repair.

## Why LP-PRP therapy?

LP-PRP is characterized by significantly reduced percentage of pro-inflammatory WBCs that cause cell death and tissue damage.

LP-PRP is nearly devoid of any white blood cells with enhanced platelet concentrate that facilitates boosted tissue healing without any pain or discomfort.

LP-PRP also releases anti-inflammatory molecules that stimulate tissue regeneration without any excessive inflammation.

# **Studies Suggest**

High white blood cells concentrations in PRP have shown to increase the expression of inflammatory markers causing cell death and painful reactions.

LP-PRP minimizes the presence of the inflammatory cytokines and cause a major accumulation to the growth factors molecules in the tissue matrix.

Intra-articular LP-PRP injections devoid of white blood cells for mild to moderate osteoarthritis (OA) have been reported to reduce pain and heal tissues without any excessive inflammation or swelling.



# What is Tubexplus?

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This unique product combines the dual-benefits for selective extraction of high concentrate Leukocyte Poor Platelet Rich Plasma (LP-PRP).

Tubex<sup>®</sup> PRP/Cell Concentration

State-of-art proprietary cellular filtration system







### Why Tubexplus ?

Contains proprietary state-of-art Nanofiber Leukocyte reduction filter.

Ensures 90% Platelet Recovery.

Facilitates 90% WBC Removal from PRP.

Generates True Leukocyte Poor PRP.





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rejuvenation







Scars and Anti-ageing



**Plantar Fasciitis** 

#### **References:**

1. Filardo, Giuseppe, et al. "Leukocyte-poor PRP application for the treatment of knee osteoarthritis." Joints 1.3 (2013): 112.

2. Simental-Mendía, Mario, et al. "Leukocyte-poor platelet-rich plasma is more effective than the conventional therapy with acetaminophen for the treatment of early knee osteoarthritis." 136.12 (2016): 1723-1732.

3. Riboh, Jonathan C., et al. "Effect of leukocyte concentration on the efficacy of platelet-rich plasma in the treatment of knee osteoarthritis." The American journal of sports medicine 44.3 (2016): 792-800.

4. Wang, Shan-zheng, et al. "Is exclusion of leukocytes from platelet-rich plasma (PRP) a better choice for early intervertebral disc regeneration?."

5. Jia, Jun, et al. "The differential effects of leukocyte-containing and pure platelet-rich plasma on nucleus pulposus-derived mesenchymal stem cells: implications for the clinical treatment of intervertebral disc degeneration." Stem Cells International 2018 (2018).

6. Yerlikaya, Melek, et al. "Comparison of effects of leukocyte-rich and leukocyte-poor platelet-rich plasma on pain and functionality in patients with lateral epicondylitis." Archives of rheumatology 33.1 (2018): 73.

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