



Tropocells® PRP

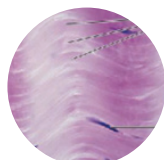
AUTOLOGOUS PLATELET - RICH PLASMA PREPARATION SYSTEM FOR ORTHOPEDICS & SPORTS MEDICINE

Platelet Rich Plasma (PRP) therapy allows patients to take advantage of the body's natural capacity for healing at a greatly accelerated rate.

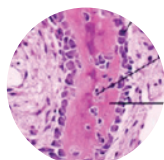
Tropocells® PRP creates concentration of platelets which contain growth factors, cytokines and other agents that trigger the healing cascade by stimulating cellular proliferation of fibroblasts and osteoblasts, promoting synthesis of extracellular matrix and enhancing collagen synthesis. When a high concentration of healing platelets and growth factors are introduced into an injured area, the healing process is jump started.

WHAT TO EXPECT:

Introducing a high concentration of platelets comprising bioactive proteins directly into the injured area may help in:



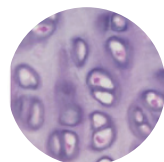
Connective tissue healing and limiting scar tissue



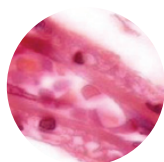
Bone regeneration (spinal fusion, bone fracture healing)



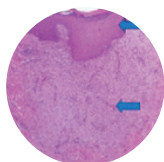
Tendinopathies healing



Cartilage and ligament regeneration and repair



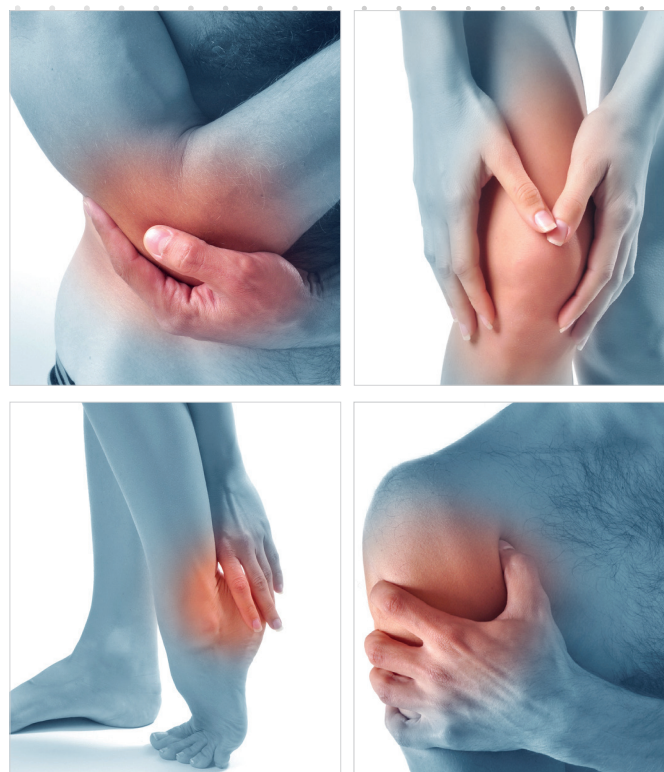
Development of new blood vessels



Wound healing

IMPROVING THE QUALITY OF LIFE BY:

- Stimulation of chondral anabolism
- Reduction of catabolic processes
- Proliferation of osteoblasts and fibroblasts
- Recruitment & differentiation of mesenchymal stem cells
- Improvement of overall joint homeostasis
- Reduction of synovial membrane hyperplasia
- Overall alleviation of pain and swelling



THE OPTIMAL BIOLOGICAL ADVANTAGES OF TROPOCELLS® PRP DUE TO THE UNIQUE SEPARATION GEL:

- High Platelet Concentration, X4-5 and up to X10 folds, about 90% yield
- No RBCs & Low Granulocytes
- Increased Mononuclear cells
- Easy to use, rapid processing time, closed system
- Biocompatible
- FDA 510(k) cleared for orthopedic applications only.
- Proven performance and clinical efficacy



Tropocells® PRP preparation



EXAMPLES FOR PRP EXPERIMENTAL EVIDENCE

PRP FOR JUMPER'S KNEE

- Better midterm clinical results compared with focused ESWT (1).

PRP FOR OSTEOARTHRITIS

- PRP is significantly more effective than HA according to clinical outcomes and WOMAC scores (2, 4).
- Significant improvement in knee injury and OA outcome scores (3).

PRP IN PLANTAR FASCIITIS

- PRP is significantly more effective and durable than cortisone for chronic recalcitrant cases of PF (5, 7).
- Complete symptom resolution after 2 months. 77.9% of patients had complete pain resolution at 1 year (6).

PRP FOR ACHILLES TENDON

- Stimulates earlier functional return of ROM, while no wound complication was observed (8).
- Improves pain scores and increases tendon vascularization (9).

PRP FOR SHOULDER AND ELBOW- LATERAL EPICONDYLITIS

- Improves pain and lowers risk of complications than autologous blood (10).
- Reduces pain and significantly increases function, exceeding the effect of corticosteroid injection (11).

PRP FOR SHOULDER AND ELBOW- ROTATOR CUFF REPAIR

- Improves tendon-to-bone healing in patients with small-moderate tears and reduces re-tear rates (12, 13).
- Reduces pain and elevates internal rotation index improvement factor (14, 15).

PRP FOR TENDONS HEALING

- PRP is more effective than HA for low grade articular degeneration.
- Positive effect on patellar tendon harvest site healing and reduced pain (16).
- PRP stimulates human tenocyte proliferation and increases collagen synthesis (17).



REFERENCES

1. Vetrano M. et al., AJSM. 2013 | 2. Meheux CJ. et al., Arthroscopy. 2015 | 3. Sampson S. et al., Am J Phys Med Rehabil. 2010 | 4. Cerza F. et al., AJSM. 2012 | 5. Monto RR. Foot & Ankle Inter. 2014 | 6. Barrett SL. & Erredge SE., Podiatry Today. 2004 | 7. Jain K. et al., Foot. 2015 | 8. Sanchez M. et al., Am J Sports Med. 2007 | 9. Gaweda K. et al., Int J Sports Med. 2010 | 10. Arirachakaran A. et al., J Orthop Traumatol. 2015 | 11. Peerbooms JC. et al., Am J Sports Med. 2010 | 12. Cai YZ. et al., J Shoulder Elbow Surg. 2015 | 13. Barber FA. et al., J Arthro Related Sur. 2011 | 14. Zavadil DP. et al., JECT. 2007 | 15. Randelli P. et al., J. Shoulder and Elbow Surgery. 2010 | 16. De Almeida AM. et al., J Sports Med. 2012



www.estar-medical.com

Tropocells® is a registered trademark of Estar Technologies Ltd.
T-578646-10-IN

Patented by Estar Technologies Ltd.

P-570257-US // P-570201-US // P-570201-IL // P-570257-IL