MYCELLS

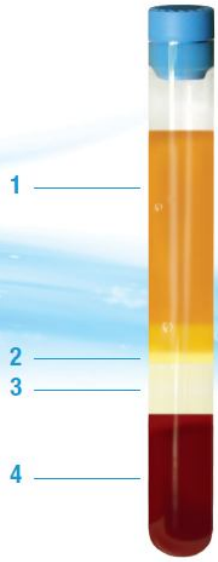
Autologous Biological Cell Regeneration

Treat Your Cells Treat Yourself

MyCells® system for the preparation of Autologous Platelet-Rich Plasma

Separation of blood components

1. Plasma
2. Platelets
3. Z-Gel
4. Red Blood Cells + White Blood Cells



MYCELLS

The MyCells® system for the preparation of autologous platelet-rich plasma uses disposable medical and surgical devices, sterile and authorized for therapeutic use, dedicated to regenerative medicine procedures.

With the MyCells® system, we obtain in particular:

- **MyCells® PRP** - liquid: Injectable Platelet-Rich Plasma (PRP).
- **MyCells® Membrane**: Fibrin membrane for local or suturable use enriched with autologous platelets.

The characteristics of the system are:

√ System that guarantees asepsis
√ 10 mL sample volume
√ Simple, fast and ready to use
√ Highly reproducible and not operator-dependent
√ Safe for the patient and for the operator
√ Package equipped with safety filter

What is MyCells® PRP

1. High-quality PRP (Assessment parameters- FDA Approval)

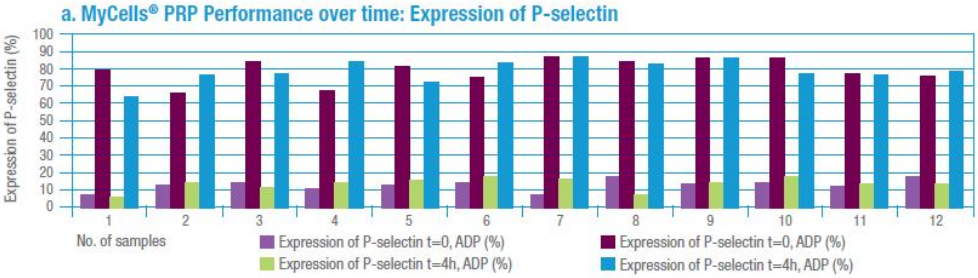
Blood sampling (mL)	PRP obtained in volume (mL)	Platelet yield (%)	RBC contamination	Presence of white blood cells	Platelet concentration factor	Stable separation
10 mL	6,0 ± 1 mL	93 ± 0.2	NONE (<0.01)	NO	From 2 to 10 X	YES

2. High concentration of growth factors (Assessment parameters- FDA Approval)

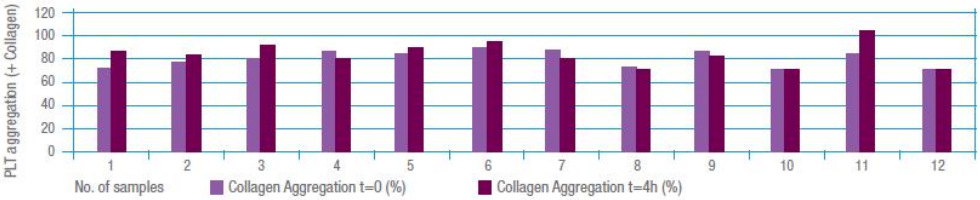
	PDGF-BB (ng/mL)	PDGF-BB (ng/mL) activated	VEGF (pg/mL)	VEGF (pg/mL) activated	EGF (pg/mL)	EGF (pg/mL) activated
Average ± SD N=12	308.33 ± 122.07	2048.33 ± 642.19	72.92 ± 38	220.42± 65.39	73.75± 31.17	269.17 ± 123.07

3. Platelet integrity stable over time (FDA Approval Assessment parameters)

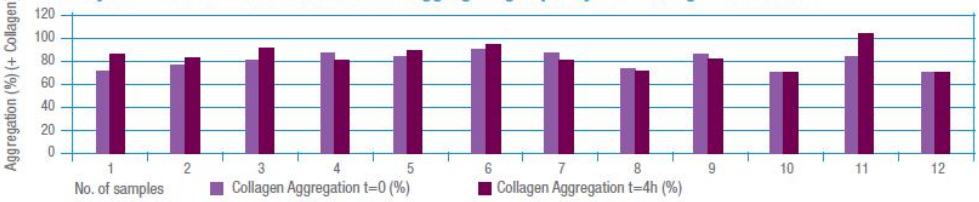
a. MyCells® PRP Performance over time: Expression of P-selectin



b. MyCells® PRP Performance over time: Response to hypotonic stress, maintenance of collagen adhesion capacity



c. MyCells® PRP Performance over time: Aggregating capacity after collagen activation



Cell Regeneration for the treatment of cartilage, tendon, ligament and muscle disorders

The treatment with **Platelet Rich Plasma (PRP)** is an innovative therapy used to treat articular, tendon and muscle pathologies that utilizes the regenerative and reparative properties of the platelet growth factors.

The PRP treatment is designed for the healing of injured tissue allowing, in time, a significant improvement in pain symptoms and a rapid recovery of mobility.

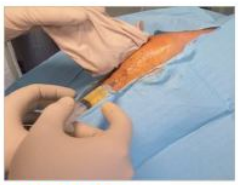
In particular, PRP MyCells® is a pure platelet concentrate with a high concentration of growth factors and is not contaminated by leukocytes, which trigger the release of highly inflammatory cytokines.

It has been shown that PRP, applied topically, activates and accelerates processes of repair of connective tissue. It is used to treat inflammation, muscle and tendon injuries, osteochondral lesions, meniscal lesions and degenerative cartilage diseases.

SAMPLING

CENTRIFUGATION

HARVESTING



APPLICATION

CARTILAGE

- Osteoarthritis and cartilage degeneration
- Chondral lesions
- Meniscal lesions

MUSCLE

- Muscle lesions, strains, sprains

TENDONS

- Patellar tendinopathy
- Epicondylitis
- Achilles tendonitis
- Plantar fasciitis
- Tendinitis
- Rotator Cuff Injury

Greater effectiveness of PRP in the treatment of epicondylitis compared to infiltration of cortisone.

It was shown that the PRP is more effective than cortisone in the treatment of epicondylitis, without unwanted side effects.

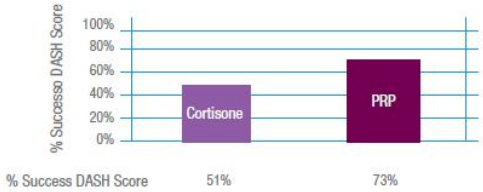


Fig.1 Randomized clinical trial that demonstrates the greater effectiveness of PRP vs cortisone (Peerbooms J, Sluimer J, Bruijn D, Gosens T.) Positive effect of an autologous platelet concentrate in lateral epicondylitis.
PRP versus corticosteroid injection at 1 year follow up Am J Sport Med. 2010 Vol. 38, No. 2 255-262)