

# High Concentration Made Simple



## WHY CELLENIS<sup>®</sup> PRP

Cellenis<sup>®</sup> PRP takes the complexity out of the platelet-rich plasma (PRP) preparation process. It delivers a highly purified platelet concentrate that preserves platelets and removes almost all erythrocytes and neutrophils that promote inflammation.<sup>1</sup>



### **High Concentration**

80% (+/- 9%) Platelet Yield + customizable concentrations up to 4.5x\*



### Monocyte Solution

86.2% of white blood cells in PRP preparation are monocytes



### Low Inflammation

Eliminates almost 100% of red blood cells and 95% of granulocytes



### Safe & Autologous

Class IIb Medical Device, Regulatory Compliant. Non-Pyrogenic - Sterile -Closed System. FDA Cleared 510(k) Class II Medical Device (BK110035), CE Class IIb



### Simple, Quick & Predictable

Small blood draw for high volume plasma, easy to use, reproducible collection process



### Comfortable

Proprietary anti-coagulant produces physiologic pH, which reduces irritation<sup>2</sup>

 Simon M. Chatfi eld, Nathalie Thieblemont, and Véronique Witko-Sarsat. Expanding Neutrophil Horizons: New Concepts in Infl ammation. J Innate Immun. 2018; PMID: 30257246 PMCID: PMC6785650 DOI: 10.1159/000493101

2 Ehrhardt Proksch. pH in nature, humans and skin. J. Dermatol. 2018 Sep; PMID: 29863755 DOI: 10.1111/1346-8138.14489 \* Verified in two published peer reviewed studies. 4.5x achieved by removing PPP prior to collecting PRP.

### **FEATURES & BENEFITS**



### Vacuum sealed, internally coated glass tube designed to:

- Prevent platelets from "sticking" to tube walls
- Precisely draws blood at a pressure that prevents lysing of the cells

#### Proprietary anti-coagulant modified to:

- Reduce acidity while preventing coagulation of platelets
- Deliver non-activated platelets physically positioned on top of gel

#### Separator gel designed to:

- Spare up to 80% (+/-9%) of platelets
- Remove 99.9% of RBC
- Remove 95% of granulocytes

### **PRP MADE SIMPLE**





Step 1: Draw Blood









Step 3 (Optional): Remove PPP



### 4 FACTS EVERY PRP PROVIDER SHOULD KNOW

- 1. Platelets release growth factors<sup>1</sup>
- 2. Cytokines can cause tissue damage<sup>2</sup>
- 3. Neutrophils inhibit healing<sup>3</sup>
- 4. Monocytes enhance healing<sup>4</sup>
- 1 Eizaburo Kobayashi, Laura Flückiger, Masako Fujioka-Kobayashi, Kosaku Sawada, Anton Sculean, Benoit Schaller, Richard J Miron. Comparative release of growth factors from PRP, PRF, and advanced-PRF. *Clin Oral Investig.* 2016 Dec; PMID: 26809431 DOI: 10.1007/s00784-016-1719-1
- 2 A Ferrante, I C Kowanko, E J Bates. Mechanisms of host tissue damage by cytokineactivated neutrophils. *Immunol Ser*. 1992; PMID: 1504146
- 3 Erminia Mariani, and Lia Pulsatelli. Platelet Concentrates in Musculoskeletal Medicine. Int J Mol Sci. 2020 Feb; DOI: 10.3390/ijms21041328
- 4 José Fábio Lana, Stephany Cares Huber, Joseph Purita, Claudia H. Tambeli, Gabriel Silva Santos, Christian Paulus, and Joyce M. Annichino-Bizzacchi. Leukocyte-rich PRP versus leukocyte-poor PRP - The role of monocyte/macrophage function in the healing cascade. *J Clin Orthop Trauma*. 2019 Oct; PMID: 31700202 PMCID: PMC6823808 DOI: 10.1016/j.jcot.2019.05.008





# **Optimal PRP Formula**

		1	
Cellenis <sup>®</sup> PRP 22ml	4		
Platelets concentration	4.5x	Supp	
RBC (10/ul)	0.0		COOP N
WBC (10/ul)	0.2		
Granulocytes %	8.5		
Mononuclear cells %	86.2		
PDGF (pg/ml)	2048		
 VEGF (pg/ml)	220		

**Regulatory status:** (i) CE certified Class IIb; (ii) FDA cleared 510(k) Class II medical device: Tropocells PRP is intended for the safe and rapid preparation of autologous platelet-rich plasma (PRP) from a small sample of blood at the patient point of care. The PRP is mixed with autograft or allograft bone prior to application to a bony defect for improving handling characteristics. 510(k) number: BK110035



email us: info@cellenis.com or visit us: www.cellenis.com