



Transfusion Medicine Center
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Regenerative Medicine and Blood Components Production Laboratory
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**EVALUATION OF JOINT PRP KIT SYSTEM
PERFORMANCE**

The **JOINT PRP KIT** (Assembled by the JOINT S.r.l) is a dedicated device for PRP extraction (**Class IIa with CE approval**).

The system is sterile and produces a single dose of Platelet Rich Plasma (PRP), it's an open system so, according to the Italian Legislation regarding blood components (DM 2 November 2015), the PRP produced must be directly applied to the patient and can't be stored or frozen.

The JOINT PRP KIT system perform the collection of 20 mL autologous whole blood anti-coagulated into a syringe and then directly transfer it into the separation device.

The loaded device is placed into a specific centrifuge and centrifuged according to a preset program: 3200 RPM/5 minutes.

The blood loading and PRP recovery from the separation device occurs guaranteeing the attack of a sterile syringes with a luer lock connection.

The system is easy to use, fast and suitable for the point of care. The tests carried out show that the obtained PRP respects the rules established by Italian Legislation (D.M. November 2, 2015) about platelets concentration (800,000-1.200.000 platelets / microliter), in a final volume of 2 mL of PRP. The presence of the WBC could be reduced by slightly reducing the final volume (about 200 microlitres less), this variation can, however, affect the number of collected platelets.

Average features of PRP obtained with JOINT PRP KIT:

Baseline Volume mL	Baseline PLT $10^3/\text{mm}^3$	Baseline WBC $10^3/\text{mm}^3$	PRP Volume mL	Platelets PRP $10^3/\text{mm}^3$	WBC PRP $10^3/\text{mm}^3$
20	188	4.8	2	950	8.6



GELIFICATION TEST

The gelification of the PRP produced with JOINT PRP KIT occurs easily by adding 0.5 mL of Calcium Gluconate / Chloride (final volume 2.5 mL), the average gelling time is 8/10 minutes.

