**Appendix 1**

The index knee was evaluated by ultrasound with the participant in a supine position with a knee flexion of 30° and maximal flexion (> 90°). The following parameters were evaluated:

1. synovial hypertrophy with gray scale (grades 0 to 4) and presence of power doppler (grade 0 to 4);
2. quantification of joint effusion (measured with knee flexed at 30°, on the longitudinal axis);
3. articular cartilage morphology (grade 0-3):
   1. Grade 0: normal, if they showed a monotonous anechoic band having a sharp hyperechoic anterior and posterior interfaces;
   2. Grade 1: mild degenerative changes: loss of the normal sharpness of cartilage interfaces and/or increased echogenicity of the cartilage;
   3. Grade 2A: moderate degenerative changes, if in addition to above changes, clear local thinning (less than 50%) of the cartilage;
   4. Grade 2B: moderate degenerative changes, if local thinning of the cartilage more than 50% but less than 100%;
   5. Grade 3: severe degenerative changes: 100% local loss of the cartilage.

**Appendix 2**

Subanalysis

Despite the absence of difference between groups, we performed a post-hoc subanalysis to investigate potential predictors of improvement with PRP or plasma treatment:

i) VAS for overall pain <6 versus ≥ 6 cm at baseline;

ii) KL2 versus KL3 at baseline;

iii) synovitis grades 0 or 1 versus 2 or 3 at baseline;

iv) power doppler absent versus present at baseline;

v) joint effusion < 4 mm versus ≥ 4 mm at baseline;

vi) VAS for overall pain comparing two groups (PRP versus placebo; Plasma versus placebo);

vii) OMERACRT-OARSI "major" responders versus "minor" responders plus non-responders, with “major” responders defined as improvement in pain or function ≥ 50% and absolute improvement ≥ 20;

viii) worsening rate (number of participants with worsening in each group);

ix) volume of PRP and plasma injected ≤ 3.2 ml versus > 3.2 ml.

There was no difference in the VAS for overall pain and function subscale of WOMAC in any of the subgroups analysed.