Reviewer's report

Title: Platelet-Rich Plasma vs Hyaluronic Acid to treat knee degenerative pathology: study design and preliminary results of a randomized controlled trial.

Version: 1 Date: 11 October 2012

Reviewer: Isabel Andia

Reviewer's report:

Major compulsory revision
The title does not reflect that this is a preliminary analysis
The main outcome variable has not been identified; discussion and conclusions about OA severity and suitability of treatment are not adequately supported by the data

Minor essential revisions
1. Information about clinicaltrial.gov identifier is lacking
2. Page 2, Abstract, please be explicit about “real potential of the procedure”, do you mean efficacy??
3. What is the main outcome variable? Primary and secondary outcome measures should be specified. It would be interesting to know changes of physical functioning and pain, and percentage of therapeutic responders to PRP or HA injections, and the comparison.
4. Page 3, Background section: Please, explain “indiscriminate clinical application”; are you planning to identify responders? Attending to severity criteria?
5. Page 4, third paragraph: PRP has rapidly evolved and there are now at least 4-5 different versions, as already described in the scientific literature. Thus it is no longer acceptable to present the clinical data without including what type of PRP was used. The authors do not describe the leukocyte content in their PRP, neither the type of PRP activator is described; these parameters clearly influence outcome. If their PRP does not contain leukocytes and/or is not activated before injection it should be explicitly reported. Please discuss limitations regarding PRP stability after freezing-thawing
6. Page 3 and 6. This area of research is very active, clinical references in the introduction need to be updated. A multi-center level I clinical trial, should be included Sanchez et al. Arthroscopy 2012. The last paragraph in page 6 of the discussion should be changed.
7. Please discuss if changes in self-reported outcomes are clinically meaningful.
8. Please explain better how do you establish “most appropriate clinical use”? (in page 6 last paragraph).
9. Discussion, page 7, first paragraph: the authors may discuss sample size
before concluding about treatment efficacy in patients with early or advanced OA. Again, I would suggest identifying % responders in both sub-groups

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

'I declare that I have no competing interests' below