Reviewer’s report

Title: Does PRP enhance bone-implant integration? A systematic review

Version: 1 Date: 31 July 2013

Reviewer: Matthias Schulz

Reviewer’s report:

In the current manuscript, the literature considering studies trying to elucidate the effects of platelet rich plasma (PRP) on the bone implant integration of different materials is analyzed.

Therefore, the literature found in the PubMed database was evaluated. After screening, 83 studies were considered for the review.

1. Is the question posed by the authors well defined?

Yes.

2. Are the methods appropriate and well described?

The authors could state how the screening was performed. Has any article been read or have the abstracts been screened for exclusion.

3. Are the data sound?

The authors should check whether the titanium section is covered by the topic of the review. All other materials/methods that are analyzed in the review are supposed to be bone substitutes or transplants.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

Yes.

5. Are the discussion and conclusions well balanced and adequately supported by the data?

Yes.

6. Are limitations of the work clearly stated?

Yes.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Yes.

8. Do the title and abstract accurately convey what has been found?
Yes.

9. Is the writing acceptable?

Yes.

Major Compulsory Revisions

1. The literature examining the paragraphs of Bioactive glasses and Titanium does not fit. The authors should check the numbering of the literature.

Minor Essential Revisions

1. The question posed in the title is not clearly answered in the conclusion. One option would be to state that a concluding answer to the question is not possible regarding the current literature.

2. Line 74: The term “chemical agents” seems to be a little bit misleading. It should be changed into “mediators”.

3. In the Methods section, the mesh terms for the search in the PubMed database are listed. The authors used the term “osseointegration”. In the rest of the manuscript the term “osteointegration” is used. The authors should be consistent throughout the review and utilize the same term.

4. In the Results section, in line 118 to 122, it is stated, that

“...In particular, RCTs and comparative trials have been analysed. Only papers that compared the results of specific treatments with or without PRP were considered. Those using PRP in all the treated groups and where other factors were the only difference were excluded. All papers documenting PRP augmentation for orthopaedic procedures were described separately to understand the evidence available on its potential in this field...”

This should be better inserted in the Methods section as far as it is not describing any results.

5. Line 164: “from” should be replaced using “by”

6. Line 284 – 293: The authors should check whether the titanium section is covered by the topic of the review. All other materials/methods that are analyzed in the review are supposed to be bone substitutes or transplants.

7. Line 326: “allogenic”

8. Line 353: “adding”

Discretionary Revisions

1. The authors could discuss the clinical/paraclinical results separately from the results achieved by histology or other methods.

Level of interest: An article of importance in its field
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.