Reviewer's report

Title: Biochemical comparison of osteoarthritic knees with and without effusion

Version: 1 Date: 22 June 2011

Reviewer: Hans-Michael M Klinger

Reviewer's report:

Comments to the authors:

Basically the paper is dealing with an interesting issue. But several aspects of the manuscript are concerning. In particular, a considerable amount of important information is lacking which should have been included in the manuscript.

1. INTRODUCTION

The authors should give an overview of the problematic and they should include more essential literature references to the topic. What do the authors mean with the term “palliative interventions”? Please clarify. In addition, there is no clear hypothesis stated for performing the study. Nevertheless the Introduction does not create controversy. Please provide a succinct purpose and hypothesis. The purpose provided rambles a bit and is not precise. The authors need to rewrite this section and make their points clearly and concisely.

2. METHODS

In general this section should provide enough information to ensure the reproducibility of the study. The authors give detailed information about study subjects, effusion status, knee function, analysis and statistical analysis. Overall, this is a good section and outlines things well.

3. RESULTS

The section “Results” should follow exactly the section “Methods”. I would recommend reorganizing the Results and bring them in a well-structured form. Therefore the section “Results” should be rewritten, the presentation and evaluation of data should be optimized.

4. DISCUSSION

The discussion should begin with an answer to the hypothesis stated at the end of the introduction. The authors need to re-write this section completely. Furthermore the authors have to point out clearly the limitation of their study.

5. CONCLUSION

In general, this study cannot make the conclusion it does, especially because of the small size of the patients.

6. ABSTRACT
The abstract should be changed due to the mentioned points in each section.

7. LEVEL OF EVIDENCE
No level of evidence is given.

8. TITLE
Appropriate

9. REFERENCES
Appropriate

10. FIGURES
OK

11. TABLES
Appropriate

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