Reviewer's report

Title: Distraction test of the posterior superior iliac spine (PSIS) in the diagnosis of sacroiliac joint arthropathy

Version: 1 Date: 30 September 2013

Reviewer: Johannes Fakler

Reviewer's report:

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

2. Are the methods appropriate and well described?
   Basically yes. A limitation might be the fact that it is not clearly stated whether identification of patients with SIJ pathology and performance of the PSIS distraction test was done by the same examiners/physicians. In terms reproducibility, it also should be mentioned whether the PSIS distraction test was performed by one or multiple persons.

3. Are the data sound?
   Yes

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?
   The authors correctly mentioned that inter- and intraobserver variabilities are an issue in clinical tests, especially for the SIJ. It seems that this might be less relevant for the PSIS distraction test. Nevertheless, according to the methods described an examiner bias cannot be excluded and should be mentioned in the discussion.

6. Are limitations of the work clearly stated?
   see 5.)

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 Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?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

10. Statistics have been assessed, an expert statistician is not needed.
The authors presented a simple, easy to perform clinical test to identify SIJ pathologies. Although further validation is needed, first results of this case control study are promising and should be published after minor essential revisions.

**Level of interest:** An article whose findings are important to those with closely related research interests

**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