Reviewer's report

**Title:** Association between knee alignment and knee pain in patients surgically treated for medial knee osteoarthritis by high tibial osteotomy A one year follow-up study

**Version:** 3 **Date:** 5 August 2009

**Reviewer:** konrad mader

**Reviewer's report:**

This well-written research article examines the preoperative association of knee alignment determined as the hip-knee-ankle angle to preoperative knee pain and the association of change in knee alignment with surgery to change in knee pain preoperatively compared to at one year postoperatively in patients operated on for knee OA by high tibial osteotomy using the hemicallotasis technique (HCO).

When assessing the work, please consider the following points:

The questions posed by the authors are substantially well defined, the methods used are appropriate and well described, the data is sound and the only thing I am missing is a power analysis of the sample size, hence pain is a multi-influence variant. The manuscript adheres to the relevant standards for reporting and data deposition; The discussion and conclusions are well balanced and adequately supported by the data and it is quite important to have the information published that pain is not affected by the alteration of knee axis. The limitations of the work are clearly stated. The authors clearly acknowledge to my experience the recent work upon which they are building.

Do the title and abstract accurately convey what has been found? yes

Is the writing acceptable? The writing is good and will require only some grammatic corrections.

- Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

This article is firmly written and shows clearly that the multi-facet factor pain is not at all modified by the axis for varus arthritis treated by high tibial osteotomy using one specific technique (hemicallotasis).

I would recommend this article for publication but I am raising the point of performing a power analysis. For my opinion the study sample might be to small to allow for the correct evidence level.

I do see any misconduct.

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

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