Reviewer's report

Title: Association between sensory function and medio-lateral knee position during dynamic tasks in patients with anterior cruciate ligament injury

Version: 2 Date: 8 September 2014

Reviewer: Timothy Sell

Reviewer's report:

Major Issues:
Reliability and validity of methods
Statistical analysis
Discussion of non-significant results

Minor Issues:
Some justification in the introduction and clinical implications

All Comments are Below:
1. Abstract (Conclusion): What is the clinical relevance of the results?

2. Line 55: Functional ability has other potential measures such as return to sport, return to activities of daily living. I would expand on this statement.

3. Line 63: How was poor vs good defined in this task. Was it just based on position or was it correlated to function such as activities of daily living, return to sport, etc.

4. Line 72 "not well studied": There are a lot of studies looking at results following ACL injury. Perhaps these studies (kinematic analysis of gait, etc) are movement quality, but don't they point toward issues with ACL rehabilitation, recovery, and return?


6. Last Paragraph of the Introduction: I would recommend adding a sentence explaining the clinical relevance if the hypotheses are met. What is the clinical implication?

7. Subjects: The subject characteristics are very broad. It is difficult to read Table 1 as the type/font is duplicating in each cell, but it appears as though the range of time from injury is very broad. The authors may want to comment since recovery would have an affect on function and likely proprioception.

8. Line 144: Please add reliability of the proprioception measure.

9. Line 149: What is the reliability (inter and intra rater) and validity of the
movement quality measures.

10. Line 166: Why was spearman's rank chosen? Based on data assumptions. Was the data divided and then the correlations were processed. correlations in the 0 group and then correlations in the 1 group? Is it valid to correlate this way? continuous variable versus categorical?

11. Discussion: The discussion should include some language indicating the very low correlations even though they were significant. They appear to be weak correlations. The authors should also be careful to not link the data. There are relationships only and not cause/effect.

12. Lines 202 - 205: Please remove. The analysis was not significant and should not be suggested as being significant. It is just as likely that more subjects would have made the data non-significant.

13. Line 206: This is not a valid statement. Correlation does not mean clinically relevant.

14. Line 232: Why would kinesthesia play a minor role in some tasks than others. Would the authors suggest that feedback and feedforward control are only necessary for demanding movements? I would suggest adding references to support their argument.

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

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

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.