Reviewer's report

Title: Determination of the human spine curve based on laser triangulation

Version: 2 Date: 2 September 2014

Reviewer: Oleg Sergiyenko

Reviewer's report:

The main problem posed by the authors is enough well defined since my point of view. The methods are appropriated and well described. Discussion and conclusions well balanced and adequately supported by the data. Acknowledgement, paper title and abstract accurately convey to the paper topic. From the other hand, the data can sounds better after applying more consecutive introduction of material to deal the manuscript to the relevant standards for reporting and data deposition. Limitations of the work are not clearly stated: the difference of method application with other laser techniques, for example, rotational laser scanners are not described absolutely.

According to mentioned above, I can conclude that the paper is enough well written; possess professional knowledge and adequate glossary on topic; shows the original solution of the posted problem. The advantage of the considered manuscript is the advanced level of medical aspects, in a difference to majority of articles on similar laser measuring techniques.

Finally, I can recommend it for publication after minor revision with the aim to deal some critics.

However, the evident critical comments to be done:

- Authors said that measurement took approximately 10 seconds at 700 mm of the longitudinal translation along the back. In this case, how they prevent during this period the patient’s spontaneous self-movements, which can be more significant than declared accuracy of 0.1 mm?

- Not defined exactly the novelty of the presented method over other introduced in [4-14].

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