Reviewer’s report

Title: Applying intraoral scanner to residual ridge in edentulous regions: in vitro evaluation of inter-operator validity to confirm trueness

Version: 0 Date: 12 Jun 2019

Reviewer: Florian Beck

Reviewer's report:

Dear Authors,

Your manuscript entitled „Applying intraoral scanner to residual ridge in edentulous patients: verification of inter-operator precision" is of current relevance in regard to the rise of digital dentistry. It faces some minor limitations which are listed below.

In brief, the authors investigated the precision of one intraoral scanner in a complete edentulous jaw and a partial edentulous jaw, both simulated by a plastic model. Scanning procedure was performed by five dentists. The simulation model was also scanned by a desktop scanner which was defined as verum. Superimposition of the scans was accomplished in the proprietary (intraoral) scanner software.

Copyediting is advised!

Abstract:

Page 2, Line 35: If you conclude "satisfactory inter-operator precision", you should define "satisfactory" and "precision" by referencing the literature within your manuscript

M&M:

Page 4, Line 25: Please reference a technical data sheet of the scanner or at least a website where it can be found if stating values of the scanner

The way of superimposition of the data sets and especially the way of performing the measurements within the CAD software should be described in more detail.

It should be explained whether methods of data optimization within the CAD software have been applied or not.

Discussion:

Page 5, Line 55: I would avoid mentioning brand names within the text (except M&M) and instead use "intraoral scanner"

Page 6, Line 6: please indicate values/references for the precision of the intraoral scanner

Page 6, Line 29: The limitation of the study in regard to clinical relevance should be extended as major problems observed in-vivo (e.g. saliva, tongue, movement of the floor of the mouth, frenulum) are not simulated in this study design
Page 6, Line 37: the IQR is not provided in the manuscript

Page 6, Line 49: "with practice…": it would be of interest whether the precision of scan no. 5 was closer to the reference scan compared to scan no. 1 of one dentist

Page 6, Line 51: please define "clinically acceptable range"

Conclusion:

Page 7, Line 41: satisfactory precision should be explained by referencing literature

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Unable to assess

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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