**Reviewer’s report**

**Title:** The impact of ICDAS on occlusal caries treatment recommendations for high caries risk patients: an in vitro study

**Version:** 1  **Date:** 26 Nov 2018

**Reviewer:** Michele Diniz

**Reviewer’s report:**

*This manuscript aimed to assess in vitro the impact of ICDAS on dentists' caries management decisions for patients at high risk for caries.

*The authors point out that the influence of using ICDAS on caries management decision-making has not been investigated before. However, this is not true. See other references in literature that evaluated caries lesions by ICDAS visual criteria and combined the radiographic examination for treatment decision:


*ICCMS should be better presented and discussed, since the authors used the combined scores for ICDAS (1-2, 3-4 and 5-6), according to the ICCMS recommendations.

*In fact, I do believe that the scores proposed for caries management decisions are not adequate: (1) no action, (2) nonoperative care (fluoride toothpaste, regular recall visits, and/or professional topical fluoride and fissure sealants), and (3) operative care (minimally invasive restorations, restorations, pulp therapy, and extraction). Different caries management are presented as the same score, especially as operative care, and this is not correct (i.e., it's not possible to compare minimally invasive restorations to extraction).

*More information about the examiners (age, clinical practice or faculty) and their clinical experience and area of actuation/expertise should be discussed, since this information might have influenced the results. Why two examiners were more invasive after ICDAS training than the others?
*Moreover, ICDAS e-learning program is not available anymore. So, how dentists can assess this information for clinical practice?

*All these queries and suggestions would improve the manuscript for a better understanding by the readers.

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

No

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

Unable to assess

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

Yes

**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:

Acceptable

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