Reviewer’s report

**Title:** Grading and Assessment of Clinical Predictive Tools for Paediatric Head Injury: A New Evidence-Based Approach

**Version:** 0 **Date:** 22 Apr 2019

**Reviewer:** Nicole Almenrader

**Reviewer's report:**

This is a well performed study assessing the quality of predictive paediatric head injury tools.

The manuscript follows a clear description from study purpose to conclusions and gives a detailed overview of currently available and valid tools regarding prediction of paediatric head injury. However the manuscript is very long and in part repetitive which makes it a difficult read.

A more concise presentation of information would be preferable.

**Specific comments:**

* Section 'introduction': page 4, line 93 to 96: please divide the study purpose into primary (only one) and secondary aims.
* Section 'methods', page 5: Is the research confined to tools in English language and hence only applicable to the English speaking world?
* Page 7, whole paragraph 2.3 Analysing predictive tools: should be moved to section 'introduction'. Please keep the section 'methods' concise and clearly defined.
* Page 7, line 182/183 and page 17 line 432/433: There is some repetition here. Please move all to section 'discussion'. - 'What makes certain tools more widely accepted...?' Rather than the single 'end user' clinician it should be national and institutional guidelines that incorporate predictive tools in their pathways and guide the clinician through the decision making process. Are certain rules more user-friendly than others? The number and complexity of items used for each rule may play a role as well.
* Section 'results' could be shortened especially as there are many figures/tables which illustrate very clearly the findings. There is no need for a 'double' description with text and figures.
* Section 'discussion': page 19, second paragraph: can be omitted.
* Page 19, last paragraph: the authors should try to be more concise. Do they consider GRASP as a user friendly tool which can be easily applied by clinicians to choose the most valid tool? Not sure about that.
* Please discuss 'limits of the study'.
* Section 'conclusions' far too long and repetitive.
* Page 20, line 537-544: please concentrate on the study aim which is not the validity of GRASP framework (reference 36), but application of GRASP for paediatric head injury predictive tools.
Main finding and conclusion: GRASP framework confirmed the PECARN rule as the highest quality tool.

* Reference 13 typing error 'systemsia'
* Figures and tables are appropriate

**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.

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.

Not relevant to this manuscript

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

Acceptable

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