Reviewer’s report
Title: Racecadotril in the treatment of acute diarrhea in children: a systematic, comprehensive review and meta-analysis of randomized controlled trials

Version: 0 Date: 03 Nov 2017

Reviewer: Jaspreet Gharial

Reviewer's report:
The paper is generally well written. It is well structured and mentions important points as per the PRISMA guidelines. In a paper with such a large amount of varied information, it is imperative that the presentation is clear and concise to allow easy comprehension. The authors have achieved this with relative ease by introducing sub sections in each topic.
The material is exhaustive including more than twice the number of studies than in previous reviews with studies in different languages also being considered. The authors must be commended on their efforts to get as much information as possible from the individual authors, in case of lack of readily available data.
The tables and figures are well presented and easy to understand.

Overall this paper can be published once the minor comments below are addressed:

Under the methods section, page 4 line 11-13, the authors give the search string used to identify the articles included in the study. On line 18 it is further stated that articles reporting studies in adults were excluded. However no mention is made of how the articles reporting studies in children are identified (as it is noted that this was not a term included in the search string). Were the searches filtered for studies in children on the search engine? Did the authors scan the abstracts manually and decide which ones were relevant to the study? Further elaboration would be useful. Furthermore the definition of age when selecting children needs to be clearly stated (under 18 years/ under 10 years). This of course, is provided the term 'children' was neither part of the search string nor filtered from the start. This data should also be represented in figure 1.
The authors state that 'studies comparing treatments with a combination including Racecadotril with another treatment were excluded'. Kindly clarify this as there are studies that have multiple arms, some combining Racecadotril with probiotics, that have been included.

Page 4, line 23-24: the authors state that 'non-randomised studies were not systematically considered but were included in some cases when providing relevant additional information'. Kindly expound on this and state what information (apart from patient stratification) was extracted from these non-randomised studies as well as how this was used in the result analysis.

Information regarding data extraction is lacking, specifically who did the data extraction in English / Chinese and how was the extracted data verified to be correct before analysis. This information is provided in brief at the end of the article in the role of the authors section, however does need to be discussed in the paper.

The fixed model procedure used to carry out the meta-analysis generally tends to give a more optimistic evaluation of the results. However it requires the studies included to have a close homogeneity in order to be valid. No justification is provided as to why this method of analysis was selected. Considering the studies were of different designs (double blinded and open label add on) and included racially diverse populations, was this the best analysis to use?

A mention is made of the overwhelming number of studies from China over the rest of the world (44 of 58 studies). This should be further emphasized in the results once stratified (for example in the open label add on trials they make up 34 of the 41 studies)

**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.

Yes
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.
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