Reviewer’s report

Title: Development and Validation of a Questionnaire assessing the Quality of Life impact of Colour Blindness (CBQoL)

Version: 0 Date: 18 May 2017

Reviewer: M. Dominik Fischer

Reviewer’s report:

General Comments:

In the manuscript entitled "Development and Validation of a Questionnaire assessing the Quality of Life impact of Colour Blindness (CBQoL)" the authors present a well-written study on the development and assessment of a new questionnaire, designed to quantify the effect of colour blindness on patients’ Quality of Life. In this experimental study, the authors address an unmet need for a QoL questionnaire specifically tailored for evaluation of colour blindness impact. In this work, the authors first developed the questionnaire with the help of expert and patient focus groups and then validated it based on correlation with existing validated questionnaires. The questionnaire was then employed to assess the effect of colour blindness on QoL in patients with acquired and congenital colour blindness as well as in normal subjects using an online assessment approach. The study successfully demonstrates the validity of the new questionnaire and correctly addresses the limitations of the online study.

This reviewer only has several minor comments, which might help to further improve the manuscript.

Specific comments for revision:

1. For future revisions, please adjust the line numbers to be better aligned with text.

2. The possible score range of the CBQoL questionnaire is not clear (eg. min & max. values)

3. Page 13. Line 9: It is not clear whether the free text questions will be part of the standard CBQoL or were used here experimentally. If standard, please add details on the way those should be handled and scored. Also, the answers to the open questions (or lack thereof) were not mentioned in the text.

4. If possible, include statistics regarding the average time-length it took to complete the questionnaire, as this might be relevant for future study designs.

5. Page 3. Line 7: The authors suggest that the questionnaire could be used to measure QoL response to treatment, yet the proposed study design does not cover within-patient variability
(that would require repeated assessment of same patient) nor a measure of test sensitivity and specificity for change assessment. Based on the relatively small variability around the mean score between the subjects in CB group, the question arises, whether the test will be sensitive enough to detect changes especially when they are small. We would ask the authors to include a few sentences to discuss this issue as limitation of the current study.


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.

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 recommend additional statistical review

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

Acceptable

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