Reviewer’s report

Title: Spectral Domain Optical Coherence Tomography in Children: Normative Data and Biometric Correlations

Version: 1 Date: 9 October 2013

Reviewer: Victoria Pueyo

Reviewer’s report:

This is a well-designed study regarding normative measurements of OCT in children. This issue is a relevant topic since OCT is becoming a very useful tool in clinical practice in paediatric ophthalmology. However, some papers have already been published in this sense and I do have several comments:

Mayor compulsory revisions:
1. Abstract: The last sentence cannot be concluded from the results as previously reported.
2. Introduction: Several papers have reported normative values for SD-OCT in children. All of them should be referenced in the literature review, and not only in the discussion.
3. Methods: You should state the age above which children provided assent.
4. Patients were recruited from hospital populations and this could be a source of bias. Children attending to a hospital may not be representative of general population even when any ocular abnormality was excluded from the study. For example, the rate of refractive errors may be overestimated and it may have an influence on the data reported. On the other hand inclusion and exclusion criteria are quite restricted and may be another source of bias.
5. Results: The population studied is small, and there is no information about their races. In the conclusion it should be stated that children of other races and ethnicity should be studied.
6. For SE and AL not only mean and standard deviation should be reported but also ranges.
7. Age subgroups need clarifying. Age intervals are not correctly described and you should include an explanation in case you are considering truncated years.
8. Results should be carefully reviewed. There is information in the discussion which is not explained in detail in the Results section.
9. Discussion: In the first paragraph there is a sentence that does not fit what is previously reported in the results: Macular values were higher in males and positively correlated with age.
10. Discussion should be focused on what this paper adds to the current knowledge. You should not overlook the paper of Barrio-Barrio. This recently published paper addresses most of the issues you report. Careful and detailed
comparison between these and your data would be interesting for the readers.

Minor essential revisions:

11. There is no need to explain the management of children with poor fixation. I guess none of them was included since they would not meet the inclusion criteria.

13. Figure: You can remove the decimals from the x axis of the left figure.

14. References: Ref 9 and 23: remove the . after the journal.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests