Reviewer’s report

Title: Assessment of anterior chamber depth measurements using the Orbscan II ultrasound biomicroscope and Artemis- 2 VHF scanner

Version: 3 Date: 5 October 2013

Reviewer: Giacomo Savini

Reviewer’s report:

The authors improved their manuscript, but did not fully address my concerns, especially for the statistical methods, which are not yet clear. I believe that a further revision is needed before publication.

MAJOR COMPULSORY REVISIONS

1) Abstract
In the methods section the authors should add the statistical methods they used to assess repeatability. It is not necessary to repeat ANOVA twice.

In the results section it is not yet clear the meaning of the p values for the intraobserver repeatability. I would rather add the results of ICC and COV (and delete the mean difference)

2) Introduction
When describing the optical methods used to measure the ACD, the authors should generically refer to Scheimpflug imaging rather than to a specific “Scheimpflug camera combined with corneal topography”

3) Statistical methods
Please provide a brief description of COV and ICC. And a full explanation of “intraobserver repeatability ANOVA”: what is it? How is it calculated? There is still some confusion in this section and such a confusion influences also the abstract and the results section

4) Results
Table 1 does not report the COV! Please provide the % value and not only the p value.

MINOR ESSENTIAL REVISIONS

Please spell out D and IOP when citing diopters and intraocular pressure for the first time.

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests