Reviewer’s report

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

**Version:** 1  **Date:** 2 March 2013

**Reviewer:** Giacomo Savini

**Reviewer’s report:**

**Major Compulsory Revisions**

1. The style of the manuscript has to be improved. I suggest, for example, avoiding sentence starting with “I used the Orbscan”

2. The methods followed to assess repeatability are not sufficient. Coefficient of variation (COV), test-retest repeatability (within-subject SD x 2.77), and intraclass correlation coefficients should be reported. Otherwise, a simple agreement study should be reported, without any analysis of the intraobserver repeatability.

3. Results: What do the authors mean when they state that “The intraobserver repeatability ANOVA P values of ACD measurements obtained using the Orbscan II, UBM, and Artemis-2 VHFUS were 0.12, 0.70, and 0.10”? The repeatability analysis is not clear.

4. Discussion: overall it is a little bit too long. I suggest shortening it.

**Minor Essential Revisions**

1. Consider changing the title to “Agreement among ACD measurements by the Orbscan II, VuMAX UBM and Artemis-2 VHF scanner”

2. Introduction: Provide the name of the manufacturer for each considered device

3. Methods: provide an exact definition of ACD: was it the measured distance between the corneal epithelium and the anterior surface of the lens?

4. Discussion: change UMB to UBM

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

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

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

**Declaration of competing interests:**

I declare that I have no competing interests