Reviewer’s report

Title: Instability of 24-Hour Intraocular Pressure Fluctuation in Healthy Young Subjects: a prospective, cross-sectional study

Version: 1 Date: 15 June 2014

Reviewer: Paolo Fogagnolo

Reviewer’s report:

This paper deals with the reproducibility of 24-hr IOP and blood pressures on a limited group of young healthy people. By means of ICC analyses, the Authors found a good reproducibility for all parameters, except fluctuations. The message of the paper is interesting, yet the manuscript is often vague and not rigorous in methods.

Major Compulsory Revisions
1) The methods of the study should be more detailed and higher attention should be paid on relevant topics such as masking, allowed intervals around the time-points, evaluation of achrophase.

Methods:
“The same clinician measured the IOP, but the IOP values recorded during the previous consultations were completely masked to the clinician”. In general, masking process is extremely rigorous and it reflects the quality of a study. Here, it is extremely vague.

2) References
Ref [1-10]: this is extremely partial. Relevant papers by at least two groups (Konstas, Orzalesi-Rossetti-Fogagnolo) were not mentioned.

3) A careful revision by a native-speaking English is mandatory; just few examples: all though, partake; Abstract: “wonderful agreements”

Discretionary Revisions
1) “Regarding MOPP, which is similar to IOP, showed a poor fluctuation agreement”: please rephrase.

2) “To characterize the circadian IOP pattern”: I would use more caution on this sentence; I would just refer to “fluctuation”, instead of “pattern”.

3) The lack of control on the use of caffeine, alcohol, and on quantity/quality/time of sleep surely influenced the results of this paper, and deserve a detailed discussion. The curves of figure 1 are likely the consequences of these concepts.

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

Quality of written English: Not suitable for publication unless extensively edited

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

Declaration of competing interests:

I declare that I have no competing interests