Reviewer’s report

Title: The importance of central corneal thickness measurements and decision making in general ophthalmology clinics: a masked observational study

Version: 2 Date: 31 July 2007

Reviewer: Ian Murdoch

Reviewer’s report:

The authors report a comparison study in which a standard history was presented twice with variation of IOP between the two presentations. The outcome was the clinical decision made on the basis of the presented information.

It is excellent to see the clinical decision making process being scrutinised in this fashion, however I have some points I believe should be addressed:

1 By my reading, the same notes were presented with differing IOPs at the same session. This could bias the results were there any memory effect.

2 It would be good to know the baseline intraobserver variation of the assessing ophthalmologist to purt the results in context ie the agreement in decision making when presented with the same data twice.

3 The measurement error of a single Goldmann IOP is +/-2mmHg in good hands and +/-3mmHg in most clinics. It seems from the authors report that their correction for CCT did not make a difference beyond this measurement error. The implication is that this clinical decision difference is one that could also occur due to measurement error. I believe this should be discussed to put the importance of their CCT based report in context.

4 Clinical decision making is a process of discussion with patients and hence this design is (of necessity) an artificial simulation of the process. Acknowledgement of this fact/limitation should be made in the discussion.

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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