Reviewer’s report

Title: Interpretation of uniocular and binocular trials of glaucoma medications: an observational case series.

Version: 2 Date: 15 August 2007

Reviewer: Steven Kymes

Reviewer’s report:

General

The authors have addressed most of my concerns, but I have a few comments to share:

1) It is not necessary to provide me a tutorial concerning the distribution of data and the use of OLS in the clinical sciences (including one of my articles and several from my group). All I asked is that they test the assumption of normalcy, or provide evidence that they have. I cannot speak for all the articles cited, but I can assure you that we tested normalcy in the article by Luo, and that the assumptions related to OLS were tested in all the OHTS papers. The fact that other reviewers do not challenge authors on this issue does not mean that the article was correct when it entered the peer review literature, and sadly there are many that have. Finally, I should point out that a simple transformation of the data is not sufficient if the transformed data is not normally distributed. What the authors did (and I encourage them to do each time) is plotted their residuals and tested them for consistency.

On the issue of inclusion of trials of people currently being treated with those who were trialed on "untreated" eyes. I remain skeptical of viewing these as equivalent, but I am a social scientist, not a clinician or a biochemist. I will defer to other colleagues on this issue if the editors are satisfied.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept without revision
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 am a consultant and receive research support from Pfizer and Allergan.