Reviewer’s report

Title: The ChromaTest, a Digital Color Contrast Sensitivity Analyzer, for Diabetic Maculopathy

Version: 3 Date: 5 June 2008

Reviewer: Richard Holubkov

Reviewer’s report:

Thank you for your attention to my comments and to those of the other reviewers. I am happy that you have found a Web-based way to perform a Wilcoxon test (I myself may use this Web page in an "emergency Wilcoxon test” setting!)

My remaining comment relates solely to several p-values presented in the text and in Table 1. As a naive (repeat) reader of the paper, it is not clear what the p-values in the final paragraph of the Results section refer to. In my initial review, I had thought these reflected improvement in specificity/sensitivity, but you point out in your response "p-values are derived by chi-square test as in table 1". Okay. I am now ASSUMING that what you are doing in the last paragraph of the Results section is repeating the chi-squared analysis in Table 1 - comparing proportions of true positives between the test positives and test negatives - ONLY among subjects who had logMar BCVA of 0.1 or better (yielding p=0.0002) and then ONLY among patients with CSMO with central macular thickening only (yielding p<0.0001).

If I am correct in this statement, I ask you to clarify in the text what the p-values are referring to. One way to do this would be to state "p=0.0002 repeating the analysis in Table 1 for only subjects with logMar BCVA >=0.1", and analogously for the second comparison. In line with this, I would also ask you to make the p-value in Table 1 crystal-clear, putting at the end of the line under the Table something like: "[symbol for chi-squared] test:p<0.0001 comparing proportions of true positives among the test positive versus test negative subjects."

This is my only revision requested, which I would term a "Minor essential revision".

Level of interest: An article of limited interest

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.