Reviewer's report

Title: Pupil responses to monochromatic blue light as a function of age

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Reviewer: Paul D Gamlin

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General comments:
This is an interesting paper that examines the effects of age on both light-driven and poststimulus pupil responses for red and blue light. The study is of generally sound design and execution, but some issues should be addressed as well as an alternate measure considered as described below.

Major compulsory revision:
The poststimulus area under the curve is measured beginning at light termination. Most prior studies have begun measuring this post-stimulus response at 5-10 seconds after light cessation to reduce potential rod contributions to this measurement. The authors should either well justify their choice of timing, or measure the poststimulus AUC beginning at 5-10 seconds after light cessation.

Minor essential revisions:
The effect of age on prereceptoral filtering, as well as the effect of baseline pupil decreases with age on stimulus irradiance should be discussed. These two factors might have both been predicted to reduce pupillary responses.

Is there any evidence of a relationship between baseline pupil and poststimulus AUC independent of age?

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