Reviewer’s report

Title: Comparing Habitual and i.Scription Refractions

Version: 0 Date: 09 Sep 2018

Reviewer: Ada Aghaji

Reviewer's report:

The authors are to be congratulated for conducting research into this relatively new technology-assessing high order aberrations to provide much more accurate subjective manifest refraction. However, these issues will need to be addressed.

1. Introduction.

Write out VSMTF in full before abbreviating.

Pg 5. Lines 54-57. "The only instrument of its type currently on the market, the i.Profilerplus consists of an autorefractor and an aberrometer." This may not be wholly accurate as there is currently a PSF Refractor (Vmax Vision, Orlando, Fla.) allow clinicians accuracy to 100ths of a dioptre.


The methods are one of the most important aspects of any research. This has not been well done. How were the subjects recruited?

Clearly state the inclusion/exclusion criteria.

Pg 7. Line 29.

"A subjective refraction using the standard equipment, the standard procedure, the standard eye chart (black letters on a white background), and standard room lighting used in a typical eye exam was performed on all subjects."

Please clarify type and make of equipment used.

It has been suggested that the i.scription could be beneficial to patients with night vision problems from high order aberrations. Were other causes of poor night vision in these subjects explored. E.g. retinitis pigmentosa?

Pg 8. Line 19. How was the best measurement determined?
3. Analysis.

How was data recorded?

How was data analysed. What data analysis software was used? What statistical tests were conducted? At what level were tests of statistical significance set?

Results.

Pg 9. Lines 4-10. This should appear in the methods section.

You cannot mention correlation in the results without referring to it in the statistical analysis section of your methods.

4. Results.

How many had night vision problems? This is mentioned in the abstract but not in the body of the manuscript.

There are so many limitations to this study. None was mentioned.

5. Conclusions.

You cannot draw these conclusions without clarifying the methodology and mentioning the study limitations.

6. Declaration. It appears this work was presented at the American Academy of Optometry in 2017. It should be stated.

Are the methods appropriate and well described?

If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?

If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?

If not, please explain in your comments to the authors.

No
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?

If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**

Please indicate the quality of language in the manuscript:

Acceptable

**Declaration of competing interests**

Please complete a declaration of competing interests, considering the following questions:

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