Reviewer's report

Title: Functional Results and Photic Phenomena with new Extended-Depth-of-Focus Intraocular Lens

Version: 0 Date: 23 Jun 2019

Reviewer: Abdullah Kursat Cingu

Reviewer's report:

The authors present 'Functional Results and Photic Phenomena with new Extended-Depth-of-Focus Intraocular Lens" for publication in BMC Ophthalmology. They included thirty-two eyes of sixteen cataract patients in the study. The authors concluded favorable results at far and intermediate distances and improved the visual and reading acuity at reading distance with the new extended depth of focus intraocular lens (EDOF-IOL) Mini WELL Ready IOL.

In general, this is a well designed and presented work which has an impact in its field. However, there are some issues should be considered before publication.

First, there is no enough information about the biochemical properties of this new IOL lens material. The authors should particularly specify if it is hydrophilic or hydrophobic.

Please define the size of capsulorrhexis and specify the duration of the use of postoperative drops in the methods part?

In the result part the it will be better to add the postoperative biomicroscopic results like the appearance of the capsule (pco, shrinkage, opacification), position of the IOL (displacement, distortion), information about refractive predictability (difference between preaop-postop MRSE).
Please rewrite the following sentence and clarify its meaning. "With the trifocal IOL, on the other hand, patients achieved a better distance corrected near reading acuity."

The manuscript needs a limitation paragraph including limited number of participants, lack of control group, short follow-up period and -if could not be added- lack of predictability results. However, in the conclusion paragraph there is a sentence "In general, the Mini WELL shows good predictability of refractive correction........" claiming that this IOL had good predictability results there is no evidence for that. There is a need for adding a table showing difference between preop-postop MRSE.

In conclusion paragraph it will be better to add ".........also with longer follow-up periods. " to the last sentence "These results should be confirmed with increased patient numbers...."

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**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
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None

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