Reviewer’s report

Title: Clinical outcomes after mix-and-match implantation of diffractive multifocal intraocular lenses with +2.75 and +4.00 diopter add powers

Version: 0 Date: 08 Feb 2020

Reviewer: Jack C M Ng

Reviewer's report:

Overall comments:
The paper is well written and provides new findings on the topic. However, the authors are recommended to provide more details of the methodology in the Methods Section to support the internal validity of the study, especially it is of a retrospective design.

Specific comments:
1. p.4 line 89: "This retrospective study included 18 patients who..." The number of patients should not be reported here. A general approach is to mention "This retrospective study included (all) patients who...", followed by inclusion and exclusion criteria as the authors did.
2. p.4 line 90-92: can you provide a bit more details on ZMB00 and ZKB00? I guess not all the readers are aware of its design, especially it is a bifocal, diffractive type of multifocal IOL with 50/50 light distribution, independent of pupillary size.
3. P.4 line 97: recommend to remove "from the analyses" if it does not have special meanings and for consistency of wordings with line 95 inclusion criteria.
4. P.4 line 97-109: is there any missing data from the retrospective record review that should be excluded from the analyses?
5. p.5 line 119: "near VA was measured at 33, 40, and 50 cm, with near VA expressed as the average of VA at these distances". Is there any ground or previous reference for this? Or authors may provide further explanation of this method.
6. p.6 line 125: (1) was the contrast sensitivity measured under uncorrected condition? (2) Was both monocular and binocular contrast sensitivity curves were measured?
7. p.6 line 140-152: was the bilateral surgery performed simultaneously or sequentially on different days? Please specify.
8. p.7 line 155: range should be provided in text and tables.
9. p.8 line 192-195: what does it mean by "good" contrast sensitivity? In the Results Section, more objective presentation like reporting the values is recommended. Comments shall be made in Discussion Section by comparing with norms/previous studies.
10. p.11 line 244-247: the CONCERTO study is one of the very first studies that used monovision approach with multifocal IOL. I think it is worth crediting it in the Introduction Section.
11. Table 1-4: please provide the ranges.
12. Figure 2: (1) what is the unit in the y-axis? (2) please revise the x-axis as "spatial frequency, CPD" (3) why isn't there a binocular contrast sensitivity curve, which is not specify in Methods Section?

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.

Yes

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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