Reviewer's report

Title: Visual acuity improvements after implantation of toric intraocular lenses in cataract patients with astigmatism: A systematic review

Version: 1 Date: 4 April 2012

Reviewer: JAVIER MENDICUTE

Reviewer's report:

DISCRETIONARY REVISIONS
- ABSTRACT: Results. Identified is repeated three times in the 4 first lines.
- ABSTRACT: Conclusions. “show” is present. The whole abstract is written in past simple.
- BACKGROUND. Fifth paragraph. “[…]can achieve to normal vision […]” Remove “to”.
- RESULTS OF THE SYSTEMATIC REVIEW. First paragraph. “[…] 7 observation studies […]” Should be observational.
- RESULTS OF THE SYSTEMATIC REVIEW. First paragraph. “[…] 1 prospective cohort studies […]” Should be study.
- RESULTS OF THE SYSTEMATIC REVIEW. Second paragraph. “shows” should be showed.
- RESULTS OF THE SYSTEMATIC REVIEW. Fourth paragraph. Change is repeated 9 times in this paragraph.
- OUTCOMES OF THE SYSTEMATIC REVIEW. Reported is repeated 7 times.
- OUTCOMES OF THE SYSTEMATIC REVIEW. Third paragraph. Study is repeated 4 times.
- DISCUSSION. Third paragraph. Show should be showed.
- DISCUSSION. Third paragraph. Results is repeated 3 times in 4 lines.
- DISCUSSION. Third paragraph. Studies is repeated 4 times in 4 lines.
- METHODS. Inclusion/exclusion criteria. First paragraph. “Unit” should be after “measurement”.
- METHODS. Inclusion/exclusion criteria. First paragraph. “Units of measurement” is written twice in the same line.

MINOR ESSENTIAL REVISIONS
- ABSTRACT: Results. We find the last sentence irrelevant.
- BACKGROUND: Second paragraph. “NHS” and “UK”. These abbreviations are not fully written anywhere in the text or in the list of abbreviations.
- BACKGROUND: Second paragraph. “[…]30% of the population have been found to have a visually impairing cataract […]” 30% of the whole population or
population over 65?

- BACKGROUND. Third paragraph. “[…] steeper in the vertical axis […] or in the horizontal axis […]”. Should say steeper than what? i.e. “than in the perpendicular axis”. Oblique astigmatism is not mentioned.

- BACKGROUND. Third paragraph. Astigmatism can be corrected with more methods other than prescription glasses or a toric IOL.

- BACKGROUND. Fifth paragraph. “This systematic review attempts to identify published […]” It attempts to identify and compare, identify and describe… ?

- RESULTS OF THE SYSTEMATIC REVIEW. First paragraph. It’s Rayner, not Reyner.

- RESULTS OF THE SYSTEMATIC REVIEW. Third paragraph. Missing verb in the end. Are shown? Are represented?

- RESULTS OF THE SYSTEMATIC REVIEW. Third paragraph. It’s Rayner, not Reyner.

- OUTCOMES OF THE SYSTEMATIC REVIEW. Third paragraph. Is the postoperative result of 0.78 logMAR or is it a typographical error?

- DISCUSSION. First paragraph. “[…] measured both at near and distant ranges.” What about the intermediate vision? It was one of the objectives.

- CONCLUSIONS. Limitations should be clearly stated. They write about the lack of consistency among studies reporting toric IOL outcomes but do not mention they are considering very few studies, with different designs, whose results are not comparable due to different visual acuity methods and that they only evaluate UDVA when at their initial objective was to assess UIVA and UNVA as well.

- METHODS. Systematic research. No reference for the QUORUM chart.

- METHODS. Review restrictions. Confusing paragraph. Should be completely revised and re-written.

- METHODS. Inclusion/exclusion criteria. First paragraph. I find confusing the whole explanation about transformation of VA measurements.

- METHODS. Inclusion/exclusion criteria. Second paragraph. Is this whole paragraph necessary to say they have excluded all studies that reported proportion of patients because none stated the minimum visual acuity? Confusing and complicated explanation.

- METHODS. As the “review restrictions” and “inclusion and exclusion criteria” are confusing, I do not feel capable of evaluating whether bibliography is correct or sufficient.

MAJOR COMPULSARY REVISIONS
- The aim of this study aims to assess UDVA, UIVA and UNVA and fails to evaluate two of them (UIVA and UNVA) due to lack of scientific evidence.

Level of interest: An article of limited interest
**Quality of written English:** Needs some language corrections before being published

**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.