**Reviewer's report**

**Title:** Expression of Matrix Metalloproteinases-2 and aquaporin-1 in corneoscleral junction after angle-closure in rabbits

**Version:** 1 **Date:** 01 Jul 2018

**Reviewer:** Riham Allam

**Reviewer's report:**

1. The study question and idea: the idea is novel regarding the type of glaucoma and relevance to clinical practice if could be later on applied on human beings

2. The study subjects: the number of controls is very small and I would suggest the controls to be at least 50% of the cases to validate the statistical results

3. The time duration between enucleation and histologic preparation is not clear in the text so needs to be defined and unified among study subjects, also the effect of enucleation on IOP changes in the extracellular matrix proteins should be included in the introduction and explain how to avoid this in your experiment (Ramesh B. Kasetti, Prabhavathi Maddineni and J. Cameron et al., Increased synthesis and deposition of extracellular matrix proteins leads to endoplasmic reticulum stress in the trabecular meshwork. (2017) Scientific Reports. vol. 7, Article number: 14951)

4. There is no clear demarcation whether the induced IOP elevation BEFORE Enucleation was acute or chronic as PAS formation needs time, and chronic IOP elevation is related to the duration and extent of iridotrabecular extent

5. Again 2-4 O'clock hours of PAS are not sufficient to hinder IOP outflow facility.
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.

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

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