PEER-REVIEW REPORT 1

Name of journal: Neural Regeneration Research
Manuscript NO: NRR-D-18-00458
Title: Neuroinflammation as a target for glaucoma therapy
Reviewer's Name: Eleftherios Paschalis Ilios
Reviewer's country: USA
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COMMENTS TO AUTHORS

General comments: I think the article has value since inflammation is a major contributor of retinal neurodegeneration and this aspect of the disease needs to be highlighted. I think that paragraphs are well written but require some improvement. The connection between paragraph requires improvement for flow.

Line 16 page 1: highlight the fact that elevated IOP is not sufficient nor necessary for developing the disease. References should be provided.
At the end of page 1 the authors should discuss other studies (animal or human) that have used blockers, such as TNF-α for retinal protection and microglia suppression. There are several new papers published (two of the in AJP and one in PNAS) using various injury models and exploring the potentials of such therapies.

Page 3 first paragraph: I am not sure about the space but a table with application of major cytokine blockers (TNF, IL1, IL6…) for retinal protection would greatly improve this article and help readers. Several studies have used such antibodies (mostly in animals) in various experimental models to show retinal protection.

Page 4. Authors need to briefly discuss the complications of cytokine blocking, especially systemically. Also, inflammation has been shown to promote regeneration and repair. Blocking inflammation is not always optimal.

It would be helpful if the authors could provide an illustrative diagram.