

OPEN PEER REVIEW REPORT 2

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Title: Inner blood-retina barrier involvement in dry AMD pathology

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COMMENTS TO AUTHORS

This review described a novel role of the iBRB and in particular claudin-5 as a key mediator in initiating dry AMD pathology and subsequent RPE pathology. It is a new discovery in the research of mechanism of AMD.

In the page 3, the author described "Regulation of claudin-5 expression levels at the inner retina can very rapidly lead to a GA-like phenotype in mouse and non-human primate models using adeno-associated virus vectors (AAV) expressing claudin-5 shRNA", and some similar manner to other AMD studies. In line 17-18, the author wrote "This is the first ever study that showed a persistent and size-selective dysregulation of the iBRB can lead to a GA-like pathology". However, they did not show any reference to reader.

AMD always develop in the macular area. But iBRB is in almost all inner retinal tissue except macular area. If iBRB plays important role in RPE dysfunction, why dose RPE pathology always develop in macula not other areas? The author should explain this phenomenon.