Reviewer's report

Title: HIV-1 Tat Protein Alter the Tight Junction Integrity and Function of Retinal Pigment Epithelium: an in vitro Study

Version: 2 Date: 2 May 2008

Reviewer: Francesca Peruzzi

Reviewer's report:

The Authors improved the quality of the manuscript by addressing all reviewer's questions

Minor comments

Page 14 lane 1 should be modified as: ...Tat was able to induce...

Page 15, last paragraph of results describes Figure 9 and not 8.

In the Discussion the Authors cannot state that: “We future determined whether these pathways are involved in the regulation of claudins expression that was observed in the present study”, since this study does not provide any link between ERKs and/or NFkB activation and claudins expression. It is more correct what is stated in the abstract that:” The effects of HIV-1 Tat on barrier function of the RPE may be mediated by ERK MAPK and NF-#B activation…”, unless the Authors will determine expression levels of claudins upon treatment with Tat in the absence or presence of ERKs and NFkB inhibitors.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.