

ESPS PEER REVIEW REPORT

Name of journal: World Journal of Ophthalmology

ESPS manuscript NO: 11635

Title: Age-Related Macular Degeneration Treatment in the Era of Molecular Medicine

Reviewer code: 00453045

Science editor: Fang-Fang Ji

Date sent for review: 2014-05-29 22:36

Date reviewed: 2014-07-01 12:27

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> Existing	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input checked="" type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input type="checkbox"/> Existing	<input checked="" type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

This is a well written manuscript on AMD but it is not focused on its title "Age-related Macular Degeneration Treatment in the Era of Molecular Medicine". As such, this makes it difficult for the reader to understand the aim of the review. It appears the authors have tried to fit too much information into one manuscript, making it in many areas, unfocused and incomplete. The first few pages briefly address many areas of interest in AMD (e.g risk factors, GWAS, AMD genetics discovery) but there are numerous existing excellent key publications that are not referred to, and which are more detailed. The novel contributions of this paper are the sections on gene therapy and stem cell research, but again they appear unfocused with sections reaching out into "the history of stem cell" and "methods of RPE cell differentiation", that also cover anatomy and retinal physiology and do not cite key literature. Finally, premature conclusions are drawn on the effectiveness of these treatments based on case reports and the authors should give a true reflection of the challenges of these treatments.

ESPS PEER REVIEW REPORT

Name of journal: World Journal of Ophthalmology

ESPS manuscript NO: 11635

Title: Age-Related Macular Degeneration Treatment in the Era of Molecular Medicine

Reviewer code: 00504910

Science editor: Fang-Fang Ji

Date sent for review: 2014-05-29 22:36

Date reviewed: 2014-07-14 07:32

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> Existing	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Existing	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS TO AUTHORS

The title doesn't explain in particular which "new treatments" will be reviewed in the paper but it reflects the major topic and contents. The abstract gives a clear delineation of the review background and of the new treatments investigated. In the "Methods of Intraocular Implantation" section a very detailed description of all the possible intraocular implantation methods is provided. Discussion is well organized and systematic theoretical analyses are given. The paper provides some up-to-date literature evidence and data not sufficient to draw scientific conclusions, but enough to speculate future studies and possible future applications. References are appropriate, relevant, and updated. Herein I have listed some suggestion to the authors: 1. The genetic related to AMD, to risk factors and to the PDT response is well explained whereas I would focus more on the pathogenesis of AMD, VEGF and PEDF being the main targets of gene therapy. 2. At the end of the "Methods and Differentiation in RPE cells" section, in the last paragraph, regarding hESC derived photoreceptors implanted into the Crx^{-/-} mouse there is no explanation about what a Crx knockout mouse is and which pathologies are investigated in the study [84]. 3. In the "Impact on visual acuity" section, "human trials" subheading, explaining the preliminary results of the on-going human trial [93] it isn't specified which type of AMD is being evaluated.