

ESPS Peer-review Report

Name of Journal: World Journal of Stem Cells

ESPS Manuscript NO: 7395

Title: Mesenchymal stem cells for treatment of aortic aneurysm

Reviewer code: 02446106

Science editor: Gou, Su-Xin

Date sent for review: 2013-11-16 16:23

Date reviewed: 2013-12-03 01:22

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<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)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

REF: ESPS Manuscript No.: 7395 The manuscript "Mesenchymal stem cells for treatment of aortic aneurysm", by Yamawaky-Ogata et al. is a review on current treatments against aortic aneurysm, with particular emphasis on a cell therapy approach based on mesenchymal stem cells. The manuscript is very interesting, the cited works are relevant and the references are updated. In addition, the content falls certainly within the scope of the journal. However, I have a major concern regarding the general structure of the manuscript. While it is submitted in form of review, I found it hard to recognize it as such. The author should do their best to avoid any ambiguity, since often the style and the way data are presented make hard to read the paper as a review. In particular, the fact that so many figures are shown, and that the text style comments them as if they were original, is very confounding. The authors should clearly state in the text, figure legends and anywhere appropriate where the data are taken from - by the way, since several figures are extremely similar to previously published material I do not know how they should deal with reproduction permissions and copyright. This, being said, the English would need revision by a mother tongue editor and the overall length of the manuscript should be verified. In addition, some of the cited methodological approaches should be better described, since they might be of great interest/critical relevance (injection site, delivery system etc.) A positive remark concerns a specific statement, i.e. the importance of cellular activities in the treatment of AA. I find the major point presented by the authors very convincing: the fact that cellular treatment can be of the greatest efficacy (possibly through an indirect effect on the ECM). To support this notion, I would cite an article by Galmiche et al. (Circ Res. 2013 Mar 29;112(7):1035-45), who found that inactivation of serum response factor



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contributes to decrease vascular muscular tone and arterial stiffness in mice; in this experimental model SRF was specifically inactivated in smooth muscle cells; thus, an intracellular sensor of cell stress and transcription factor controls vasomotor tone and cell-matrix attachment affecting arterial elasticity in large arteries.

ESPS Peer-review Report

Name of Journal: World Journal of Stem Cells

ESPS Manuscript NO: 7395

Title: Mesenchymal stem cells for treatment of aortic aneurysm

Reviewer code: 01043075

Science editor: Gou, Su-Xin

Date sent for review: 2013-11-16 16:23

Date reviewed: 2013-12-03 01:48

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 checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" 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)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input checked="" type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

In this review, the authors summarize previous research results on using MSC for aortic aneurysm, focused on two studies from their lab (Hashizume et al, Fu et al) but also considering other related studies. It is a good review of AA and considerations for how likely paracrine effects impact the disease. While MSC biology is briefly mentioned, there is no discussion of MSC phenotype, or the inherent heterogeneity of the cell sources used in various studies. Since the review is for a stem cell audience, the authors should add a section detailing what exactly they are calling MSCs (are they really stem cells?), the different phenotypes used in the field as MSCs, and how this might influence effects noted in various studies. MSC is a term that is too often used in a non-rigorous manner, so this would be a good opportunity for the authors to help clarify the issue.