

ESPS PEER REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 12703

Title: Mesenchymal stem cells derived from human induced pluripotent stem cells: A new source for generating brown and white adipocytes

Reviewer code: 02446073

Science editor: Ling-Ling Wen

Date sent for review: 2014-07-23 16:46

Date reviewed: 2014-07-25 08:12

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" 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	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input type="checkbox"/> Existing	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

In this review article, Hafner A-L and Dani C well summarized the adipogenic potential of hiPSCs and the current approaches to derive hiPSC-MSC. Then the authors discussed in detail the main characteristics of hiPSC-MSCs in term of their low-adipogenic capacities and proposed several hypotheses to explain the difference between hiPSC-MSC and adult-MSCs in term of their adipogenic capabilities. Overall, this review article is well written and has provided the up-to-date knowledge in this field.

ESPS PEER REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 12703

Title: Mesenchymal stem cells derived from human induced pluripotent stem cells: A new source for generating brown and white adipocytes

Reviewer code: 01236209

Science editor: Ling-Ling Wen

Date sent for review: 2014-07-23 16:46

Date reviewed: 2014-07-29 14:29

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	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input type="checkbox"/> Existing	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

In this paper, the authors first introduce the roles of adipose tissues in energy balance, and the therapeutic potential of adipocytes for obesity and its associated metabolic complications. Then the authors discuss a promising autologous adipocyte source from hiPSCs, and summarize the recent progress in deriving adipocytes and adipogenic MSCs from hiPSCs. Overall, the manuscript is well written, and covers an interesting topic of regenerative medicine. Major points: The authors describe that hiPSCs can be differentiated into both adipocytes and MSCs with a low adipogenic potential. Instinctively, one would suggest using hiPSC-adipocytes, but not hiPSC-MSCs for therapeutic application for obesity and its associated metabolic complications. The authors need to explain why hiPSC-MSCs is better than hiPSC-adipocytes in therapeutic application. Minor points: 1. Page 4, "MSCs originate both from both mesoderm and neuroectoderm [11]." 2. Unify the use of abbreviations throughout the manuscript, such as hiPSC and hiPS.