

ESPS Peer-review Report

Name of Journal: World Journal of Stem Cells

ESPS Manuscript NO: 3264

Title: Human adipose CD34+ cells contain erythroid progenitors expressing fetal hemoglobin

Reviewer code: 02446087

Science editor: Gou, Su-Xin

Date sent for review: 2013-04-18 16:22

Date reviewed: 2013-04-24 16:27

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"/> 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)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS TO AUTHORS

In the manuscript "Human adipose CD34+ cells contain erythroid progenitors expressing fetal hemoglobin" authored by Amparo Navarro et al., the authors demonstrated that stromal vascular fraction of human adipose tissues expressed fetal hemoglobin. They further concluded that hematopoietic progenitors from such stromal vascular fraction were not derived from bone marrow, but originated from the adipose tissue itself. Basically this paper is a follow-up paper extending from the authors' previous paper that was published in Stem Cells (2008; 26:2696). The methods and experiments of this study were comprehensive, and the quality of results was good. However, I have some suggestions that may make this paper more readable and useful for interested readers. 1. English writing can be improved, especially in the whole section of the Abstract. For instance, the last sentence of Materials and Methods section of the Abstract (lines 13 to 16, p.2) and the third sentence of Results section of the Abstract (lines 22 to 26, p.2) are convoluted and difficult to read. The writing of the second sentence of the Results of Abstract (lines 21 to 22, p.2) is unclear: according to that sentence, GATA1 was expressed in both SVF cells and CB CD34+ cells, so what was the purpose of this sentence? 2. The arrangement of graphs in Figure 4 (p.28) is asymmetrical, thus it is difficult to compare the results among them. Specifically, the right lower two graphs are different from the other 10 graphs, thus they should be grouped together and put independently. 3. I suggest that authors reword the Conclusion of the Abstract, because all of their supporting evidences in this paper were indirect. My personal view is that such strong statement of the authors can only be made with the definite results derived from the conditional BM MSC knock-out mouse model.

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Name of Journal: World Journal of Stem Cells

ESPS Manuscript NO: 3264

Title: Human adipose CD34+ cells contain erythroid progenitors expressing fetal hemoglobin

Reviewer code: 00573611

Science editor: Gou, Su-Xin

Date sent for review: 2013-04-18 16:22

Date reviewed: 2013-05-02 15:55

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)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input checked="" type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS TO AUTHORS

In this study, the authors examined the expression of genes directly involved in the process of hematopoiesis and analyzed hemoglobin levels and globin gene expression in burst-forming units-erythroid (BFU-E)-derived colonies. The authors concluded that hematopoietic progenitors from stromal vascular fraction (SVF) are not derived from bone marrow, but originate in the adipose tissue itself. Comments This is an interesting study. The methods of this study are reasonable and results are clear. However, there are some comments as follows. 1. The title is improper. The authors used SVF-derived CD45+ and CD45- cells, but not CD45-/CD34+ cells, in the experiments. There is no direct evidence to indicate that human adipose CD34+ cells contain erythroid progenitors expressing fetal hemoglobin. The authors should revise the title of manuscript. 2. The authors concluded that hematopoietic progenitors from SVF are not derived from bone marrow, but originate in the adipose tissue itself. However, there is currently not enough evidence to support this conclusion. The authors should provide more evidence to support this conclusion. 3. In Figures 3 and 4, there are not easy to read the meanings of sub-figures/figures. The captions of sub-figures should be added in these figures.