

## ESPS PEER-REVIEW REPORT

**Name of journal:** World Journal of Stem Cells

**ESPS manuscript NO:** 16540

**Title:** Dedifferentiated fat cells: A cell source for regenerative medicine

**Reviewer's code:** 00504335

**Reviewer's country:** Czech Repoublic

**Science editor:** Xue-Mei Gong

**Date sent for review:** 2015-01-22 14:05

**Date reviewed:** 2015-01-27 15:06

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	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"/> The same title	<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"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input type="checkbox"/> No	

## COMMENTS TO AUTHORS

In his review article the authors discuss properties of so called dedifferentiated (DFAT) cells, which can be isolated from adipose tiissue. The paper is based on the literature data and on the own work of the authors. The authors call the cells isolated from adipose tissue as DFAT. However, there is a large body of publications which describe the cells isolated from adipose tissue as adipose tissue-derived MSCs. Are DFAT cells the same as adipose tissue-derived MSCs? The authors should show clearly the phenotypic and functional differences between DFAT cells and adipose tissue-derived MSCs. Otherwise, they speak about well described MSCs. Are DFAT really other cell lineage or they are MSCs cultured in different way than "classical" MSCs? Minor point: References must be check by the authors and prepared more carefully, for example - The 1st reference contains both the first name and surname of authors, - Ref. 4. has not the name of journal, - Some references show all pages, some abbreviated form of the last page, - Some references have the year after the authors'names, other after the journal, - Ref. 33, has all authors (a total 17), but other references have only 3 authors and et al. - Etc, etc.

## ESPS PEER-REVIEW REPORT

**Name of journal:** World Journal of Stem Cells

**ESPS manuscript NO:** 16540

**Title:** Dedifferentiated fat cells: A cell source for regenerative medicine

**Reviewer's code:** 01851506

**Reviewer's country:** Japan

**Science editor:** Xue-Mei Gong

**Date sent for review:** 2015-01-22 14:05

**Date reviewed:** 2015-01-27 16:30

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	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"/> The same title	<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"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input checked="" type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

## COMMENTS TO AUTHORS

Jamabay and Bostrom summarize the recent advances in dedifferentiated fat (DFAT) cells as a potential source for regenerative medicine. The content is, in general, interesting and would be suitable for a wide readership. However, I have following reservations about the superiority of DFAT cells as a source for implementing regenerative medicine. (1) Although the authors discussed the potential problem of iPS cells in terms of tumorigenicity, they did not mention about the novel technologies such as the use of proteins or Sendai virus to induce iPS cells. Since these techniques allow obtaining virtually genome-modified free iPS cells, the superiority of DFAT cells to these iPS cells should be discussed such that a wide range of readers could understand the superiority. (2) Given that DFAT cells possess a potential to transdifferentiate into ectodermal cells besides mesodermal ones, it is imperative to keep the cell identity once the DFAT cell-derived cells get reached a desired phenotype (for example cardiomyocytes from DFAT cells). Since overexpression of a series of transcription factors to keep the desired lineage from DFAT cells is not an ideal solution, more discussions are required to justify the use of DFAT cells in the implementation of regenerative medicine. Minor concerns: There are several typographic and grammatical errors.

## ESPS PEER-REVIEW REPORT

**Name of journal:** World Journal of Stem Cells

**ESPS manuscript NO:** 16540

**Title:** Dedifferentiated fat cells: A cell source for regenerative medicine

**Reviewer's code:** 02446219

**Reviewer's country:** Iran

**Science editor:** Xue-Mei Gong

**Date sent for review:** 2015-01-22 14:05

**Date reviewed:** 2015-02-21 04:14

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	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"/> The same title	<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"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input checked="" type="checkbox"/> Plagiarism	<input checked="" type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		[ Y] No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

## COMMENTS TO AUTHORS

This review collected and discussed about a type of multipotent cells called DFAT. They are derived from adipose tissue. It is an interesting topic, but for me as a reader it is not clear how they are harvested from adipose tissue, whether it needs to a special technique or they are a fraction of this tissue and normally found in tissue. This part of manuscript needs a little revision. In addition, references are not uniform and according to journal guidelines.