

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 47708

Title: Induced pluripotent stem cells for therapy personalization in pediatric patients:
Focus on drug induced adverse events

Reviewer's code: 00503952

Position: Editorial Board

Academic degree: MD, MSc

Professional title: Senior Scientist

Reviewer's country: Canada

Author's country: Italy

Reviewer chosen by: Ying Dou

Reviewer accepted review: 2019-03-26 14:14

Reviewer performed review: 2019-03-28 04:56

Review time: 1 Day and 14 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input checked="" type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input checked="" type="checkbox"/> Advanced
		<input checked="" type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS



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The so-called induced pluripotent stem cells are not same as real stem cells, they are unlikely to be used as stem cells for gene therapy or any medical research. It is now too late to stop spending time and money on these garbage cells- the so-called Induced pluripotent stem cells {J Biomed Res. 2015 Jan; 29(1): 1-2}.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

BPG Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 47708

Title: Induced pluripotent stem cells for therapy personalization in pediatric patients:
Focus on drug induced adverse events

Reviewer's code: 03372822

Position: Editorial Board

Academic degree: PhD

Professional title: Assistant Professor

Reviewer's country: Portugal

Author's country: Italy

Reviewer chosen by: Ying Dou

Reviewer accepted review: 2019-07-19 13:25

Reviewer performed review: 2019-07-29 09:45

Review time: 9 Days and 20 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input checked="" type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input checked="" type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

In this review, the authors present the multiple possibilities to address Adverse drug reactions (ADR) in a patient personalized manner using induced pluripotents stem cells (iPSC). The use of organoids and organ-in-a-chip are also presented. However, there is little emphasis in the use of these cells to address pediatric specific problems. The organs discussed and modeled are very relevant for ADR. The authors often give too much information about the differentiation protocols used to differentiate the cells of interest from iPSC. However, this review is not a technical review and the authors do not point out the critical reagents or parameters in the protocols necessary to achieve the cells of interest. Thus, these descriptions appear like an overload of information. iPSC have been reprogrammed from centenarian persons and have acquired the same level of reprogramming as iPSC derived from cells of juvenile subjects. Thus, the age of the original donor, may no longer be reflected after reprogramming. Please discuss this point as the cells derived from iPSC originated from adults or young subjects may respond in a same way to drugs. Page 12, the authors address the “interindividual difference” reflected in the iPSC. However, iPSC clones from the same patient may display differences. These intraindividual differences, which may be a foe to test drugs to ADRs are not mentioned in the review. Please discuss this point. The possibility to make direct conversions from somatic cells to cells of interest described in this manuscript exist, but this technology has not been presented here. Could this conversion approach present some advantages to iPSC for testing ADR? Please discuss

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

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- ☐ Plagiarism



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[Y] No

BPG Search:

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[] Duplicate publication

[] Plagiarism

[Y] No

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 47708

Title: Induced pluripotent stem cells for therapy personalization in pediatric patients:
Focus on drug induced adverse events

Reviewer's code: 00546602

Position: Peer Reviewer

Academic degree: PhD

Professional title: Associate Professor

Reviewer's country: Australia

Author's country: Italy

Reviewer chosen by: Ying Dou

Reviewer accepted review: 2019-07-18 22:59

Reviewer performed review: 2019-07-30 23:00

Review time: 12 Days

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input checked="" type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
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publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input checked="" type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The iPSC technology is emerging as a new concept for diagnostics, drug development, bio-marker discovery and potential for therapeutics. In the present review, authors have summarised the use of such cellular technology to identify drug induced adverse events vis-a-vis developing personalised medicine. Authors have described and reviewed the potential use of iPSC technology in evaluating drug toxicity in various ailments. The review does provide a critical analysis of various pathological conditions where iPSC technology could make a difference in assessment and identifying the adverse events. However, there are number of limitations in the use of iPSC technology to achieve those goals at the moment because of the clonal variability, erasing of epigenetic memory of the parent cells, complexities of organ culture and faithfully gauging the outcomes etc and this review completely fails in addressing those issues. If authors are ready to incorporate a separate section of reviewing such limitations in using iPSC technology, this MS may be considered for re-review and publication

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

- ☐ The same title
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- ☐ [Y] No

BPG Search:

- ☐ The same title
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