

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells**ESPS manuscript NO:** 12989**Title:** Repressors of Reprogramming**Reviewer's code:** 02446343**Reviewer's country:** Sweden**Science editor:** Xue-Mei Gong**Date sent for review:** 2014-08-01 20:36**Date reviewed:** 2014-08-28 02:47

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input checked="" type="checkbox"/> [Y] Grade A: Excellent	<input checked="" type="checkbox"/> [Y] Grade A: Priority publishing	Google Search:	<input checked="" type="checkbox"/> [Y] 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

Induced pluripotent stem cells (iPSC) by over expressing four transcription factors (Oct4, Sox2, c-Myc and Klf4) shown to convert somatic cells into pluripotent embryonic stem cell-like state. This discovery has enormous impact on creating disease-specific stem cells for treating a variety of diseases. However, introduction of over expressing transcription factors into somatic cells make them potentially cancerous cells. Alternative methods have been developed to generate iPSC for safer clinical use but the new methods are less than satisfactory. Therefore, development of new method is needed to generate iPSC suitable for safer clinical use. This review suggests an alternative strategy to generate iPSC by eliminating endogenous factors which enhance cellular differentiation process. Inhibition of negative factors rather than the enforcement of positive factors, could lead to safer reprogrammed iPSC. This is a timely and well written review on an important issue of stem cell application in regenerative medicine. Publication of this paper may attract new investigators in the field of somatic cell reprogramming who may try to test this hypothesis. This paper can be considered for publication in the World Journal of Stem Cells.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 12989

Title: Repressors of Reprogramming

Reviewer's code: 02559655

Reviewer's country: Germany

Science editor: Xue-Mei Gong

Date sent for review: 2014-08-01 20:36

Date reviewed: 2014-08-28 20:45

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	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"/> Existing	<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
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<input type="checkbox"/> Grade E: Poor	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Existing	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

The manuscript entitled "Repressors of Reprogramming" by Popowski and Tucker reviews the negative regulators of somatic cell reprogramming. Although the manuscript is well written, there are few other factors, such as miRNAs, other genetic and epigenetic factors (Ink4/Arf locus, Mbd3 etc.), which are not covered in the present manuscript. Specific comments: 1. Epigenetic modifiers- I feel it is better to shorten the bivalent description part and to expand the functional role of epigenetic modifiers in reprogramming. 2. A separate section on miRNA's negative role in reprogramming will be useful for the reader.