

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 15567

Title: Search for naive human pluripotent stem cells

Reviewer's code: 02446126

Reviewer's country: Afghanistan

Science editor: Yue-Li Tian

Date sent for review: 2014-11-29 15:55

Date reviewed: 2014-12-02 21:07

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

Manuscript is well written and describes important aspects of biology in mouse ESCs, human ESCs and so called na?ve ESCs. Authors also explained when hESCs were established and inserted special chapter dedicated to X chromosome inactivation, which appears during differentiation of ESCs. From this view, authors should additionally pay attention to selected differentiation pathways in ESCs. They should mention how to induce selected differentiation pathways in mESCs and hESCs and which main factors are involved. Authors also mentioned how to control pluripotency by small molecules. From this view, they should mention effects of so called epi-drugs, such as HAT or HDAC inhibitors or others on ESCs pluripotency, proliferation and differentiation. Chapter related to iPSCs should be also valuable. Pictorial documentation is sufficient and review can be published in WJSC journal after minor revision.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 15567

Title: Search for naive human pluripotent stem cells

Reviewer's code: 02446100

Reviewer's country: France

Science editor: Yue-Li Tian

Date sent for review: 2014-11-29 15:55

Date reviewed: 2014-11-29 19:15

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 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 checked="" 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

The authors of this review paper briefly discussed the differences of mouse embryonic stem cells (ESCs) and human ESCs and the recent progress in culture conditions to establish mouse ESC-like human ESCs (naïve or ground-state human ESCs). The biological and practical relevance of these investigations were clearly resumed. The paper is well written which should be useful for stem cell research community. To be more consistent, the authors should also briefly mention the possible influences of other culture factors, including insoluble factors (substrates or scaffolds) and spatiotemporal variation of soluble factors (nutrients, cell factors, ...).