

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 22054

Title: Towards in vivo amplification: Overcoming hurdles in the use of hematopoietic stem cells in transplantation and gene therapy

Reviewer's code: 00504012

Reviewer's country: China

Science editor: Shui Qiu

Date sent for review: 2015-08-11 10:06

Date reviewed: 2015-08-18 09:05

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

COMMENTS TO AUTHORS

no further comments

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 22054

Title: Towards in vivo amplification: Overcoming hurdles in the use of hematopoietic stem cells in transplantation and gene therapy

Reviewer's code: 01217232

Reviewer's country: China

Science editor: Shui Qiu

Date sent for review: 2015-08-11 10:06

Date reviewed: 2015-08-23 06:54

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

COMMENTS TO AUTHORS

In this review, Dr. Nagree et al have reviewed the advances on gene therapy with hematopoietic stem cells as the target cells, focusing on in vivo selection and amplification of the transduced HSCs. The paper is appropriately prepared and the review is instructive. This reviewer has no concerns to be addressed.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 22054

Title: Towards in vivo amplification: Overcoming hurdles in the use of hematopoietic stem cells in transplantation and gene therapy

Reviewer's code: 01021289

Reviewer's country: Japan

Science editor: Shui Qiu

Date sent for review: 2015-08-11 10:06

Date reviewed: 2015-08-23 18:04

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 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

This manuscript reviews the current strategies and limitations to expand the gene corrected hematopoietic stem cells. The authors detailed the Ex vivo selection, In vivo chemo-selection, engineered inducible growth and selection strategies and those aimed to enhance engraftment of the gene corrected cells. The manuscript is well organized and educational that may be shared by the basic scientist and clinician that deals with the HSC oriented gene therapies. Major comments 1. In the middle part of the paragraph on page 21 where T cell gene therapy is described, the authors should elaborate what the T-cell gene therapy is. Without having this, it is hard to follow this section. 2. The first line on page 7 states the "reduction of the usefulness of the cells post-selection". It would be helpful for the readers to follow if the reasons for their reduction are explained. Minor 1. Line 8 from the bottom on page 8: "Faber disease" may be "Fabry disease". 2. "have showed" on the 4th line on page 18 should be "have shown".

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 22054

Title: Towards in vivo amplification: Overcoming hurdles in the use of hematopoietic stem cells in transplantation and gene therapy

Reviewer's code: 01047169

Reviewer's country: South Korea

Science editor: Shui Qiu

Date sent for review: 2015-08-11 10:06

Date reviewed: 2015-08-24 16:12

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 checked="" type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input checked="" 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 checked="" 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

This manuscript reviews current art-of-status to overcome the hurdles of gene therapy and stem cell transplantation using hematopoietic stem cell and deivative cells. It is Generally well written and informative. For better understanding of the audience, I recommend to split the former part to sub-sections. eg Ex Vivo Pre-Selection Strategies - Cytotoxic drug resistance - Cell surface markers In Vivo Chemo-Selection strategies - ABCB1 - DHFR - MGMT