

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 22431

Title: Use of platelet lysate for bone regeneration - are we ready for clinical translation?

Reviewer's code: 02446015

Reviewer's country: Italy

Science editor: Fang-Fang Ji

Date sent for review: 2015-09-04 12:10

Date reviewed: 2015-09-05 20:36

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 checked="" type="checkbox"/> Plagiarism	<input 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	
		[Y] No	

COMMENTS TO AUTHORS

The authors define the main findings from multiple manuscripts that examine the benefits of platelet lysate in wound healing; however, the collective body experimentation is limited. The submitted manuscript has the following concerns: - The manuscript contains a significant number of one-sentence paragraphs. It significantly disrupts the flow and appears to be a series of loosely connected facts. The entire document should be rewritten with better transitions so that it flows and is more coherent. - While there is a great deal of information here it is poorly organised. It is difficult to see what in vitro and in vivo work has been performed. Is this based on pre-clinical work or clinical studies?

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 22431

Title: Use of platelet lysate for bone regeneration - are we ready for clinical translation?

Reviewer's code: 02446119

Reviewer's country: China

Science editor: Fang-Fang Ji

Date sent for review: 2015-09-04 12:10

Date reviewed: 2015-10-30 11:13

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 checked="" type="checkbox"/> Plagiarism	<input 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	
		[Y] No	

COMMENTS TO AUTHORS

There are some studies try to establish standard clinical-grade PRP or plus MSC in recent years. These important reviews and original articles should be included, for example, Tissue engineering Part B, Reviews. 2014;20(3):200-5. New biotechnology. 2015;32(1):199-211. Journal of translational medicine. 2015;13:232. Immunology letters. 2015. Stem cell research & therapy. 2015;6:6. In addition, the classification and comparison of individual studies should highlight the main findings and give clear conclusions, which may help readers to know the current status and unsolved problems in this field. Reference #21 concluded that PL-serum, similar to PL-plasma, can substitute for FBS in hMSC cultures, so, it did not support the authors' worry about the use of heparin. Most of the orthopaedic surgery that needs artificial grafts are delayed or optional operation. The scaffold could be pretreated with PRP days before or with autologous MSCs simultaneously weeks before the operation. The authors' concern on instant-available PL-loaded scaffolds is not a common situation. A lot of missing spaces between words and after punctuations.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 22431

Title: Use of platelet lysate for bone regeneration - are we ready for clinical translation?

Reviewer's code: 02445552

Reviewer's country: Spain

Science editor: Fang-Fang Ji

Date sent for review: 2015-09-04 12:10

Date reviewed: 2015-11-16 15:31

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

I recommend to the authors to present a summary of factors present in PL as a table.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

ESPS manuscript NO: 22431

Title: Use of platelet lysate for bone regeneration - are we ready for clinical translation?

Reviewer's code: 02616017

Reviewer's country: China

Science editor: Fang-Fang Ji

Date sent for review: 2015-09-04 12:10

Date reviewed: 2015-11-18 09:48

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

Bone regeneration following trauma, tumour resection and degenerative bone disease is a key clinical problem. How to improve bone regeneration efficiency is a hot research topic. So far, the use of autograft bone or its substitutes supplemented with bone-specific growth factors and/or osteogenic cells such as mesenchymal stem cells (MSCs) is common strategy. Recent studies that human platelet lysate (PL) is an effective alternative to FCS, displaying enhanced proliferation ability while keeping osteogenic differentiation capacity. Limited pre-clinical investigations support in vitro finding and potential clinical application. Moreover, PL-coated scaffolds without seeded MSCs demonstrated equal new bone formation and vascularisation in vivo. Together, platelet lysates contain rich bioactive factors that act synergistically to facilitate MSC attachment, proliferation and differentiation, thus it provides an exciting medium for expanding mesenchymal stem cells and functions as scaffold coating for bone regeneration. The review by Dr. Ala Altaie summarized the advancement in basic research and preclinic study on bone regeneration using PL. The review also analyzed the questions about quality control and direction on how to transform this research into clinical application. For my opinion, it is a high quality review.