

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 47741

Title: Small molecules for mesenchymal stem cell fate determination

Reviewer's code: 03850089

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Emeritus Professor

Reviewer's country: Brazil

Author's country: China

Reviewer chosen by: Jin-Lei Wang

Reviewer accepted review: 2019-03-28 12:46

Reviewer performed review: 2019-03-29 12:58

Review time: 1 Day

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 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 checked="" 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

*At page 2, the paper refers to a Dai et al study (ref 45). The authors could summarize, in

few words, about this study and the explanation about the possible mechanisms mentioned. *Attention to typing errors. For example, at end of page 4. * The article is an interesting and well-done review work, but the information brought could be more elaborate. For example, about the scientific / clinical applications. The title leads us to understand that the use of the mentioned molecules approached, so the authors could discuss more about clinical applications. What obstacles encounter for its use? Table I is very rich with very interesting data, and it would be interesting if the authors mentioned possible clinical applications of this molecules and explore some of the information contained therein.

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: 47741

Title: Small molecules for mesenchymal stem cell fate determination

Reviewer's code: 03472394

Position: Editorial Board

Academic degree: PhD

Professional title: Assistant Lecturer, Senior Researcher, Senior Scientist

Reviewer's country: Russia

Author's country: China

Reviewer chosen by: Jin-Lei Wang

Reviewer accepted review: 2019-03-28 11:27

Reviewer performed review: 2019-03-30 20:58

Review time: 2 Days and 9 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 type="checkbox"/> Grade B: Minor language	(High priority)	<input 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 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 type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The problem of the effect of various small molecules, especially, of plant, fungal or

bacterial origin on proliferation and differentiation of MSCs that is considered in the manuscript has high relevance but not well studied. This is a comprehensive review. Authors analyzed the great databases of scientific literature. Moreover, they present the data in a clear form of two great figures and one very informative table. The key words reflect the focus of the manuscript. But I recommend adding “natural compounds” or something like this. Authors described the data from scientific literature. Authors describe the all known to present small molecules mostly of natural origin and the different mechanisms (through various receptors) of their effect on MSCs differentiation. There are two figures of great quality and one very informative table. The table has its own list of references – it’s very comfortable for the reader. But it would be better to add in the table one more column with the origin/natural source of the small molecule. The number of references is 139 from 1976 to this year with the majority of them for the last 3 years. It’s really great for the review. The manuscript well organized and presented. The style and language are OK. Authors prepared their manuscript according to manuscript type and the appropriate category: a Review.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

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

BPG Search:

- ☐ The same title
- ☐ Duplicate publication



**Baishideng
Publishing
Group**

7041 Koll Center Parkway, Suite
160, Pleasanton, CA 94566, USA
Telephone: +1-925-223-8242
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

[] Plagiarism

[Y] No

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 47741

Title: Small molecules for mesenchymal stem cell fate determination

Reviewer's code: 03814168

Position: Editorial Board

Academic degree: PhD

Professional title: Assistant Professor

Reviewer's country: Pakistan

Author's country: China

Reviewer chosen by: Jin-Lei Wang

Reviewer accepted review: 2019-03-29 03:17

Reviewer performed review: 2019-04-05 02:56

Review time: 6 Days and 23 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 type="checkbox"/> Grade B: Minor language	(High priority)	<input 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 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 type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The title is generalized, it must be meaningful Abstract of the review is general



**Baishideng
Publishing
Group**

7041 Koll Center Parkway, Suite
160, Pleasanton, CA 94566, USA
Telephone: +1-925-223-8242
E-mail: bpgoffice@wjgnet.com
<https://www.wjgnet.com>

covering stem cells differentiation, while the contents are focused on trilineage differentiation. References need to be formatted in single style. Language need to be improved. References of the table need to be included in complete list of references.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

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

BPG Search:

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