

PEER-REVIEW REPORT

Name of journal: World Journal of Orthopedics

Manuscript NO: 42879

Title: Investigational Growth Factors Utilized in Animal Models of Spinal Fusion:
Systematic Review

Reviewer's code: 03069301

Reviewer's country: Spain

Science editor: Ying Dou

Date sent for review: 2018-10-23

Date reviewed: 2018-11-03

Review time: 11 Days

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input checked="" 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 checked="" type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input checked="" 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 checked="" type="checkbox"/> Major revision	<input checked="" type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The authors present a systematic review on the factors used in animal models of spinal arthrodesis. The study is well designed but obviates studying the BMP-7 (OP-1). The BMP-7 has been much used in animals as well as in humans, and although it is currently



**Baishideng
Publishing
Group**

7901 Stoneridge Drive, Suite 501,
Pleasanton, CA 94588, USA
Telephone: +1-925-223-8242
Fax: +1-925-223-8243
E-mail: bpgoffice@wjgnet.com
https:// www.wjgnet.com

temporarily suspended its commercialization, its inclusion in a paper on animal experimentation is necessary. The clinical use of other proteins such as BMP-2 has also been subjected to other clinical problems.

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 Orthopedics

Manuscript NO: 42879

Title: Investigational Growth Factors Utilized in Animal Models of Spinal Fusion:
Systematic Review

Reviewer's code: 03708308

Reviewer's country: Italy

Science editor: Ying Dou

Date sent for review: 2018-10-23

Date reviewed: 2018-11-03

Review time: 11 Days

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 checked="" type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" 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 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

The manuscript is an interesting systematic review of the all non-human, preclinical animal models of spinal fusion reported in the literature and the growth factors role growth factors in spinal fusion. After a 4806 articles research on the four principles



**Baishideng
Publishing
Group**

7901 Stoneridge Drive, Suite 501,
Pleasanton, CA 94588, USA
Telephone: +1-925-223-8242
Fax: +1-925-223-8243
E-mail: bpgoffice@wjgnet.com
https:// www.wjgnet.com

science databases (PubMed, Embase, Cochrane Library, and Web of Science), only 26 articles were considered eligible by the authors. Main growth factors investigated were: AB204; angiopoietin; calcitonin; erythropoietin; basic fibroblast growth factor; growth differentiation factor, combined insulinlike growth factor 1 + transforming growth factor beta; insulin; NELL-1; noggin; P-15; peptide B2A; and secreted phosphoprotein 24. The authors concluded that many of the investigated growth factors could inform the development of efficacious, clinically translatable materials for spinal fusion. Comment 1: The authors should implement the discussion, add their opinion on the future prospective of the main growth factors, which of the should be further investigated and their possible clinical use.

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 Orthopedics

Manuscript NO: 42879

Title: Investigational Growth Factors Utilized in Animal Models of Spinal Fusion:
Systematic Review

Reviewer's code: 03069318

Reviewer's country: United States

Science editor: Ying Dou

Date sent for review: 2018-10-23

Date reviewed: 2018-11-09

Review time: 16 Days

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 checked="" type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input checked="" 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 checked="" type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

Abstract In the results, preferably include a range in fusion rates Introduction Please do not use trademarks in the introduction, use the name of the factor itself. Methods Well described Results Be consistent in reporting data. For example, state % of fusion



**Baishideng
Publishing
Group**

7901 Stoneridge Drive, Suite 501,
Pleasanton, CA 94588, USA
Telephone: +1-925-223-8242
Fax: +1-925-223-8243
E-mail: bpgoffice@wjgnet.com
https:// www.wjgnet.com

rate for calcitonin. Also for BFGF report specific values. Similarly for IGF/TGFb Were there any complications reported in these animal studies? Discussion Well presented. As described, the applicability of these factors to clinical practice is not only related to translation of the findings to humans, but also potential complications.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

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

BPG Search:

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