

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Stem Cells*

**Manuscript NO:** 77481

**Title:** LncRNA SNHG16 promotes human placenta-derived mesenchymal stem cell proliferation capacity through the PI3K/ AKT pathway under hypoxia

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 04638072

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Doctor

**Reviewer's Country/Territory:** China

**Author's Country/Territory:** China

**Manuscript submission date:** 2022-05-02

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-05-03 08:48

**Reviewer performed review:** 2022-05-08 15:59

**Review time:** 5 Days and 7 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No



**Baishideng  
Publishing  
Group**

7041 Koll Center Parkway, Suite  
160, Pleasanton, CA 94566, USA  
**Telephone:** +1-925-399-1568  
**E-mail:** bpgoffice@wjgnet.com  
**https://**www.wjgnet.com

<b>Peer-reviewer statements</b>	Peer-Review: [ <input checked="" type="checkbox"/> ] Anonymous [ <input type="checkbox"/> ] Onymous Conflicts-of-Interest: [ <input type="checkbox"/> ] Yes [ <input checked="" type="checkbox"/> ] No
-------------------------------------	---

#### **SPECIFIC COMMENTS TO AUTHORS**

The authors studied the role of lncRNA in regulating of hypoxia on hP-MSCs. Hypoxia lead to activation of AKT pathway. The author should demonstrate that whether SNHG16 alter the activation of AKT in response to hypoxia. lncRNA have several mechanisms to regulate gene expression. The authors should make clear or discuss how SNHG16 regulate AKT pathway.

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Stem Cells*

**Manuscript NO:** 77481

**Title:** LncRNA SNHG16 promotes human placenta-derived mesenchymal stem cell proliferation capacity through the PI3K/ AKT pathway under hypoxia

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 06272301

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Doctor

**Reviewer's Country/Territory:** China

**Author's Country/Territory:** China

**Manuscript submission date:** 2022-05-02

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-05-02 17:52

**Reviewer performed review:** 2022-05-09 09:06

**Review time:** 6 Days and 15 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

<b>Peer-reviewer statements</b>	Peer-Review: [ <input checked="" type="radio"/> ] Anonymous [ <input type="radio"/> ] Onymous Conflicts-of-Interest: [ <input type="radio"/> ] Yes [ <input checked="" type="radio"/> ] No
-------------------------------------	---

## SPECIFIC COMMENTS TO AUTHORS

In this manuscript, the authors described that LncRNA SNHG16 promotes human placental-derived mesenchymal stem cells proliferation capacity through PI3K/AKT pathway under hypoxia. I suggest accepting this manuscript after authors address the following concerns. 1. In Figure 1A&E, WB images were poor quality, so I suggest supplementing immunofluorescence staining for evidence. 2. In Figure 1D, I suggest repeating the experiment with a better quality diagram. 3. In Figure 4F, RNA FISH should be supplemented to provide the spatial location of lncRNA SNHG16. 4. Please explain why the results of control groups do not match in Figure 5C and Figure 4A. 5. The title contains a word "under hypoxia". In Figure 5, why the normal and hypoxia groups were not set after SNHG16 was knocked down. The proliferation phenotypes should be further confirmed by WB, IF and colony formation. In addition, the expression of SNHG16 should be restored after knockdown to confirm whether the phenotype is consistent. 6. In Figure 6, WB images were poor quality in CDK6 and Cyclin E1, so I suggest repeating them and adding immunofluorescence or ELISA evidence, as well as detecting the related RNA level of this pathway. 7. Both MYC and PI3K/AKT pathways can promote cell proliferation. Please explain why the MYC pathway was not detected later.

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Stem Cells*

**Manuscript NO:** 77481

**Title:** LncRNA SNHG16 promotes human placenta-derived mesenchymal stem cell proliferation capacity through the PI3K/ AKT pathway under hypoxia

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 05817547

**Position:** Peer Reviewer

**Academic degree:** PhD

**Professional title:** Postdoctoral Fellow

**Reviewer's Country/Territory:** Iran

**Author's Country/Territory:** China

**Manuscript submission date:** 2022-05-02

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-05-02 15:49

**Reviewer performed review:** 2022-05-10 20:09

**Review time:** 8 Days and 4 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

<b>Peer-reviewer statements</b>	Peer-Review: [ <input checked="" type="checkbox"/> ] Anonymous [ <input type="checkbox"/> ] Onymous Conflicts-of-Interest: [ <input type="checkbox"/> ] Yes [ <input checked="" type="checkbox"/> ] No
-------------------------------------	---

## SPECIFIC COMMENTS TO AUTHORS

In this manuscript, the authors have reported LncRNA SNHG16 promotes human placental-derived mesenchymal stem cells proliferation capacity through PI3K/AKT pathway under hypoxia. This manuscript suffers from several drawbacks in technical execution and data presentation, and, in my opinion, this manuscript in its current shape needs major revision. The main issues are as follows: 1-The manuscript must be carefully proofread for grammar, spelling, and punctuation issues. 2- The statements of this paper need improvement. The discussion part is not well written and needs a major rewrite. There is no balance between the different sections of the manuscript. The content of the introduction and results were too long. 3- For P-value, please write the exact value. 4- The method section was not well described and needed to be rewritten in more detail, such as the method of cell culture, cell transfection, etc. 5- The results of Primer Blast for gene SNHG16 primers showed a large number of nonspecific targets and no binding to the main target, which needs further investigation. 6- It is recommended to mention the statistical analysis results of cell cycle comparisons.

## RE-REVIEW REPORT OF REVISED MANUSCRIPT

**Name of journal:** *World Journal of Stem Cells*

**Manuscript NO:** 77481

**Title:** LncRNA SNHG16 promotes human placenta-derived mesenchymal stem cell proliferation capacity through the PI3K/ AKT pathway under hypoxia

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 05817547

**Position:** Peer Reviewer

**Academic degree:** PhD

**Professional title:** Postdoctoral Fellow

**Reviewer's Country/Territory:** Iran

**Author's Country/Territory:** China

**Manuscript submission date:** 2022-05-02

**Reviewer chosen by:** Jia-Ru Fan

**Reviewer accepted review:** 2022-07-09 10:29

**Reviewer performed review:** 2022-07-09 10:55

**Review time:** 1 Hour

<b>Scientific quality</b>	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
<b>Language quality</b>	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
<b>Conclusion</b>	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
<b>Peer-reviewer</b>	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous



**Baishideng  
Publishing  
Group**

7041 Koll Center Parkway, Suite  
160, Pleasanton, CA 94566, USA  
**Telephone:** +1-925-399-1568  
**E-mail:** bpgoffice@wjgnet.com  
<https://www.wjgnet.com>

statements

Conflicts-of-Interest: [ ] Yes [Y] No

#### **SPECIFIC COMMENTS TO AUTHORS**

In this manuscript, the authors have evaluated “LncRNA SNHG16 promotes human placenta-derived mesenchymal stem cell proliferation capacity through the PI3K/AKT pathway under hypoxia”. Overall, this manuscript provides valuable and valid data. I do not see any major issues in this manuscript.