

## PEER-REVIEW REPORT

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

**Manuscript NO:** 76874

**Title:** Metabolic determinants of stemness in medulloblastoma

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

**Peer-review model:** Single blind

**Reviewer's code:** 05046795

**Position:** Peer Reviewer

**Academic degree:** PhD

**Professional title:** Research Assistant Professor

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

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

**Manuscript submission date:** 2022-04-07

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-04-07 09:10

**Reviewer performed review:** 2022-04-07 09:53

**Review time:** 1 Hour

<b>Scientific quality</b>	<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 Grade E: Do not publish
<b>Language quality</b>	<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
<b>Conclusion</b>	<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
<b>Re-review</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Peer-reviewer</b>	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous

statements

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

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

Here, the authors summarized metabolic differences among the different MB groups. They also introduced the emerging metabolism-based therapeutic strategies for MB. There have some minor concerns about this review: 1. Does the metabolism shift in CSCs is unique in MB or totally same as other tumours? 2. They should summarize the metabolism therapeutic targets in Table 1 or Figure2. 3. Add some new evidence from FDA approved clinical trail(targeting metabolism) in MB, or AACR reports. 4. The interaction between different metabotic pathways should be discussed in CSCs.

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**Manuscript NO:** 76874

**Title:** Metabolic determinants of stemness in medulloblastoma

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

**Peer-review model:** Single blind

**Reviewer's code:** 05527205

**Position:** Peer Reviewer

**Academic degree:** PhD

**Professional title:** Associate Professor

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

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

**Manuscript submission date:** 2022-04-07

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-04-07 14:18

**Reviewer performed review:** 2022-04-11 08:59

**Review time:** 3 Days and 18 Hours

<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>Re-review</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Peer-reviewer</b>	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous

statements

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

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

This is a well-organized review that will bring wide interest in the metabolic characteristics of CSC in different subtypes of MB, here are my detailed opinions: 1) Since the great importance of metabolism in medulloblastoma CSC, the author needs to summarize the alteration of detailed metabolites examined by LC/MS or NMR. 2) In different subtypes of MB, the markers of CSC is isolated with different markers or not ? 3) The author need to add one row to describe the therapeutic strategy (drugs) of MB in table 1 ? 4) The resolution of Figures are low, needs improvement.