

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastrointestinal Oncology

**Manuscript NO:** 67956

**Title:** Characterization of metabolic landscape in hepatocellular carcinoma

**Reviewer's code:** 04230438

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Doctor

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

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

**Manuscript submission date:** 2021-05-08

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-05-10 06:46

**Reviewer performed review:** 2021-05-27 03:05

**Review time:** 16 Days and 20 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 Grade E: Do not publish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 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 type="checkbox"/> Yes <input checked="" 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**

This paper presents a review of metabolic traits of Hepatocellular carcinoma (HCC) with a focus on alterations on glycolysis, lipid metabolism and glutamine addiction. It then highlight some routes to develop biomarkers and therapies. This is a well-written and very informative paper that reaches its goal with regards to the specific HCC characteristics. Here are a few remarks: page 6, line 4: the use of the expression “metabolic reprogramming” is more and more debated in the very recent literature, for example in Medina, BioEssays 2020 (<https://onlinelibrary.wiley.com/doi/10.1002/bies.202000058>) or Jacquet et al. Biology 2021 (<https://www.mdpi.com/2079-7737/10/2/129>). One reason is that this expression is used to cover many different meanings. Instead of “metabolic reprogramming”, “metabolic alterations” might be a good alternative. page 6, line 7: it is wrong to associate the “Warburg effect” to “aerobic glycolysis”. This is not the definition originally given by Otto Warburg in his 1956 paper since he only noted an enhanced production of lactate independently of the presence of oxygen. The original observation by Warburg has progressively drifted with time to be limited to “aerobic glycolysis” due to the propagation of this shortcut. page 6, line 5: replace “Warburg effect” by “aerobic glycolysis” if this is what you mean to avoid any confusion. And also replace “suitable environment” by “suitable mechanism” (or something similar). page 12, line 3: I would replace “metabolic reprogramming” by “metabolic alteration” page 13, line 14: what is AAD ? page 24, line 2: trials instead of trails (2 occurrences) page 27, line 11: I would replace “energy reprogramming” by energy alteration or changes page 29, line 4: the field instead of filed ?

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastrointestinal Oncology

**Manuscript NO:** 67956

**Title:** Characterization of metabolic landscape in hepatocellular carcinoma

**Reviewer's code:** 05393105

**Position:** Editorial Board

**Academic degree:** MBBS, MD

**Professional title:** Professor

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

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

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**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-05-27 11:31

**Reviewer performed review:** 2021-06-03 09:21

**Review time:** 6 Days and 21 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 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 statements</b>	Peer-Review: <input type="checkbox"/> Anonymous <input checked="" type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## **SPECIFIC COMMENTS TO AUTHORS**

It is a decent review. There are a few suggestions for enhancing the manuscript: Minor

1. Please correct grammar and formatting throughout the manuscript Major: 1. Please include this article in the discussion Chen Yang et al. Metabolism - associated molecular classification of hepatocellular carcinoma, Mol Oncol. 2020 Apr; 14(4): 896–913. Published online 2020 Jan 29. doi: 10.1002/1878-0261.12639. PMCID: PMC7138397; PMID: 31955511 2. Does the scope of review include the component of Proteogenomics impacting Metabolomics? If yes then it may be included in the discussion and plenty of data is available regarding the same