**PEER-REVIEW REPORT**

Name of journal: *World Journal of Clinical Oncology*

Manuscript NO: 85445

Title: Progress in the research of cuproptosis and possible targets for cancer therapy

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 02461627

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer’s Country/Territory: United Arab Emirates

Author’s Country/Territory: China

Manuscript submission date: 2023-04-28

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-04-28 11:45

Reviewer performed review: 2023-05-09 16:12

Review time: 11 Days and 4 Hours

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<tr>
<th>Scientific quality</th>
<th>Grade A: Excellent</th>
<th>Grade B: Very good</th>
<th>Grade C: Good</th>
<th>Grade D: Fair</th>
<th>Grade E: Do not publish</th>
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<tr>
<th>Novelty of this manuscript</th>
<th>Grade A: Excellent</th>
<th>Grade B: Good</th>
<th>Grade C: Fair</th>
<th>Grade D: No novelty</th>
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<tr>
<th>Creativity or innovation of this manuscript</th>
<th>Grade A: Excellent</th>
<th>Grade B: Good</th>
<th>Grade C: Fair</th>
<th>Grade D: No creativity or innovation</th>
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SPECIFIC COMMENTS TO AUTHORS

The manuscript entitled “Progress in the research of cuproptosis and possible target for cancer therapy” and authored by Wang et al reviewed the notion that copper death (cuproptosis) occurs when intracellular copper is overloaded, triggering aggregation of lipidated mitochondrial proteins and Fe-S cluster proteins. This unique cell death is caused by the instability of copper ions. Authors then referred to cuproptosis-related genes as identified by Tsvetkov, including FDX1, LIAS, LIPT1, DLD, DLAT, PDHA1, PDHB, MTF1, GLS, and CDKN2A and provided a fresh understanding of the role of copper death and related genes in cancer. This manuscript seems to be prematurely rushed into publication and is not acceptable in its current format. Despite the fact that it might have a scientific value, the lack of careful attention and awkwardness of many sections make it very hard to follow.
Name of journal: World Journal of Clinical Oncology

Manuscript NO: 85445

Title: Progress in the research of cuproptosis and possible targets for cancer therapy

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 03522829

Position: Peer Reviewer

Academic degree: PhD

Professional title: Assistant Professor

Reviewer’s Country/Territory: Egypt

Author’s Country/Territory: China

Manuscript submission date: 2023-04-28

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-05-28 08:10

Reviewer performed review: 2023-06-07 08:12

Review time: 10 Days

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<th>Scientific quality</th>
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### SPECIFIC COMMENTS TO AUTHORS

The aim of this review to highlight the role of copper death (cuproptosis) and related genes in cancer. Actually, the current proposal is interesting and well-written. Therefore, I recommend that the current study be published after minor revisions as follows: 1-

Please include a section on future directions to emphasize the constraints and future intentions for applications. 2- The authors mentioned that "Using immunotherapy as an example. With copper ions' anti-angiogenic properties, immunotherapy drugs combined with copper chelators will become a new treatment for cancer" could the authors deeply discuss the complex interactions of immune cells in the tumor microenvironment of cancer as well as cancer cells? reference: SnapShot: TP53 status and macrophages infiltration in TCGA-analyzed tumors. Int Immunopharmacol. 2020 Sep;86:106758. doi: 10.1016/j.intimp.2020.106758.
Name of journal: *World Journal of Clinical Oncology*

Manuscript NO: 85445

Title: Progress in the research of cuproptosis and possible targets for cancer therapy

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 06190600

Position: Peer Reviewer

Academic degree: MBBS

Professional title: Academic Research

Reviewer’s Country/Territory: India

Author’s Country/Territory: China

Manuscript submission date: 2023-04-28

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-07-12 04:45

Reviewer performed review: 2023-07-21 11:28

Review time: 9 Days and 6 Hours

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<td>[ ] Grade D: Fair</td>
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| Novelty of this manuscript | [ ] Grade A: Excellent | [ Y] Grade B: Good | [ ] Grade C: Fair |
|                            | [ ] Grade D: No novelty |                     |                     |

| Creativity or innovation of this manuscript | [ ] Grade A: Excellent | [ Y] Grade B: Good | [ ] Grade C: Fair |
|                                             | [ ] Grade D: No creativity or innovation |                     |                     |


### Scientific significance of the conclusion in this manuscript

- Grade A: Excellent
- Grade B: Good
- Grade C: Fair
- Grade D: No scientific significance

### Language quality

- Grade A: Priority publishing
- Grade B: Minor language polishing
- Grade C: A great deal of language polishing
- Grade D: Rejection

### Conclusion

- Accept (High priority)
- Accept (General priority)
- Minor revision
- Major revision
- Rejection

### Re-review

- Yes
- No

### Peer-reviewer statements

- Peer-Review: Anonymous
- Onymous

- Conflicts-of-Interest: Yes
- No

### SPECIFIC COMMENTS TO AUTHORS

Dear Author, Congratulations on your research work. The topic of review is very interesting and novel. The review is extensive and good, but I suggest few things which can improve the quality further.

1. Make a figure depicting cuproptosis as cancer therapy - how it works
2. In discussion section, add limitations of therapy and future scope & recommendations
3. Add a separate conclusion paragraph