

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 88459

Title: Erlotinib combination with a mitochondria-targeted ubiquinone effectively suppresses pancreatic cancer cell survival

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 06144658

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Professor

Reviewer's Country/Territory: China

Author's Country/Territory: United States

Manuscript submission date: 2023-09-26

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-10-06 08:03

Reviewer performed review: 2023-10-07 09:04

Review time: 1 Day and 1 Hour

Scientific quality	☐ Grade A: Excellent ☒ Grade B: Very good ☐ Grade C: Good ☐ Grade D: Fair ☐ Grade E: Do not publish
Novelty of this manuscript	☐ Grade A: Excellent ☒ Grade B: Good ☐ Grade C: Fair ☐ Grade D: No novelty
Creativity or innovation of this manuscript	☐ Grade A: Excellent ☒ 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

1.The full name of the 462 and 670 cell lines can be written on the labels without any abbreviation. 2.Only the lower-right picture in picture 1A depicts the groups; if the groups are identical, they should all be designated similarly. This conclusion is insufficient: "the functional moiety of MitoQ CoQ10 (ubiquinone) did not suppress cell viability, while the vehicle moiety TPP mildly decreased cell viability only at higher doses." Figure 1C's IC50 value is excessively high for a three-dimensional culture; an explanation of why this is the case is required. 3.Each group should be shown in a different color in Figures 2A and 3B. 4. Figures 4A and D have been redone and clearly noted. 5.HIF1 α is typically detectable in hypoxic conditions for 15 minutes; please add to the short time data shown in Fig. 4C.

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Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05469117

Position: Editorial Board

Academic degree: PhD

Professional title: Adjunct Professor, Chief Physician, Deputy Director

Reviewer's Country/Territory: China

Author's Country/Territory: United States

Manuscript submission date: 2023-09-26

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-10-08 12:23

Reviewer performed review: 2023-10-08 16:59

Review time: 4 Hours

Scientific quality	☒ Grade A: Excellent ☐ Grade B: Very good ☐ Grade C: Good ☐ Grade D: Fair ☐ Grade E: Do not publish
Novelty of this manuscript	☒ Grade A: Excellent ☐ Grade B: Good ☐ Grade C: Fair ☐ Grade D: No novelty
Creativity or innovation of this manuscript	☒ Grade A: Excellent ☐ 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

Thank you for inviting me to evaluate the Basic Study titled “Erlotinib combination with a mitochondria-targeted ubiquinone effectively suppresses pancreatic cancer cell survival”. Increased activity of the EGFR is often observed in pancreatic cancer, however, the antitumor effect of the small molecule EGFR inhibitor erlotinib alone is limited. In this report, they demonstrated that erlotinib can elevate the mitochondrial membrane potential ($\Delta\psi_m$) in pancreatic adenocarcinoma (PDAC) cells, facilitating tumor cell uptake the mitochondria-targeted ubiquinone (MitoQ) to the level to break the mitochondrial homeostasis and induce lethal responses, and MitoQ combination with erlotinib can synergistically increase lethal effects in PDAC cells in culture. The paper is well arranged and the logic is clear, and. The cited literature is comprehensive and modern. The provided figure and tables are well composed and understandable. The quality of language of the manuscript is quite acceptable for me. So, I recommend to you that this manuscript may be accepted.