



PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Cases*

Manuscript NO: 70444

Title: Clinical and prognostic significance of expression of phosphoglycerate mutase family member 5 and Parkin in advanced colorectal cancer

Provenance and peer review: Unsolicited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03023603

Position: Peer Reviewer

Academic degree: PhD

Professional title: Doctor

Reviewer's Country/Territory: United States

Author's Country/Territory: China

Manuscript submission date: 2021-08-02

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-08-09 15:01

Reviewer performed review: 2021-08-18 21:08

Review time: 9 Days and 6 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 Grade E: Do not publish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



Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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SPECIFIC COMMENTS TO AUTHORS

The manuscript “Clinical and prognostic significance of PGAM5 and Parkin in advanced colorectal cancer and its correlation” aimed to assess protein expression of PGAM5 and Parkin as a diagnosis and predictive biomarker for colorectal (CRC). They used immunohistochemistry on 100 CRC tissues from patients to determine the expression of these two proteins. The authors found that PGAM5 and Parkin were higher in cancerous than in adjacent non-cancerous tissues. These two proteins were both cytoplasmic and positively correlated within advanced CRC tissues. The authors suggest PGAM5 and Parkin as new clinical biomarkers for CRC. However, future studies are needed to clarify the contradictory role of these two protein in CRC. Major comments: 1. The authors used immunohistochemistry to determine protein expression in CRC tissues. The findings in the paper could be supported with gene expression and protein levels of PGMA5 and Parkin using other methods such as western blot. 2. The findings that PGAM5 and Parkin are higher in CRC tissues contradict the role of PGAM5 and Parking in improving mitochondrial function and cellular health. In addition, other studies, including the one cited by the authors and others (Turk J Gastroenterol. 2020 Mar;31(3):211-220), found lower protein levels of parkin in advanced CRC tissues from patients. Many altered proteins in cancers display this dichotomous role (tumor suppressor and tumor promoter). The discussion could be more concise and focused on helping clarify this dichotomy in the role of PGAM5 and Parkin in CRC. Further studies are needed to reconcile the contradictory findings. 3. The authors mentioned that PGAM5 might promote CRC development through other mechanisms like energy and/or lipid metabolism. Could the authors expand on this with specific examples?



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Minors comments. 1. The “and correlation” might be omitted from the title. 2. Many typos and grammatical issues are present throughout the paper need attention