

PEER-REVIEW REPORT

Name of journal: World Journal of Gastrointestinal Oncology

Manuscript NO: 64907

Title: Poly adenosine diphosphate-ribosylation, a promising target for colorectal cancer treatment

Reviewer's code: 05275248

Position: Peer Reviewer

Academic degree: PhD

Professional title: Academic Research, Dean

Reviewer's Country/Territory: China

Author's Country/Territory: South Korea

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Reviewer chosen by: Ya-Juan Ma

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Scientific quality	<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 Grade E: Do not publish
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

SPECIFIC COMMENTS TO AUTHORS

In this manuscript, the author summarized the pivotal role of PARP1 and PARylation in CRC therapy. This review demonstrated that PARP1 plays an important role in DNA repair, maintenance of genomic integrity, and regulation of a variety of metabolic and signal transduction processes. It can be the potential therapeutic target in CRC which has valuable clinical prospect. But there are still several shortcomings. 1. The authors suggested that PARP1 plays a role in DNA damage repair, mitochondrial ROS, and transcriptional regulation. But in what process does the PARP1 or PARylation effects more, or in what states does it play a dominant role? In this paper, the functions of PARP-1 are listed, but the internal relations are not deeply explored, which is not logical enough. 2. In the “Non-clinical and clinical studies on CRC treatment” part, the detailed description of PARP1 inhibitor for breast/ovarian/pancreatic cancer therapy can be reduced or deleted. 3. In addition to the five PARP1 inhibitors mentioned in the manuscript, several candidates are currently in clinical studies. The authors can update and supplement other clinical trials related to PARP1 inhibitors, including monotherapy and combination therapy. 4. In the conclusion part, the application prospects of PARP-1 and PARylation in CRC therapy should be strengthened. 5. There are some writing errors in context.