

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 83782

Title: Exploring the regulatory mechanism of tRNA-derived fragments 36 in acute pancreatitis based on small RNA sequencing and experiments

Provenance and peer review: Unsolicited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03475330

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Professor, Surgeon

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

Manuscript submission date: 2023-02-09

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-04-23 04:38

Reviewer performed review: 2023-04-28 12:51

Review time: 5 Days and 8 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 Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
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 type="checkbox"/> Minor revision <input checked="" 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

Confidential The manuscript entitled " Exploring the regulatory mechanism of tRF36 in acute pancreatitis based on small RNA sequencing and experiments" has been reviewed. A lot of careful work has gone into this project. However, a drawback of this manuscript is that, as the authors describe, the analysis was carried out on a small number of samples. On the other hand, the authors even describe the weakness of the paper in the discussion section. Apart from that, several issues need improvement. Remarks to the author The manuscript entitled " Exploring the regulatory mechanism of tRF36 in acute pancreatitis based on small RNA sequencing and experiments" has been reviewed. A lot of careful work has gone into this project. However, a drawback of this manuscript is that, as the authors describe, the analysis was carried out on a small number of samples. On the other hand, the authors even describe the weakness of the paper in the discussion section. Apart from that, several issues need improvement. Comments. What are the causes of acute pancreatitis? How many days after the onset of pancreatitis was the patient's blood drawn? How severe was the pancreatitis when the blood was taken? Patients with pancreatitis would have had mild to severe disease. Did the authors check

the serum levels of P53 in the serum of the 20 pooled cases of patients with pancreatitis? And did tRF36 and P53 correlate with the severity of the pancreatitis? In the results section. As shown in Figure 2a, tRF-36 was downregulated in the serum of AP patients and its differential expression was the most significant ($p < 0.05$, Figure 2a). →Is this statement correct? The expression of ferritin in the pancreatic tissues of the AP model mice was significantly reduced (Figure 3h). →Is this result correct? Ferritin should be increased in pancreatitis. Longer discussion. Please be concise as there are many results. What does Figure 2a mean? Please prepare a detailed explanation. Minor There is no comment on the standard ethical principles. Figures 3c and d are in reverse order.

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Provenance and peer review: Unsolicited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 04410177

Position: Peer Reviewer

Academic degree: PhD

Professional title: Assistant Professor, Senior Statistician, Statistical Worker, Statistician

Reviewer's Country/Territory: Taiwan

Author's Country/Territory: China

Manuscript submission date: 2023-02-09

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-04-15 09:10

Reviewer performed review: 2023-04-28 12:52

Review time: 13 Days and 3 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
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
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 type="checkbox"/> Minor revision <input checked="" 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

Dear Editor, To maintain WJG's rapid peer review process, I just focus on individual concerns and make decision finally. According to your esteemed guidelines for publishing by WJG, this paper is interesting and applicable to clinical practice in hepatic ischemia-reperfusion injury. However, lack of important detail of vitro model explained and bias affected results description to provide information for readers. It's my pleasure to have an opportunity to review this manuscript. I hope I will have more invitation from WJG to review manuscript submitted to your esteemed journal in the future. Sincerely yours, I-Shiang Tzeng, PhD Associate Professor This is a basic study discussing about the regulatory mechanisms of tRNA-derived fragments (tRFs) in AP based on small RNA sequencing and experiments. This study results confirms through in vitro model. I think the topic is important and contributive to the clinical practice with an empirical approach quite valuable for acute pancreatitis professionals.

1 Title: Appropriate. 2 Abstract: Well described in the manuscript. 3 Key words: Appropriate. 4 Background: Please add references about review article related to similar issue. 5 Methods: Appropriate. 6 Results: Appropriate. 7 Discussion: I am

not familiar the hypothesis proposed in this study. The authors should clarify this concern for discussion. 8 Illustrations and tables: I am not familiar in vitro model. Please introduce commonly used illustrations and tables for vitro model. Does any vivo model involve the similar topic? 9 Biostatistics: Does the manuscript examined by experienced biostatistics? 10 Units: Does the manuscript meet the requirements of use of international system of units? 11 References: Please cite appropriately the latest, important and authoritative references in the introduction and discussion sections. 12 Quality of manuscript organization and presentation: Please provide English editing certificate. 13 Research methods and reporting: Please provide appropriate research methods and reporting. Authors should have prepared their manuscripts according to manuscript type and the appropriate categories, as follows: (1) CARE Checklist (2013) - Case report; (2) CONSORT 2010 Statement - Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist - Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement - Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines - Basic study. 14 Ethics statements: Please provide appropriate ethics approval.

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 83782

Title: Exploring the regulatory mechanism of tRNA-derived fragments 36 in acute pancreatitis based on small RNA sequencing and experiments

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Reviewer's code: 03475330

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Professor, Surgeon

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

Manuscript submission date: 2023-02-09

Reviewer chosen by: Jing-Jie Wang

Reviewer accepted review: 2023-05-29 08:45

Reviewer performed review: 2023-05-30 00:40

Review time: 15 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input 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
Peer-reviewer	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous

statements

Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

Specific comments to the authors: Confidential The manuscript entitled "Exploring the regulatory mechanism of tRF36 in acute pancreatitis based on small RNA sequencing and experiments" has been re-reviewed. Comments. What are the causes of acute pancreatitis? RE: Thanks for the comment. Acute pancreatitis (AP) is a local inflammation of the pancreas and even organ dysfunction due to self-digestion of the pancreas and surrounding organs after abnormal activation of pancreatic enzymes. We have explained about this issue in the introduction. That is not my point. What causes acute pancreatitis? What is the underlying disease? For example, idiopathic, stone, alcohol? The reason for asking this is Does the primary disease make a difference in the expression of tRF36? How do the authors distinguish between mild and moderate pancreatitis?