Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Novelty of this manuscript	[Y] Grade A: Excellent [ ] 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　　[Y] Grade B: Good　　　[　] Grade C: Fair [　] Grade D: No scientific significance
Language quality	[　] Grade A: Priority publishing　[Y] Grade B: Minor language polishing　[　] Grade C: A great deal of language polishing　[　] Grade D: Rejection
Conclusion	[　] Accept (High priority)　[　] Accept (General priority) [Y] Minor revision　[　] Major revision　[　] Rejection
Re-review	[Y] Yes　[　] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous　[　] Onymous
	Conflicts-of-Interest: [　] Yes　[Y] No

SPECIFIC COMMENTS TO AUTHORS

In this paper, the authors investigated the presence and influence of artifacts in 2-D SWE of liver. They concluded that investigate the presence and influence of artifacts in 2-D SWE of liver, and artifacts may lead to the overestimation of LS and reduce the repeatability and reliability of LS measurements. The theme of the study is interesting, and the paper is well written. However, the authors should address the following points.

1. As the authors also described in the section of discussion, they analyzed only a small sample of data from two operators, were too small to correctly evaluate the theme of the study. 2. The authors described that "some studies have suggested that novices should perform at least 300 abdominal US scans or more than 50 supervised 2-D SWE examinations; however, this may not be sufficient (p10, line 9-11)". I suggest that the authors explain this more specific.

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 83511

Title: Artifacts in two-dimensional shear wave elastography of liver

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 06110727

Position: Peer Reviewer

Academic degree: MD

Professional title: Assistant Lecturer

Reviewer's Country/Territory: India

Author's Country/Territory: China

Manuscript submission date: 2023-02-27

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-03-02 08:00

Reviewer performed review: 2023-03-08 03:05

Review time: 5 Days and 19 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
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 [Y] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No scientific significance
Language quality	[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Re-review	[Y] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This is the first prospective study to analyze artifacts in 2-D SWE of the liver. This study analyzed the predilection sites and people for artifacts, and explored the effects of artifacts on LS measurements. Knowledge of the artifacts is essential to avoid misinterpretation of images and also to be able to improve operation technology to obtain high-quality images for accurate diagnosis. This study investigated the presence and effects of artifacts in 2-D SWE of the liver. This is important to avoid artifacts and improve diagnostic performance in future operations. The study is well designed and beautifully written. I can't think of any additional limitation more than what the authors highlighted in the manuscript

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Novelty of this manuscript	[Y] Grade A: Excellent [ ] 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 [Y] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No scientific significance
Language quality	[Y] 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) [Y] Minor revision [ ] Major revision [ ] Rejection
Re-review	[Y] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

I found the manuscript entitled "Artifacts in two-dimensional shear wave elastography of liver" original, very interesting, well-structured and with huge impact on ultrasound elastography. 2-D SWE has shown sufficient accuracy in evaluating the degree of liver fibrosis. However, there was significant heterogeneity in the results of these studies. Only a few review articles have been published of 2-D SWE artifacts. This manuscript investigates the presence and influence of artifacts in 2-D SWE of liver. Their results showed artifacts were more likely to occur in the bottom-left corner of the elastogram. Artifacts may lead to the overestimation of LS and reduce the repeatability and reliability of LS measurements. The authors suggest that Q-Box should be kept away from artifacts in the future for elasticity maps with artifacts. Comments: 1. Title and key words - well chosen. 2-The abstract summarized and reflect the described in the manuscript. 3. Introduction contains the most important data to support the importance of the study. Some references could be included here. 4. Material and methods - the paragraphs are generally well structured and explained. 5. Results section is well and clearly presented with pertinent statistics. 6. Discussion paragraph could be expanded to

underline the strength of this study, also, directions for future research could be discussed. 7. Good quality of the Figures. 8. References –appropriate, latest and important.