

## Reviewer #1:

### 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.

**RESPONSE:** Three new references have been added to this article.

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.

**RESPONSE:** It has been expanded in the discussion paragraph. "To the best of our knowledge, 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 improve operation technology to obtain high-quality images. It is very important to obtain accurate measurements in an attempt to optimize its performance and application value. In addition, knowledge from this and other studies on artifacts can be used to investigate how training and education could reduce the occurrence of artifacts. Hopefully, engineers and researchers can improve the product design, provide quality indicators and other ways to avoid the acquisition of improper data due to artifacts."

7. Good quality of the Figures.
8. References -appropriate, latest and important.

**RESPONSE:** The references have been updated as necessary.

## Reviewer #2:

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.

## Reviewer #3:

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.

**RESPONSE:** In this study, a total of 1440 valid elastograms were obtained by two operators for analysis. We believe that the conclusions drawn based on these data can reflect some characteristics of artifacts. Of course, we also indicated that a larger sample study involving more operators and devices needs to be conducted in future.

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.

**RESPONSE:** It has been described in detail in the discussion section. “A learning curve has been observed for 2-D SWE, a proportion of operator error would decrease over time.”