

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 51098

**Title:** Ultrasound-based techniques for the diagnosis of liver steatosis

**Reviewer's code:** 00227368

**Position:** Peer Reviewer

**Academic degree:** MD, PhD

**Professional title:** Associate Professor, Professor

**Reviewer's country:** Turkey

**Author's country:** Italy

**Reviewer chosen by:** Artificial Intelligence Technique

**Reviewer accepted review:** 2019-08-27 17:54

**Reviewer performed review:** 2019-08-28 11:52

**Review time:** 17 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language	(High priority)	<input type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input type="checkbox"/> No

### SPECIFIC COMMENTS TO AUTHORS

That is a very good study. The results are interesting for both hepatolohist and Internist.



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## INITIAL REVIEW OF THE MANUSCRIPT

### *Google Search:*

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

### *BPG Search:*

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 51098

**Title:** Ultrasound-based techniques for the diagnosis of liver steatosis

**Reviewer's code:** 00030389

**Position:** Editorial Board

**Academic degree:** MD, PhD

**Professional title:** Professor

**Reviewer's country:** Japan

**Author's country:** Italy

**Reviewer chosen by:** Jie Wang

**Reviewer accepted review:** 2019-08-30 03:33

**Reviewer performed review:** 2019-08-31 06:14

**Review time:** 1 Day and 2 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language	(High priority)	<input type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input type="checkbox"/> No

## SPECIFIC COMMENTS TO AUTHORS

The authors reviewed the manuscripts on ultrasound-based techniques for the diagnosis



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of liver steatosis. The ultrasound-based techniques included B-mode imaging (Hamaguchi score, US-FLI score and Hepatorenal steatosis index), quantitative ultrasound (backscatter coefficient and controlled attenuation parameter), quantification of US attenuation with imaging systems (ATI, UGAP and ATT), and Speed of sound estimation. The review contains the performance of those techniques and their comparison. I have no suggestion to revise the review.

#### **INITIAL REVIEW OF THE MANUSCRIPT**

##### ***Google Search:***

- ☐ The same title
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- ☐ Plagiarism
- ☐ No

##### ***BPG Search:***

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 51098

**Title:** Ultrasound-based techniques for the diagnosis of liver steatosis

**Reviewer's code:** 00032933

**Position:** Editorial Board

**Academic degree:** MD, PhD

**Professional title:** Attending Doctor, Professor, Chief Doctor

**Reviewer's country:** Taiwan

**Author's country:** Italy

**Reviewer chosen by:** Jie Wang

**Reviewer accepted review:** 2019-08-31 13:40

**Reviewer performed review:** 2019-09-01 09:45

**Review time:** 20 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language	(High priority)	<input type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input type="checkbox"/> No

## SPECIFIC COMMENTS TO AUTHORS

This is an interesting review concerns about the US based diagnosis for hepatic steatosis.



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The authors make a comprehensive review on conventional US, RF data calculation and CAP on measurement of steatosis. They also present some results from the latest approach by attenuation imaging, UGAP or sound speed estimation. The preliminary results seem to be objective and more accurate than CAP. Comments 1. Please give full name before the use of ATI and describe the difference between CAP and ATI. 2. Please make a comment or description for the location of measurements in ATI, SSD, and UGAP.

#### **INITIAL REVIEW OF THE MANUSCRIPT**

##### ***Google Search:***

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- ☐ No

##### ***BPG Search:***

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 51098

**Title:** Ultrasound-based techniques for the diagnosis of liver steatosis

**Reviewer's code:** 00052899

**Position:** Editorial Board

**Academic degree:** MD, PhD

**Professional title:** Chief Doctor, Director, Professor

**Reviewer's country:** China

**Author's country:** Italy

**Reviewer chosen by:** Jie Wang

**Reviewer accepted review:** 2019-09-01 02:03

**Reviewer performed review:** 2019-09-03 16:21

**Review time:** 2 Days and 14 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language	(High priority)	<input type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input type="checkbox"/> No

## SPECIFIC COMMENTS TO AUTHORS

In this study, the authors reviewed the ultrasound-based techniques for the diagnosis of



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liver steatosis. The authors made a comprehensive review on conventional US, RF data calculation and CAP for the measurement of liver steatosis. Preliminary results show that proprietary technologies implemented in US systems seem more accurate than CAP for grading liver steatosis. Another available method for quantifying liver steatosis is based on the computation of the sound speed and the initial results appear promising. The results might be useful for clinical doctors.

#### **INITIAL REVIEW OF THE MANUSCRIPT**

##### ***Google Search:***

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- ☐ Plagiarism
- ☐ No

##### ***BPG Search:***

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No



## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 51098

**Title:** Ultrasound-based techniques for the diagnosis of liver steatosis

**Reviewer's code:** 00053888

**Position:** Editorial Board

**Academic degree:** FRCS (Gen Surg), MD

**Professional title:** Attending Doctor, Doctor, Surgeon

**Reviewer's country:** United Kingdom

**Author's country:** Italy

**Reviewer chosen by:** Jie Wang

**Reviewer accepted review:** 2019-09-04 09:23

**Reviewer performed review:** 2019-09-04 13:36

**Review time:** 4 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input checked="" type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input checked="" type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

## SPECIFIC COMMENTS TO AUTHORS

This is a timely and useful review of techniques and scoring systems using USS in use to



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evaluate hepatic steatosis. The review is helpful but the authors should consider introducing some figures &/or table to break the text up a little. In addition there are a few areas of grammar that I would not use 'of paramount importance', 'thus', etc. If these few areas can be addressed then I think the manuscript should be published.

#### **INITIAL REVIEW OF THE MANUSCRIPT**

##### ***Google Search:***

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

##### ***BPG Search:***

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 51098

**Title:** Ultrasound-based techniques for the diagnosis of liver steatosis

**Reviewer's code:** 00058381

**Position:** Editorial Board

**Academic degree:** MD

**Professional title:** Professor

**Reviewer's country:** Austria

**Author's country:** Italy

**Reviewer chosen by:** Jie Wang

**Reviewer accepted review:** 2019-09-05 12:20

**Reviewer performed review:** 2019-09-05 14:43

**Review time:** 2 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input checked="" type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input checked="" type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input checked="" type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

## SPECIFIC COMMENTS TO AUTHORS

Major Comments: This manuscript offers an overview on ultrasound-based techniques



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for the diagnosis of liver steatosis; however, everyone would expect an article of this kind to include some illustrative material – so please add some figures/tables. Minor Comments: Some language polishing is required; e.g., "None support" (page 2); "The attenuation coefficient in calculated in decibel per centimeter per megahertz" (Page 10). Abbreviated terms should be written out when used for the first time. NB: The current rating ("Fair", "Major Revision") is mainly due to the lack of illustrative material.

#### **INITIAL REVIEW OF THE MANUSCRIPT**

##### ***Google Search:***

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- ☐ No

##### ***BPG Search:***

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 51098

**Title:** Ultrasound-based techniques for the diagnosis of liver steatosis

**Reviewer's code:** 01557574

**Position:** Editorial Board

**Academic degree:** PhD

**Professional title:** Professor

**Reviewer's country:** Turkey

**Author's country:** Italy

**Reviewer chosen by:** Jie Wang

**Reviewer accepted review:** 2019-08-30 14:29

**Reviewer performed review:** 2019-09-06 08:24

**Review time:** 6 Days and 17 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input checked="" type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input checked="" type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

## SPECIFIC COMMENTS TO AUTHORS

This manuscript titled "Ultrasound-based techniques for the diagnosis of liver steatosis "



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should be published at WJG. There is general informations and it is well documanted.  
Sincerely yours.

#### **INITIAL REVIEW OF THE MANUSCRIPT**

##### ***Google Search:***

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- ☐ Plagiarism
- ☒ No

##### ***BPG Search:***

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☒ No

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 51098

**Title:** Ultrasound-based techniques for the diagnosis of liver steatosis

**Reviewer's code:** 00253956

**Position:** Editorial Board

**Academic degree:** BSc, PhD

**Professional title:** Academic Research, Assistant Professor, Doctor, Lecturer

**Reviewer's country:** United Kingdom

**Author's country:** Italy

**Reviewer chosen by:** Jie Wang

**Reviewer accepted review:** 2019-09-02 08:48

**Reviewer performed review:** 2019-09-06 10:51

**Review time:** 4 Days and 2 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input checked="" type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input checked="" type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

## SPECIFIC COMMENTS TO AUTHORS

A detailed review of the benefits and limitations of ultrasound based techniques for the

detection and grading of liver steatosis will be of use to scientists and clinicians working in this field. The review is interesting but since the review is designed to cover 'steatosis', as detailed in the title there is no coverage of the use of US for grading of steatosis in alcoholic liver disease (ALD), and a sole focus on NAFLD. Secondly, elements of the review such as Hamaguchi score, US-FLI score etc, would be easier to appreciate for reference if tabularised. It would also be useful to include the size of the studies undertaken with the methods - how useful is the predictive value based upon the numbers of the cohorts investigated. Although useful as a review, more research power would be generated if this was an unbiased systematic review, that covered all reported incidences of US for the diagnosis of liver steatosis, either as NAFLD or via alcohol, and therefore could provide more comparison of equipment and methods directly.

## **INITIAL REVIEW OF THE MANUSCRIPT**

### ***Google Search:***

- ☐ The same title
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- ☐ Plagiarism
- ☐ No

### ***BPG Search:***

- ☐ The same title
- ☐ Duplicate publication
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- ☐ No