PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 74629

Title: Application of intravoxel incoherent motion diffusion-weighted imaging in hepatocellular carcinoma

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05429043

Position: Editorial Board

Academic degree: PhD

Professional title: Assistant Professor

Reviewer's Country/Territory: India

Author's Country/Territory: China

Manuscript submission date: 2021-12-30

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-28 06:06

Reviewer performed review: 2022-01-28 06:39

Review time: 1 Hour

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
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) [ ] Minor revision [Y] 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

Application of intravoxel incoherent motion diffusion-weighted imaging in hepatocellular carcinoma describes an imaging biomarker for HCC differentiation, pathological grading, and treatment response prediction and evaluation, prediction of postoperative recurrence and gene expression prediction.   It is an interesting article. A few concerns are the following   How it is different from the following article? "Progress of intravoxel incoherent motion diffusion-weighted imaging in liver diseases"   have you cited the article ?   All the figure legends need to be modified . Clarity should be with 300dpi. The alignment in one frame as A,B<C etc in horizontal manner to make it more legible arrangement Specify the rationale for choosing the patients with 85 and 35? The review looks good if you mention the duration of study collected for the topic.   A graphical abstract will be good to depict the concept clearly Add more details specific to the technique regarding the its use as diagnosis and therapy   The conclusion need to be elaborated with more aspects of its application

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Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03009765

Position: Peer Reviewer

Academic degree: PhD

Professional title: Professor

Reviewer's Country/Territory: Croatia

Author's Country/Territory: China

Manuscript submission date: 2021-12-30

Reviewer chosen by: Xin Liu

Reviewer accepted review: 2022-02-28 09:40

Reviewer performed review: 2022-03-04 09:49

Review time: 4 Days

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
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) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Re-review	[ ] Yes [Y] No

Peer-reviewer statements	Peer-Review: [ ] Anonymous [Y] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

As research on IVIM-DWI in HCC increases, the authors of this review wrote a paper on the principle of IVIM-DWI and its progress in HCC differentiation, pathological grading, and treatment response prediction and evaluation, prediction of postoperative recurrence and gene expression prediction. The topic is interesting and current. The authors showed that IVIM-DWI can accurately reflect tissue structures and has important application value for HCC differentiation. The results of this paper show that IVIM-DWI has important application value in the treatment and diagnosis of HCC. The main limitation of the studies done is the small number of patients, which requires further studies with larger series to reach a consensus on all parameters, but I think this review paper can help clinicians in everyday practice, especially clinicians who face problems in accurately diagnosing and treating HCC.

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Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03259131

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Associate Professor, Surgeon, Surgical Oncologist

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

Manuscript submission date: 2021-12-30

Reviewer chosen by: Xin Liu

Reviewer accepted review: 2022-02-24 02:03

Reviewer performed review: 2022-03-06 15:26

Review time: 10 Days and 13 Hours

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
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

Review comments   WJG-74629_reviewer   It is my great honour and pleasure to review such an interesting manuscript. The authors review the principle of intravoxel incoherent motion diffusion-weighted imaging (IVIM-DWI) and its progress in hepatocellular carcinoma (HCC) differentiation, pathological grading, and treatment response prediction and evaluation, prediction of postoperative recurrence and gene expression prediction.   This study is a narrative review.   Although there have been some similar reports, this study provides an important contribution to patho-physiological diagnosis of HCC.   Above all, this study is well-designed. I agree the authors' insistence. This manuscript is well-written and illustrated. Basically, I have no major criticisms on the description.   As a review article, the collected literatures are a little older. At least, the authors should discuss by referring the newest trials and reports. This review is interesting and important. However, the present manuscript needs some revisions for the publication of "World Journal of Gastroenterology".

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Reviewer's code: 05429043

Position: Editorial Board

Academic degree: PhD

Professional title: Assistant Professor

Reviewer's Country/Territory: India

Author's Country/Territory: China

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[Y] Accept (High priority) [ ] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Peer-reviewer	Peer-Review: [Y] Anonymous [ ] Onymous

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

SPECIFIC COMMENTS TO AUTHORS

No comments

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 74629

Title: Application of intravoxel incoherent motion diffusion-weighted imaging in hepatocellular carcinoma

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03259131

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Associate Professor, Surgeon, Surgical Oncologist

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

Manuscript submission date: 2021-12-30

Reviewer chosen by: Han Zhang

Reviewer accepted review: 2022-05-01 14:51

Reviewer performed review: 2022-05-02 05:56

Review time: 15 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
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
Peer-reviewer	Peer-Review: [Y] Anonymous [ ] Onymous

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

SPECIFIC COMMENTS TO AUTHORS

Review comments   WJG-74629_R1, reviewer.   It is my great honour and pleasure to review the revised version. I appreciate the authors' labors to answer the inquiries of the "Editorial Board", point by point.   Above all, I have no major criticism on the final version.   There are some limitations in this study. However, this study is the frontier work in this area and the results are clinically important.   I hope this manuscript will be suitable for the publication of "World Journal of Gastroenterology".