PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 60414

Title: * value derived from multi-echo Dixon technique can aid discrimination between benign and malignant focal liver lesions

Reviewer's code: 05088164

Position: Associate Editor

Academic degree: MD, PhD

Professional title: Associate Professor

Reviewer's Country/Territory: Romania

Author's Country/Territory: China

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Reviewer chosen by: Jia-Ping Yan

Reviewer accepted review: 2020-12-30 15:23

Reviewer performed review: 2021-01-02 18:42

Review time: 3 Days and 3 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Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish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
Re-review	[Y] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

I had the pleasure to read the manuscript on the research analyzing the role of the R2 value derived from multi-Echo Dixon technique in the discrimination between benign and malign focal liver lesions. The title of this article correctly reflects the main hypothesis of the manuscript. The abstract summarizes the data presented in the manuscript in a proper manner. The abstract has a correct structure. The key words reflect the main ideas of the paper. The Introduction adequately describe the background, the importance of being able to distinguish a malignant from a benign lesion with a method without negative consequences as contrast agents. The authors present the aim of the study to analyze the performance of 2d-ROI and VOI on differentiating benign and malignant focal liver lesions. The authors describe the methods used in adequate detail: patients, lesions, inclusion and exclusion criteria, MRI acquisition, image analysis, lab analysis, diagnosis of focal liver lesions, statistical analysis. The manuscript meets the requirements of ethics, being reviewed, and approved by the local ethics committee. The results are presented in a proper manner. The authors described the clinical and pathological characteristics of the lesions and then the R2 analysis. The AUROC for both 2D-ROI and VOI show a good capability to distinguish the benign and malignant lesions with good sensitivity and specificity. The results are presented also with good figures and tables, but probably too many. I would not include figure 3 and table 4 as data presented could be easily presented only in text. In the Discussion, the authors interpret the findings appropriately, highlighting the importance of their results to the clinical practice. They based their discussion on important paper published recently. Overall, the manuscript is well and coherently organized. The use of the English language and grammar is accurate.

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Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The authors improved the manuscript following my comments and recommendations (the tables were deleted and the information was included in the text). I have nothing more to add and I consider that the paper can be published in this version.