Lian-Sheng Ma Company Editor-in-Chief World Journal of Gastroenterology

<u>**Re</u>**: Manuscript #75498 (Minireview); The role of CT/MRI LI-RADS criteria in the diagnosis of hepatocellular carcinoma in clinical practice: a pictorial minireview</u>

Dear Editor,

Thank you for your time to review our submission to your journal. Your suggestions and the reviewers' comments have been extremely helpful for the final development of our manuscript. Please find below (underlined) the changes that we have made to our initial submission in response to your suggestions and the reviewers' comments.

Science Editor comments:

The short review of LI-RADS criteria in the diagnosis of HCC might add information for current clinical practice.

Thank you for this important comment. We added the following paragraph to address your comment just before the "Conclusions"

<u>"LI-RADS IN CLINICAL PRACTICE</u>

<u>The LI-RADS</u> "lexicon" provide strict diagnostic criteria and reporting guidelines in order to improve the consistency and clarity of radiologist interpretation and reporting. Subsequently, the communication between radiologists and clinicians has been improved. The adoption of a universal liver imaging lexicon is of great importance. This lexicon was created to standardize the terminology used to describe liver imaging findings and is recommended for use in various patient settings including patients with cirrhosis, chronic HBV infection, current or prior HCC and following locoregional therapy to assess tumor response^[31,32]. In this sense, the integration of LI-RADS into the AASLD HCC guidance was a major achievement. However, global unification of diagnostic systems of HCC is still an unmet need.

Variability in terminology and definitions creates confusion between clinicians and challenges the significance of the published literature. For example, multiple terms have been used to describe nodules without APHE that are hypointense in the hepatobiliary phase of a gadoxetateenhanced MRI examination^[33]. The LI-RADS Hepatobiliary Agent Working Group recommends standardized terminology for these nodules: "hepatobiliary phase hypointense nodules without APHE". A single term with a uniform definition improves the ability of scientific investigators to interpret and pool data relating to these nodules and assists radiologists and referring clinicians in interpreting their clinical significance^[31]. However, there are still areas of uncertainty. Non-cirrhotic patients at increased risk for HCC, such as patients with chronic HCV infection or nonalcoholic steatohepatitis with advanced fibrosis, do not meet criteria for diagnosis of HCC with the use of LI-RADS. This is an example of an important gap in the generalized implementation of the LI-RADS criteria which necessitates further research.".

Reviewer #1 comments:

Congratulations to the authors for a well written review. The review is informative and precise for the readers.

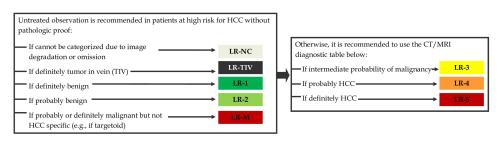
Thank you for your comments and your time to review our work.

Reviewer #2 comments:

The role of CT/MRI LI-RADS criteria in the diagnosis of hepatocellular carcinoma in clinical practice: a pictorial minireview Manuscript Type: Minireviews. This is an educational review. Summarized table(s) had better be added in the manuscript to help readers' understanding, although this was a pictorial minireview. The arrows were not clear in some Figures, in particular Figure 6, and 16. Authors should revise them.

Thank you for your comments. In order to help readers' understanding we added the following Table, which describes the LI-RADS categories. In addition, we reshaped the arrows in nearly all the Figures following your advice.

Diagnostic Algorithm of Liver Lesions in CT/MRI (LI-RADS v2018 CORE)



Arterial Phase Hyperenhancement (APHE)		No APHE		Nonrim APHE		
Observation Size (mm)		<20	≥20	<10	10-19	≥20
Major Features: - Enhancing "capsule"	None	LR-3	LR-3	LR-3	LR-3	LR-4
- Nonperipheral "washout"	1	LR-3	LR-4	LR-4	LR-4 LR-5	LR-5
 Threshold growth (≥50% in ≤6 months) 	≥2	LR-4	LR-4	LR-4	LR-5	LR-5

Reviewer #3 comments:

It is very important report.

Thank you for your comments and your time to review our work.

We hope that the above mentioned changes satisfactorily address your comments and that our revised manuscript will now be approved for publication in your journal.

Sincerely,

Emmanouil Sinakos