

Letter to the editor response

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On behalf of the original authorship of the paper, “LI-RADS M (LR-M): definite or probably malignancy, not specific for hepatocellular carcinoma,” and the editors of the special edition of *Abdominal Radiology* on LI-RADS, I would like to respond to the letter to the editor submitted by Drs. Yeun-Yoon Kim, Chansik An, and Myeong-Jin Kim. We thank these investigators for their insightful comments reflecting a broad, international perspective on application of the LI-RADS in practice. As these investigators emphasize, global imaging algorithms variably emphasize sensitivity versus specificity, depending largely on geographic differences in the relative role of deceased donor liver transplantation (DDLT) versus surgical resection or locoregional therapy options for HCC management. We would encourage the authors to publish their experiences with use of LI-RADS to provide peer-reviewed data to inform its future refinement.

The authors’ suggestion of combining LR-5 and LR-M into a single category, LR-5 M, is interesting and may be appropriate in practices where sensitivity for detection of malignancy is valued over specificity for diagnosis of HCC. Individual institutional practice guidelines may allow presumptive treatment of LR-5 and LR-M lesions without the need for biopsy in such scenarios. While we support combining categories for management purposes if needed to reflect regional practice settings, we discourage replacing the LR-5 and LR-M categories with a new single category because this may cause diagnostic confusion and lead to inappropriate management. For example, malignancy other than HCC usually precludes liver transplantation and the LR-M category is designed to alert the referrer to this possibility. Even when liver transplantation is not a therapeutic option, the LR-M category may trigger additional investigation to establish an exact diagnosis, determine prognosis, and make informed clinical decisions. Moreover,

even if categories are combined informally for management, we encourage radiologists to continue to report relevant LI-RADS imaging features and the individual categories. This will enable the development of robust, international registries to rigorously evaluate the performance of LI-RADS in clinical practice and guide its improvement.

The authors also suggest the option of dividing the LR-M category into LR-4 M and LR-5 M. Conceptually, this is a logical suggestion and we will consider its incorporation into the next version of LI-RADS (anticipated within 3–4 years). Since dividing LR-M into two categories may introduce additional complexity to the algorithm for end-users—a potential barrier to adoption—we encourage interim research to demonstrate the value of this suggestion.

In summary, we sincerely appreciate the perspective of our international colleagues and recognize that variations in practice may present potential challenges to the application of LI-RADS on a global scale. In acknowledgment of this and with a strong desire to engage the global community, we have established an international working group within LI-RADS. We cordially and enthusiastically invite the authors to participate in this or other LI-RADS working groups. Such participation is vital to achieving our goal of continually improving LI-RADS to optimize its relevance and utility around the world.

Compliance with ethical standards

Funding No funding was received for this study.

Conflict of interest A.K. has research grant support from General Electric.

Ethical approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent Statement of informed consent was not applicable since the manuscript does not contain any patient data.