



Letter to the editor regarding “radiomics nomogram based on optimal VOI of multi-sequence MRI for predicting microvascular invasion in intrahepatic cholangiocarcinoma”

Yong Xie¹ · Jian Wang¹ · Yinghua Zou¹

Received: 26 November 2023 / Accepted: 2 February 2024 / Published online: 21 March 2024
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Dear Editor,

We have read with great interest the recent article conducted by Ma et al. [1], published in the November 2023 issue of *La radiologia medica*, about the application of MRI-based radiomics in predicting microvascular invasion (MVI) in intrahepatic cholangiocarcinoma (ICC). The results of the study suggested that a nomogram combining image + radiomics model of MRI multi-sequence fusion may be a predictor of preoperative MVI status in ICC patients. Undoubtedly, this is an exciting study. But we would like to add a few comments.

First of all, the MRI instruments (including nine scanners) used by the authors are different, and the text does not explain that the images were resampled before the VOI delineation. However, in practical applications, the use of different models of MRI machines can lead to differences in data acquisition and processing. To solve this problem, the image needs to be resampled. It is important to note that the patient’s privacy and data security should be fully considered when performing resampling. In addition, the accuracy and reliability of the data need to be ensured during the resampling process to avoid adverse effects on the research results.

Additionally, the intraclass correlation coefficient (ICC) is an indicator to assess intra- and interobserver reproducibility when performing data dimensionality reduction [2]. An ICC of less than 0.75 indicates low agreement and may have large errors or variations. When analyzing data, removing these features can reduce data noise and improve the stability and accuracy of the model. At the same time, it is

also in line with the principle of “removing unstable or unreliable data” in bioinformatics. Then, SelectKBest analysis or Spearman’s correlation analysis and the least absolute shrinkage and selection operator algorithm are performed.

In summary, we hope that the authors will consider our suggestion. If there is something wrong, we hope that the authors will criticize and correct it. Finally, thank you very much to the authors for their wonderful paper.

Author contributions Material preparation, data collection, and analysis were performed by YX. YX, JW, YZ designed and reviewed this article. YX, JW, YZ read and approved the final manuscript.

Funding The authors have not disclosed any funding.

Declarations

Conflict of interest None for all authors.

Human and animal participants This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent Not applicable.

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✉ Jian Wang
jianwang0987@sina.com

¹ Department of Interventional Radiology and Vascular Surgery, Peking University First Hospital, No. 8 Xishiku Street, Xicheng District, Beijing 100034, China