

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastrointestinal Oncology*

Manuscript NO: 88961

Title: Pre-operative enhanced magnetic resonance imaging combined with clinical features predict early recurrence of hepatocellular carcinoma after radical resection

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 06494300

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: China

Manuscript submission date: 2023-10-17

Reviewer chosen by: Huo Liu

Reviewer accepted review: 2023-12-29 09:19

Reviewer performed review: 2024-01-08 04:33

Review time: 9 Days and 19 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

In this manuscript, the authors explored the predictive value of Gd-EOB-DTPA-enhanced MRI combined with clinical features in predicting early recurrence of hepatocellular carcinoma after liver resection. They collected clinical features and MRI imaging features from 161 HCC patients confirmed by pathology, and grouped and analyzed the patients based on early recurrence and non-early recurrence after resection. The results showed significant differences between the early recurrence and non-early recurrence groups in factors such as patient age, serum AFP levels, pathological satellite lesions, microvascular invasion, BCLC staging, and CNLC staging. Additionally, MRI imaging features such as tumor size, number, margins, and portal vein tumor thrombus were also associated with the early recurrence group. It is meaningful to achieve early prediction of recurrence in clinical practice and improving patient prognosis, but there are several questions that need to be addressed. Major concerns: 1. The authors has provided independent predictive factors for early recurrence, but it appears they have not been validated, and the specificity, sensitivity, and accuracy of each predictive factor have not been provided in the table. 2. And the

manuscript mentions that age, AFP level, CNLC staging, tumor margins, as well as major vessel invasion and hypo-intense tumor periphery in hepatobiliary phase on MRI are independent risk factors for early recurrence after HCC surgery. It seems that relying solely on these factors may not achieve the prediction objective stated in the title of manuscript. It would be better to construct a comprehensive prediction model by integrating these factors to achieve the goal of early recurrence prediction. 3. Additionally, it is important to compare the advantages of the constructed predictive model with existing models to determine if there is higher accuracy. 4. Based on the study results, how can these predictive factors be utilized to guide the treatment and prognosis management of HCC patients? What is the effect to survival outcomes of patients? Minor concerns: 1. In the description of the results for 2.2 MRI Imaging Features, please confirm if it is “non-recurrence” or “non-early recurrence”. 2. In the part of Materials and methods, examples of feature definitions and representative MRI images should be provided to enable the authors to gain a better understanding of your analysis.