



PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Oncology*

Manuscript NO: 89167

Title: What are the changes in the hotspots and frontiers of microRNAs in hepatocellular carcinoma over the past decade?

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

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Reviewer’s code: 06195974

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Assistant Professor

Reviewer’s Country/Territory: United States

Author’s Country/Territory: China

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Reviewer chosen by: AI Technique

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Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input 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 Grade E: Do not publish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 checked="" type="checkbox"/> Grade B: Good <input 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 checked="" type="checkbox"/> Grade B: Good <input 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 checked="" type="checkbox"/> Grade B: Good <input 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 aimed to perform a comprehensive analysis of recent research concerning miRNAs in hepatocellular carcinoma (HCC). All relevant publications were retrieved and, overall, a total of 9,426 publications on this topic were selected. According to the keywords analysis, the researches of miRNAs focused on their expression level, the effects and mechanisms on the biological behavior of HCC. Keywords bursting analysis showed that in the early years (2013–2017), “microRNA expression”, “gene expression”, “expression profile”, “functional polymorphism”, “circulating microRNA”, “susceptibility” and “mir 21” et al. started to raise attention. In the latest phase (2018–2022), the hot topics were “sorafenib resistance”, “tumor microenvironment” and so on. They thus concluded that the study would provide a comprehensive overview for the researches of miRNAs in HCC based on bibliometric analysis ranging from miRNAs expression level, the effects, and mechanisms on the biological behavior of HCC, to sorafenib resistance, tumor microenvironment and so on. The study is of interest, however, in my opinion, the authors should tried to focus their research on the topic now of major clinical impact. miRNA in HCC development as well



**Baishideng
Publishing
Group**

7041 Koll Center Parkway, Suite
160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: office@baishideng.com
https://www.wjgnet.com

as treatment response/resistance, have been extensively studied. However, with the recent increasing development of systemic treatments, the authors should discuss the recent evidence supporting the higher anti-tumor efficacy of combination treatment strategy based on the combination of tyrosine kinase inhibitor plus immune checkpoint inhibitors as well-described in a recent comprehensive review addressing the improved efficacy and overall survival and safety profile of combination (TKI plus ICI) treatments, as recently reported (TKIs in combination with immunotherapy for hepatocellular carcinoma. *Expert Rev Anticancer Ther.* 2023 Mar;23(3):279-291). -To improve the clinical significance I would suggest to recall and discuss the following 2 topics both related to miRNA: 1) recent studies addressed the different miRNA profile in hepatocarcinogenesis according to the underlying liver disease which are now changing in the changing scenario of HCC as recently demonstrated in a larger cohort of HCC patients (). This important epidemiological issue should be recalled and discussed. 2) regarding the resistance to sorafenib and the safety profile, the authors should discuss the clinically relevant topic related to the need of predictive marker able to identify patients responding to sorafenib and other systemic therapies as well as marker able to predict treatment-related adverse events since it has been recently demonstrated that optimal management of adverse events and improvements of their management translates into longer patient overall survival, as recently demonstrated (Management of adverse events with tailored sorafenib dosing prolongs survival of hepatocellular carcinoma patients. *J Hepatol.* 2019 Dec;71(6):1175-1183.).