

PEER-REVIEW REPORT

Name of journal: World Journal of Hepatology

Manuscript NO: 65574

Title: Hepatocellular carcinoma: Understanding molecular mechanisms for defining potential clinical modalities

Reviewer's code: 05106340

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Professor

Reviewer's Country/Territory: China

Author's Country/Territory: India

Manuscript submission date: 2021-03-10

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-04-09 06:18

Reviewer performed review: 2021-04-13 06:50

Review time: 4 Days

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 Grade E: Do not publish
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 review, the author introduce diagnosis, chemotherapy and molecular landscape of HCC, and also Epigenetics and its potential role in HCC. However, part of description requires further improvement. 1.Primary liver cancer is mainly divided into hepatocellular carcinoma (HCC), intrahepatic cholangiocarcinoma (ICC), and HCC-ICC according to pathological type. These three types vary greatly in pathogenesis, biological behaviors, histological morphology, treatment methods, and prognosis. HCC accounts for 85–90% of all cases of primary liver cancer. Thus at the beginning, need to defined that the liver cancer described in this review is HCC. 2.Both lenvatinib and sorafenib, are used as standard-of-care chemotherapeutics in patients with advanced HCC, the study of lenvatinib should be described. 3.In the section of the Molecular landscape of HCC, more recently studies should be summarized. Jiang et.al used quantitative proteomic data stratify the early-stage hepatocellular carcinoma into the subtypes S-I, S-II and S-III, each of which has a different clinical outcome. (PMID: 30814741, DOI: 10.1038/s41586-019-0987-8); Gao et.al performed proteogenomic characterization of HCC identifies three subgroups with distinct features in metabolic reprogramming, microenvironment dysregulation, cell proliferation, and potential therapeutics. (PMID: 31585088, DOI: 10.1016/j.cell.2019.08.052). These two studies should be cited and described.