

PEER-REVIEW REPORT

Name of journal: *World Journal of Hepatology*

Manuscript NO: 91044

Title: Precision Targeting in Hepatocellular Carcinoma: Exploring Ligand-Receptor Mediated Nanotherapy

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 07729308

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Brazil

Author's Country/Territory: China

Manuscript submission date: 2023-12-20

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-12-30 22:41

Reviewer performed review: 2024-01-03 23:41

Review time: 4 Days

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 Grade E: Do not publish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

Scientific significance of the conclusion in this manuscript	<input checked="" type="checkbox"/> Grade A: Excellent <input 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 checked="" type="checkbox"/> Accept (General priority) <input 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

This review manuscript outstandingly revises the literature concerning nanoparticles linked to ligands for targeting specific receptors. The body of the manuscript is well-presented and effectively highlights the current scenario. Additionally, the conclusion is appropriate.

Hepatocellular carcinoma is a significant global health concern due to its high illness and fatality rates. Traditional chemotherapy faces challenges like drug resistance and side effects. Recent breakthroughs in nanoparticle-based drug delivery systems offer promise by targeting specific receptors overexpressed in HCC cells. This review highlights how these advancements enhance drug specificity and effectiveness, outlining the role of receptors in targeting nanoparticle therapies for HCC treatment.

Special observation: The manuscript is exceptionally well-written, effortlessly imparting a significant amount of knowledge. It was remarkably easy to read—an outstanding piece of work. The only critique I have pertains to a minor detail. In the conclusion section, the phrase '...In this review, we will delve into the application of nanomedicine in HCC, with special emphasis on the role...' could be revised to '...In this review, we

delved into the application of nanomedicine in HCC, with special emphasis on the role...'
using past tense.

1 Title. Does the title reflect the main subject/hypothesis of the manuscript?

yes

2 Abstract. Does the abstract summarize and reflect the work described in the manuscript?

yes

3 Key Words. Do the key words reflect the focus of the manuscript?

yes

4 Background. Does the manuscript adequately describe the background, present status and significance of the study?

yes

5 Methods. Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail?

NA

6 Results. Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field?

NA

7 Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper's scientific significance and/or relevance to clinical practice sufficiently?

yes

8 Illustrations and tables. Are the figures, diagrams, and tables sufficient, good quality and appropriately illustrative, with labeling of figures using arrows, asterisks, etc, and

are the legends adequate and accurately reflective of the images/illustrations shown?

yes

9 Biostatistics. Does the manuscript meet the requirements of biostatistics?

NA

10 Units. Does the manuscript meet the requirements of use of SI units?

yes

11 References. Does the manuscript appropriately cite the latest, important and authoritative references in the Introduction and Discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references?

yes

12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate?

yes

13 Research methods and reporting. Authors should have prepared their manuscripts according to BPG's standards for manuscript type and the appropriate topically-relevant category, as follows: (1) CARE Checklist (2013) - Case report; (2) CONSORT 2010 Statement - Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist - Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement - Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines - Basic study. For (6) Letters to the Editor, the author(s) should have prepared the manuscript according to the appropriate research methods and reporting. Letters to the Editor will be critically evaluated and only letters with new important original or complementary information should be considered for publication. A Letter to the Editor that only recapitulates information published in the article(s) and states that more

studies are needed is not acceptable?

NA

14 Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review committee. Did the manuscript meet the requirements of ethics?

NA