

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 74921

Title: Hepatitis B and the circadian rhythm of the liver

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 06246906

Position: Peer Reviewer

Academic degree: MD

Professional title: N/A

Reviewer's Country/Territory: Ukraine

Author's Country/Territory: Croatia

Manuscript submission date: 2022-01-11

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-11 13:35

Reviewer performed review: 2022-01-11 15:04

Review time: 1 Hour

Scientific quality	<input checked="" type="checkbox"/> Grade A: Excellent <input 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 Grade E: Do not publish
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous

statements

Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The paper is well written and properly structured. I am really thankful for giving me this opportunity to review this paper. It reveals the actual relationship between hepatitis B and circadian rhythms in the human body, which may play an important role in its pathogenesis. This knowledge allows us to consider chronomedicine as a way to improve existing therapeutic approaches through a personalized medicine by biological rhythms. In my opinion, the most important findings of these manuscript are links between viral infection and clock genes that regulate metabolic process which direct on future perspectives in studying hepatitis B. I recommend this article for acceptance, but at the same time I have some minor comments: 1. It may be useful to present the findings of the clock genes role in a lifecycle of hepatitis B in a diagram, figure or table. 2. I would like to point out the uniqueness of the considered topics, which may determine the sources used. However, I recommend updating this paper with the latest data highlighting the importance of studying clock genes in general (2-3 references). Authors may consider the following publications or others which in their opinion better describe this aspect: <https://doi.org/10.1016/j.arr.2021.101554>
<https://doi.org/10.1155/2021/8238833>

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 74921

Title: Hepatitis B and the circadian rhythm of the liver

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 01518946

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Professor, Research Fellow, Senior Consultant Dermatologist

Reviewer's Country/Territory: Japan

Author's Country/Territory: Croatia

Manuscript submission date: 2022-01-11

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-11 23:11

Reviewer performed review: 2022-01-17 08:51

Review time: 5 Days and 9 Hours

Scientific quality	<input checked="" type="checkbox"/> Grade A: Excellent <input 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
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous



**Baishideng
Publishing
Group**

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

statements

Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This manuscript describes excellent review of HBV replication and the circadian rhythms. Most data are dependent on a variety of previous papers and general explanation of HBV sounds to be good. The content of this manuscript is very fruitful. A reviewer feels one additional figure, which shows HBV replication and the circadian rhythms.

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 74921

Title: Hepatitis B and the circadian rhythm of the liver

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 02842879

Position: Editorial Board

Academic degree: PhD

Professional title: Assistant Professor, Chief Doctor, Professor

Reviewer's Country/Territory: China

Author's Country/Territory: Croatia

Manuscript submission date: 2022-01-11

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-11 15:59

Reviewer performed review: 2022-01-20 02:12

Review time: 8 Days and 10 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
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input 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 type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous

statements

Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This was a very interesting review with a very novel perspective on circadian rhythms and hepatitis B virus. However, the focus on the theme was not prominent, the priority was not very clear. The review described too much basic knowledge such as "The biology and life cycle of HBV", "The Circadian Rhythm" etc., however, the relationship between hepatitis B virus and circadian rhythm was described insufficiently, and the significance of circadian rhythm for future antiviral therapy was also insufficiently explained. The supplement of the views around this new mechanism are also suggested. On the other hand, several additional figures are needed to be supplemented.

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 74921

Title: Hepatitis B and circadian rhythm of the liver

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 02842879

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Chief Doctor, Professor

Reviewer's Country/Territory: China

Author's Country/Territory: Cuba

Manuscript submission date: 2022-01-11

Reviewer chosen by: Yu-Lu Chen

Reviewer accepted review: 2022-04-01 13:43

Reviewer performed review: 2022-04-15 03:19

Review time: 13 Days and 13 Hours

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
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
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

the author has responded well to the suggestions made during the review of the first draft. Therefore, the comment on the revised manuscript is “accept”.