

PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 57351

Title: Effect of a fever in viral infections – the ‘Goldilocks’ phenomenon?

Reviewer’s code: 03123424

Position: Peer Reviewer

Academic degree: MD

Professional title: Professor

Reviewer’s Country/Territory: China

Author’s Country/Territory: United Kingdom

Manuscript submission date: 2020-06-11

Reviewer chosen by: Xi-Fang Chen (Part-Time Editor)

Reviewer accepted review: 2020-10-16 15:13

Reviewer performed review: 2020-10-16 16:01

Review time: 1 Hour

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" 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 Grade E: Do not publish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 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 paper has briefly reviewed the effect of fever in acute infections, and suggested that a mild fever promoted host defence mechanisms and reduced viral replication. whereas, a high fever is detrimental. however, Manuscript, based on literature review, was lack of innovative and creative.

PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 57351

Title: Effect of a fever in viral infections – the ‘Goldilocks’ phenomenon?

Reviewer’s code: 00505621

Position: Peer Reviewer

Academic degree: DVSc, PhD

Professional title: Professor

Reviewer’s Country/Territory: China

Author’s Country/Territory: United Kingdom

Manuscript submission date: 2020-06-11

Reviewer chosen by: Xi-Fang Chen (Part-Time Editor)

Reviewer accepted review: 2020-10-18 12:48

Reviewer performed review: 2020-10-21 14:07

Review time: 3 Days and 1 Hour

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 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 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 discusses the risks and benefits of a fever on the host response, focussing on the effects of a fever on viral replication and host response, and the detrimental effect on the host. The paper is helpful for readers to understand the relationship between fever response of hosts and viral replication, and could be accepted after a minor revision. Major comments: 1. In this paper, mild fever, extreme hyperthermia, higher degrees of fever (around 39-40°C) were employed. Could authors definite the scope of these different fevers? e.g. what range of temperatures refers to mild fever? And what range of temperatures refers to extreme hyperthermia? It is noted in "4. EFFECT OF MILD FEVER ON THE HOST", "temperatures between 35 and 41.5°C" was described in "4.4. Effect on pharmacology", could "temperatures between 35 and 41.5°C" be defined as mild fever? 2. In "3.1. Basic viral replication", "This requires interaction with a specific receptor on the host cell surface, allowing fusion of the host cell and viral membranes, or endocytosis.", there are alterative mechanisms for some viruses to enter the host cells, e.g. non-receptor mediated entry by macropinocytosis might be employed by African swine fever virus (ASFV), and ASFV infection in pigs often result in high fever in hosts (Front. Vet. Sci. 7:215. doi: 10.3389/fvets.2020.00215). Authors might add this information in this paper. Minor comments: 1. "High temperatures appear to increase endosomal pH, adversely affecting influenza entry and intracellular transportation" should be "High temperatures appear to increase endosomal pH, adversely affecting influenza virus entry and intracellular transportation" 2. "A raised temperature also appears to cause a reduction in the cytokine IL-6 levels after human cell infection with influenza" should be "A raised temperature also appears to cause a reduction in the cytokine IL-6 levels after human cell infection with influenza virus".

PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 57351

Title: Effect of a fever in viral infections – the ‘Goldilocks’ phenomenon?

Reviewer’s code: 05238087

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Professor

Reviewer’s Country/Territory: China

Author’s Country/Territory: United Kingdom

Manuscript submission date: 2020-06-11

Reviewer chosen by: Xi-Fang Chen (Part-Time Editor)

Reviewer accepted review: 2020-10-15 02:38

Reviewer performed review: 2020-10-29 08:05

Review time: 14 Days and 5 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 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 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 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 title of the manuscript is very attractive, and the content of the paper should also be meaningful if the author modifies the content. There are some concerns. 1. The full text should be written around the effect of a fever in viral infections, but several chapters in this paper deviate from this theme. For example, in the fifth part of the article “effect of extreme hyperthermia on the host “ , the content is rarely related to viruses, and in part 5.1, it is even more about "injury", which completely deviates from the theme. 2. Some content in the article should be written in the relevant paragraphs. For example, the last two paragraphs “Viruses, from the Latin word virus, meaning poison, are tiny ubiquitous microorganisms, usually a few hundred nanometers in size. A virion contains a single nucleic acid (RNA or DNA) core surrounded by a protein coat, and requires the cellular processes of animals, plants, and bacteria in order to replicate.” and “Coronaviruses are a group of related single-stranded, positive-strand large RNA viruses that cause diseases in mammals and birds. In humans, these viruses cause respiratory tract infections that can range from mild (for example, the common cold), to lethal (for example, SARS, MERS, and SARS-CoV-2). They have characteristic club-shaped spikes that project from their surface, similar to the solar corona, from which their name derives.” in the introduction should be written in the third part “effect of fever on virus”. 3. The author can also list several viral diseases that can cause fever and write down the influence of different degrees of fever.

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 57351

Title: Effect of a fever in viral infections – the ‘Goldilocks’ phenomenon?

Reviewer’s code: 00505621

Position: Peer Reviewer

Academic degree: DVSc, PhD

Professional title: Professor

Reviewer’s Country/Territory: China

Author’s Country/Territory: United Kingdom

Manuscript submission date: 2020-06-11

Reviewer chosen by: Chen-Chen Gao

Reviewer accepted review: 2020-11-24 12:41

Reviewer performed review: 2020-11-24 12:59

Review time: 1 Hour

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 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
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

All my comments have been placed down, the paper can be accepted.

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 57351

Title: Effect of a fever in viral infections – the ‘Goldilocks’ phenomenon?

Reviewer’s code: 05238087

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Professor

Reviewer’s Country/Territory: China

Author’s Country/Territory: United Kingdom

Manuscript submission date: 2020-06-11

Reviewer chosen by: Chen-Chen Gao

Reviewer accepted review: 2020-11-26 10:04

Reviewer performed review: 2020-11-26 13:30

Review time: 3 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 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
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 paper has been well revised. I don't have any more comments.