

## Possible causes of disparities in the risk and outcomes of

## **COVID-19: CMV and aged immune phenotype**

Andrew P Smith and Graham Pawelec

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Review timeline:

Received: July 15, 2020 Editorial response: July 26, 2020 Revision received: July 27, 2020 Editorial response: July 27, 2020 Published online: August 29, 2020

1<sup>st</sup> editorial response 26-Jul-2020

Ref.: Ms. No. JCTRes-D-20-00069 Possible causes of disparities in the risk and outcomes of COVID-19: CMV and aged immune phenotype Journal of Clinical and Translational Research

Dear author(s),

Reviewers have submitted their critical appraisal of your paper. The reviewers' comments are appended below. Based on their comments and evaluation by the editorial board, your work was FOUND SUITABLE FOR PUBLICATION AFTER MINOR REVISION.

If you decide to revise the work, please itemize the reviewers' comments and provide a pointby-point response to every comment. An exemplary rebuttal letter can be found on at http://www.jctres.com/en/author-guidelines/ under "Manuscript preparation." Also, please use the track changes function in the original document so that the reviewers can easily verify your responses.

Your revision is due by Aug 25, 2020.

To submit a revision, go to https://www.editorialmanager.com/jctres/ and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely,

Journal of Clinical and Translational Research Peer review process file 06.202003.002



Michal Heger Editor-in-Chief Journal of Clinical and Translational Research

Reviewers' comments:

Reviewer #1: In this brief hypothesis the authors suggest that persistent infection with cytomegalovirus, and chronic persistent stress, may act as contributory factors in the severity of Covid-19 infection. To support this they refer to recent reviews and primary data. The essay is well written, and succinctly distills a range of evidence. It is highly topical.

## Minor points

- I would rephrase the section : CMV is widespread in ethnic minorities, and it can plausibly account for socioeconomic/ethnic differences in mortality.

"Mortality rates from Covid-19 have been shown to be increased in certain ethnic groups and differences in CMV seroprevalence may act as one potential factor in this regard".

- I would slightly temper the statement that CMV reduces the efficacy of immune response to vaccination. There is some debate about this and it may even be beneficial in young people. Perhaps, "In some studies CMV has been shown to have a negative impact on vaccine responses in older people".

Author's response

Dear Editor,

The reviewer raised the following points and we have revised the manuscript to take these into account:

Minor points

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"Mortality rates from Covid-19 have been shown to be increased in certain ethnic groups and differences in CMV seroprevalence may act as one potential factor in this regard".

This has now been changed (highlighted) in the manuscript.

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This has now been changed (highlighted) in the manuscript.

Best regards,



Andy Smith and Graham Pawelec

2<sup>nd</sup> editorial decision: 27-Jul-2020

Ref.: Ms. No. JCTRes-D-20-00069R1 Possible causes of disparities in the risk and outcomes of COVID-19: CMV and aged immune phenotype Journal of Clinical and Translational Research

Dear authors,

I am pleased to inform you that your manuscript has been accepted for publication in the Journal of Clinical and Translational Research.

You will receive the proofs of your article shortly, which we kindly ask you to thoroughly review for any errors.

Thank you for submitting your work to JCTR.

Kindest regards,

Michal Heger Editor-in-Chief Journal of Clinical and Translational Research