

Profiling of immune dysfunction in COVID-19 patients allows early prediction of disease progression

Andre Rendeiro, Joseph Casano, Charles Vorkas, Harjot Singh, Ayana Morales, Robert DeSimone, Grant Ellsworth, Rosemary Soave, Shashi Kapadia, Kohta Saito, Christopher Brown, JingMei Hsu, Christopher Kyriakides, Steven Chiu, Luca Vincenzo Cappelli, Maria Cacciapuoti, Wayne Tam, Lorenzo Galluzzi, Paul Simonson, Olivier Elemento, Mirella Salvatore, and Giorgio Inghirami DOI: https://doi.org/10.26508/lsa.202000955

Corresponding author(s): Giorgio Inghirami, Weill Cornell Medicine and Mirella Salvatore, Weill Cornell Medicine

Review Timeline:	Submission Date:	2020-11-12
	Editorial Decision:	2020-11-16
	Revision Received:	2020-11-25
	Editorial Decision:	2020-12-01
	Revision Received:	2020-12-03
	Accepted:	2020-12-04

Scientific Editor: Shachi Bhatt

Transaction Report:

(Note: With the exception of the correction of typographical or spelling errors that could be a source of ambiguity, letters and reports are not edited. The original formatting of letters and referee reports may not be reflected in this compilation.)

Please note that the manuscript was previously reviewed at another journal and the reports were taken into account in the decision-making process at Life Science Alliance. Since the original reviews are not subject to Life Science Alliance's transparent review process policy, the reports and author response cannot be published.

1st Editorial Decision November 16, 2020

November 16, 2020

Re: Life Science Alliance manuscript #LSA-2020-00955-T

Dr. Andre F Rendeiro Weill Cornell Medicine New York

Dear Dr. Rendeiro,

Thank you for transferring your manuscript entitled "Longitudinal immune profiling of mild and severe COVID-19 reveals immune dysfunction and allows prediction of clinical progression" to Life Science Alliance (LSA).

For a brief overview, the manuscript was reviewed at one of our sister journals, where it was rejected due to lack of advance over another recently published manuscript. As per LSA's mission, we do not consider lack of conceptual advance to be a hindrance to publication of a well done study. LSA editors reviewed the manuscript and the accompanying reviewers' comments, and determined that the study is publishable at LSA pending following minor revisions,

- + Respond to R1's concern about the use of younger healthy donors as controls with discussion drawing the readers' attention to this caveat and a discussion on how this impacts the conclusions drawn (R1 pt1)
- + Clarify the need to stratify severe COVID-19 patients as incubated vs not (R1 pt 3)
- + Improve data presentation (R2, main point and pt1)
- + Tone down the focus on longitudinal aspect of the data as pointed out by R2 (pt 2)
- + Improve designation of MDSCs in patients and discuss and compare the recent Schultze-Schrepping et al Cell manuscript (R2 pt 3)

To upload the revised version of your manuscript, please log in to your account: https://lsa.msubmit.net/cgi-bin/main.plex

You will be guided to complete the submission of your revised manuscript and to fill in all necessary information. Please get in touch in case you do not know or remember your login name.

We would be happy to discuss the individual revision points further with you should this be helpful.

While you are revising your manuscript, please also attend to the below editorial points to help expedite the publication of your manuscript. Please direct any editorial questions to the journal office.

The typical timeframe for revisions is three months. Please note that papers are generally considered through only one revision cycle, so strong support from the referees on the revised version is needed for acceptance.

When submitting the revision, please include a letter addressing the reviewers' comments point by point.

We hope that the comments below will prove constructive as your work progresses.

Thank you for this interesting contribution to Life Science Alliance. We are looking forward to receiving your revised manuscript.

Sincerely,

Shachi Bhatt, Ph.D. Executive Editor Life Science Alliance https://www.lsajournal.org/ Tweet @SciBhatt @LSAjournal

A. THESE ITEMS ARE REQUIRED FOR REVISIONS

- -- A letter addressing the reviewers' comments point by point.
- -- An editable version of the final text (.DOC or .DOCX) is needed for copyediting (no PDFs).
- -- High-resolution figure, supplementary figure and video files uploaded as individual files: See our detailed guidelines for preparing your production-ready images, https://www.life-science-alliance.org/authors
- -- Summary blurb (enter in submission system): A short text summarizing in a single sentence the study (max. 200 characters including spaces). This text is used in conjunction with the titles of papers, hence should be informative and complementary to the title and running title. It should describe the context and significance of the findings for a general readership; it should be written in the present tense and refer to the work in the third person. Author names should not be mentioned.

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Full guidelines are available on our Instructions for Authors page, https://www.life-science-alliance.org/authors

We encourage our authors to provide original source data, particularly uncropped/-processed electrophoretic blots and spreadsheets for the main figures of the manuscript. If you would like to add source data, we would welcome one PDF/Excel-file per figure for this information. These files will be linked online as supplementary "Source Data" files.

IMPORTANT: It is Life Science Alliance policy that if requested, original data images must be made available. Failure to provide original images upon request will result in unavoidable delays in publication. Please ensure that you have access to all original microscopy and blot data images before submitting your revision.

December 1, 2020

RE: Life Science Alliance Manuscript #LSA-2020-00955-TR

Giorgio Inghirami Weill Cornell Medicine

Dear Dr. Inghirami,

Thank you for submitting your revised manuscript entitled "Profiling of immune dysfunction in COVID-19 patients allows early prediction of disease progression". We would be happy to publish your paper in Life Science Alliance pending final revisions necessary to meet our formatting quidelines.

Along with the points listed below, please also attend to the following,

- -please upload your supplementary tables as single editable doc or excel files
- -please add a callout for Figure 3E, Figure S6A,B, and Figure S7A-E in your main manuscript text
- -please use the [10 author names, et al.] format in your references (i.e. limit the author names to the first 10)

If you are planning a press release on your work, please inform us immediately to allow informing our production team and scheduling a release date.

To upload the final version of your manuscript, please log in to your account: https://lsa.msubmit.net/cgi-bin/main.plex

You will be guided to complete the submission of your revised manuscript and to fill in all necessary information. Please get in touch in case you do not know or remember your login name.

To avoid unnecessary delays in the acceptance and publication of your paper, please read the following information carefully.

A. FINAL FILES:

These items are required for acceptance.

- -- An editable version of the final text (.DOC or .DOCX) is needed for copyediting (no PDFs).
- -- High-resolution figure, supplementary figure and video files uploaded as individual files: See our detailed guidelines for preparing your production-ready images, https://www.life-science-alliance.org/authors
- -- Summary blurb (enter in submission system): A short text summarizing in a single sentence the study (max. 200 characters including spaces). This text is used in conjunction with the titles of papers, hence should be informative and complementary to the title. It should describe the context and significance of the findings for a general readership; it should be written in the present tense and refer to the work in the third person. Author names should not be mentioned.

B. MANUSCRIPT ORGANIZATION AND FORMATTING:

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We encourage our authors to provide original source data, particularly uncropped/-processed electrophoretic blots and spreadsheets for the main figures of the manuscript. If you would like to add source data, we would welcome one PDF/Excel-file per figure for this information. These files will be linked online as supplementary "Source Data" files.

- **Submission of a paper that does not conform to Life Science Alliance guidelines will delay the acceptance of your manuscript.**
- **It is Life Science Alliance policy that if requested, original data images must be made available to the editors. Failure to provide original images upon request will result in unavoidable delays in publication. Please ensure that you have access to all original data images prior to final submission.**
- **The license to publish form must be signed before your manuscript can be sent to production. A link to the electronic license to publish form will be sent to the corresponding author only. Please take a moment to check your funder requirements.**
- **Reviews, decision letters, and point-by-point responses associated with peer-review at Life Science Alliance will be published online, alongside the manuscript. If you do want to opt out of having the reviewer reports and your point-by-point responses displayed, please let us know immediately.**

Thank you for your attention to these final processing requirements. Please revise and format the manuscript and upload materials within 7 days.

Thank you for this interesting contribution, we look forward to publishing your paper in Life Science Alliance.

Sincerely,

Shachi Bhatt, Ph.D. Executive Editor Life Science Alliance https://www.lsajournal.org/ Tweet @SciBhatt @LSAjournal

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December 4, 2020

RE: Life Science Alliance Manuscript #LSA-2020-00955-TRR

Giorgio Inghirami Weill Cornell Medicine Pathology and Laboratory Medicine 1300 York Avenue New York 10065

Dear Dr. Inghirami,

Thank you for submitting your Research Article entitled "Profiling of immune dysfunction in COVID-19 patients allows early prediction of disease progression". It is a pleasure to let you know that your manuscript is now accepted for publication in Life Science Alliance. Congratulations on this interesting work.

The final published version of your manuscript will be deposited by us to PubMed Central upon online publication.

Your manuscript will now progress through copyediting and proofing. It is journal policy that authors provide original data upon request.

Reviews, decision letters, and point-by-point responses associated with peer-review at Life Science Alliance will be published online, alongside the manuscript. If you do want to opt out of having the reviewer reports and your point-by-point responses displayed, please let us know immediately.

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Scheduling details will be available from our production department. You will receive proofs shortly before the publication date. Only essential corrections can be made at the proof stage so if there are any minor final changes you wish to make to the manuscript, please let the journal office know now.

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Again, congratulations on a very nice paper. I hope you found the review process to be constructive and are pleased with how the manuscript was handled editorially. We look forward to future exciting submissions from your lab.

Sincerely,

Shachi Bhatt, Ph.D.
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