

Patients with lupus are not protected from COVID-19

The comment provided by Joob and Wiwanitkit contains serious factual errors that need to be urgently corrected to prevent harm to patients.¹ Their claim that ‘there is no case of SLE with covid-19’ is false. It is puzzling how they can make such a claim without providing supporting evidence. An initial analysis of patients included in the COVID-19 Global Rheumatology Alliance registry shows that 19 (17%) of 110 patients with rheumatic diseases who have been diagnosed with COVID-19 as of 1 April 2020 were patients with lupus.² The frequency of patients with lupus who have been diagnosed with COVID-19 was over-represented at ~50% of that reported for rheumatoid arthritis, a disease that is ~4 to 8 times more prevalent than lupus in the adult population in the USA.³ Although selection and reporting bias and differences in comorbidities might contribute to this disproportionately high frequency of COVID-19 in patients with lupus, there is reason to be cautious. Evidence supported by mechanistic data indicates that patients with lupus are inherently more susceptible to viral infections.⁴ Indeed, we recently suggested that patients with lupus might be particularly more susceptible to severe acute respiratory syndrome (SARS)-CoV-2 infection and to a more complicated course of COVID-19.⁵

The claim that ‘anti-HIV drug is proven for efficacy against the novel coronavirus’ is also false. The authors here cite another of their own ‘Letter to the Editor’ also making unsupported claims that ‘HIV-infected patients receiving standard anti-HIV drug might not have increased risk for COVID-19’.⁶

To support their claim that ‘Hydroxychloroquine is also reported for efficacy against covid-19’, the authors cite a review from 2017 before SARS-CoV-2 or COVID-19 was even reported.⁷ There are multiple ongoing studies and clinical trials under way to examine possible effects of hydroxychloroquine in COVID-19, but the clinical data we have available at this point in time are not convincing.⁸

Amr H Sawalha

Departments of Pediatrics and Medicine and Lupus Center of Excellence, University of Pittsburgh, Pittsburgh, Pennsylvania, USA

Correspondence to Dr Amr H Sawalha, Rheumatology, University of Pittsburgh, Pittsburgh, PA 15260, USA; asawalha@umich.edu

Contributors The author fulfilled the following criteria: substantial contributions to the conception or design of the work, or the acquisition, analysis or interpretation of data; drafting the work or revising it critically for important intellectual content; and final approval of the version published.

Funding AHS is funded by the Lupus Research Alliance and the National Institute of Arthritis and Musculoskeletal and Skin Diseases of the National Institutes of Health grant number R01AR070148.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, conduct, reporting or dissemination plans of this research.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; internally peer reviewed.

This article is made freely available for use in accordance with BMJ's website terms and conditions for the duration of the covid-19 pandemic or until otherwise determined by BMJ. You may use, download and print the article for any lawful, non-commercial purpose (including text and data mining) provided that all copyright notices and trade marks are retained.

© Author(s) (or their employer(s)) 2021. No commercial re-use. See rights and permissions. Published by BMJ.



To cite Sawalha AH. *Ann Rheum Dis* 2021;**80**:e21.

Received 17 April 2020

Accepted 18 April 2020

Published Online First 24 April 2020



► <http://dx.doi.org/10.1136/annrheumdis-2020-217695>

Ann Rheum Dis 2021;**80**:e21. doi:10.1136/annrheumdis-2020-217656

ORCID iD

Amr H Sawalha <http://orcid.org/0000-0002-3884-962X>

REFERENCES

- 1 Joob B, Wiwanitkit V. SLE, hydroxychloroquine and NO SLE patients with COVID-19: a comment. *Ann Rheum Dis* 2020;**79**:e61.
- 2 Gianfrancesco MA, Hyrich KL, Gossec L, et al. Rheumatic disease and COVID-19: initial data from the COVID-19 global rheumatology alliance provider registries. *Lancet Rheumatol* 2020. doi:10.1016/S2665-9913(20)30095-3. [Epub ahead of print: 16 Apr 2020].
- 3 Helmick CG, Felson DT, Lawrence RC, et al. Estimates of the prevalence of arthritis and other rheumatic conditions in the United States: Part I. *Arthritis Rheum* 2008;**58**:15–25.
- 4 Katsuyama E, Suarez-Fueyo A, Bradley SJ, et al. The CD38/NAD/SIRTUIN1/EZH2 Axis Mitigates Cytotoxic CD8 T Cell Function and Identifies Patients with SLE Prone to Infections. *Cell Rep* 2020;**30**:112–23.
- 5 Sawalha AH, Zhao M, Coit P, et al. Epigenetic dysregulation of ACE2 and interferon-regulated genes might suggest increased COVID-19 susceptibility and severity in lupus patients. *Clin Immunol* 2020;**7**:108410.
- 6 Joob B, Wiwanitkit V. SARS-CoV-2 and HIV. *J Med Virol* 2020. doi:10.1002/jmv.25782. [Epub ahead of print: 27 Mar 2020].
- 7 Ponticelli C, Moroni G. Hydroxychloroquine in systemic lupus erythematosus (SLE). *Expert Opin Drug Saf* 2017;**16**:411–9.
- 8 Taccone FS, Gorham J, Vincent J-L. Hydroxychloroquine in the management of critically ill patients with COVID-19: the need for an evidence base. *Lancet Respir Med* 2020. doi:10.1016/S2213-2600(20)30172-7. [Epub ahead of print: 15 Apr 2020].