LETTER TO THE EDITOR



Does Adding of Hydroxychloroquine to the Standard Care Provide any Benefit in Reducing the Mortality among COVID-19 Patients?: a Systematic Review

Tejas K. Patel¹ • Manish Barvaliya² • Bhavesh D. Kevadiya³ • Parvati B. Patel⁴ • Hira Lal Bhalla¹

Received: 16 June 2020 / Accepted: 24 June 2020 / Published online: 30 June 2020 © Springer Science+Business Media, LLC, part of Springer Nature 2020

Dear Prof. Gendelman

The recent retractions of two articles from the Lancet (Mehra et al. 2020a) and the New England Journal of Medicine (Mehra et al. 2020b) on the use of hydroxychloroquine has highlighted the needs for increased scrutiny of primary data sources. These retractions have created doubts in the minds of physicians and physician-scientists on therapeutic usages for Corona Virus Disease - 2019 (COVID-19) and the tremendous pressure placed on health care providers to find definitive preventive and treatment strategies. Recently we also published a Systematic Review titled "Does Adding of Hydroxychloroquine to the Standard Care Provide any Benefit in Reducing the Mortality among COVID-19 Patients?: a Systematic Review for the Journal of Neuroimmune Pharmacology" (Patel et al. 2020). Our primary aim was to search out whether hydroxychloroquine would reduce the mortality of the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. We performed the secondary analysis of mortality data from both non randomized controlled trial and retrospective observational studies available in the public domain.

Electronic supplementary material The online version of this article (https://doi.org/10.1007/s11481-020-09940-9) contains supplementary material, which is available to authorized users.

☑ Tejas K. Patel dr.tkp2006@yahoo.co.in

- ¹ Department of Pharmacology, All India Institute of Medical Sciences, Gorakhpur, Gorakhpur, Uttar Pradesh 273008, India
- ² Department of Pharmacology, Government Medical College, Bhavnagar, Gujarat 364001, India
- ³ Department of Radiology, Stanford Medicine, Stanford University, Palo Alto, CA 94304, USA
- ⁴ Department of Pharmacology, GMERS Medical College, Gotri, Vadodara, Gujarat 390021, India

For clarity, independent study results were used in our research. None of the included studies in our systemic review were linked to recent retractions. Indeed, the findings of metaanalysis depend on the credibility of the included studies and data extraction process. We wish to affirm the data extraction and analyses made to the Journal's readership. To meet the ethical standards of publications, we herein share data extraction sheet (Supplementary File 1) and ReVMan software file (Supplementary File 2) of the analyses performed. We also want to state that the findings of our systematic review are preliminary and await further confirmatory data sets. It should only be interpreted in the lights of such limitations.

References

- Mehra MR, Desai SS, Ruschitzka F, Patel AN (2020a) Retraction-Hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19: a multinational registry analysis. [published online ahead of print, 2020 May 22] [retracted in: Lancet. 2020 Jun 5;:null]. Lancet. S0140-6736(20)31180–31186. https:// doi.org/10.1016/S0140-6736(20)31180-6
- Mehra MR, Desai SS, Kuy S, Henry TD, Patel AN (2020b) Retraction: cardiovascular disease, drug therapy, and mortality in Covid-19. N Engl J Med. https://doi.org/10.1056/NEJMoa2007621 [published online ahead of print, 2020 Jun 4] [retraction of: N Engl J Med. 2020 May 1;;]. N Engl J Med. NEJMc2021225. https://doi.org/10. 1056/NEJMc2021225
- Patel TK, Barvaliya M, Kevadiya BD, Patel PB, Bhalla HL (2020) Does adding of Hydroxychloroquine to the standard care provide any benefit in reducing the mortality among COVID-19 patients?: a systematic review. J NeuroImmune Pharmacol:1–9. https://doi.org/ 10.1007/s11481-020-09930-x

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.