

**CLINICAL OPINION from Ben Kruskal, MD:****I DO NOT RECOMMEND HYDROXYCHLOROQUINE or chloroquine for treatment of COVID-19**

- The basis for recommending it in the first place was highly speculative, based on theoretical mechanisms of action that were plausible.
- The in vitro data on antiviral effects are mixed.
- While both of these drugs are in routine clinical use in humans, there are a number of important toxicities including retinopathy and QTc prolongation.
- The first trial in patients showed no difference in clinical outcomes.<sup>1</sup>
- The best known report of use in patients described a small uncontrolled series with a heterogenous group of patients, no clinical outcomes, a reported decrease in viral shedding, and a number of internal inconsistencies.<sup>2-4</sup>
- A subsequent small carefully done observational trial showed no reduction in viral shedding, and poor clinical outcomes (1 death, 2 ICU transfers, and one patient stopping the drug due to unacceptable QTc prolongation).<sup>5</sup>
- This may justify further carefully controlled small clinical trials but it does not justify clinical use of these drugs for Covid-19 outside of clinical trials.

## References

1. Chen J , Liu D , Liu L , et al . A pilot study of hydroxychloroquine in treatment of patients with common coronavirus disease-19 (COVID-19). Journal of Zhejiang University (Medical Sciences) 2020; 49 ( 1 ).
2. Gautret P , Lagier J- C , Parola P , et al . Hydroxychloroquine and azithromycin as a treatment of COVID-19: results of an open- label non- randomized clinical trial. Int J Antimicrob Agents 2020; 105949 : 105949. DOI: [https:// doi. org/10. 1016/ j. ijantimicag. 2020. 105949](https://doi.org/10.1016/j.ijantimicag.2020.105949)
3. <https://blogs.sciencemag.org/pipeline/archives/2020/04/06/hydroxychloroquine-update-for-april-6>
4. <https://www.medrxiv.org/content/10.1101/2020.03.31.20048777v1>
5. No Evidence of Rapid Antiviral Clearance or Clinical Benefit with the Combination of Hydroxychloroquine and Azithromycin in Patients with Severe COVID-19 Infection. Molina JM, Delaugerre C, Goff JL, Mela-Lima B, Ponscarne D, Goldwirt L, de Castro N. Med Mal Infect. 2020 Mar 30:S0399-077X(20)30085-8. doi: 10.1016/j.medmal.2020.03.006.

**For the most up-to-date COVID-19 information please visit:**

**Centers for Disease Control \* Massachusetts Department of Public Health \* New England Quality Care Alliance**