

COVID-19

22 June 2020

Recommendation Regarding the Use of Ivermectin as a Treatment for COVID-19

A recent study (1) reported that ivermectin was successfully used *in vitro* for the treatment of SARS-CoV-2 in experimentally infected cells, and two preprint publications (2,3) reported observational clinical studies on the apparent utility of ivermectin to treat patients with COVID-19 needing mechanical ventilation. However, none of these studies was peer-reviewed nor formally published and one study (3) was later retracted.

The Pan American Health Organization (PAHO) compiled an evidence database of potential COVID-19 therapeutics for which a rapid review was conducted of all COVID-19 *in vitro* (lab) and *in vivo* (clinical) human studies published from January to May 2020 (4). The review concluded that the studies on ivermectin were found to have a high risk of bias, very low certainty of the evidence, and that the existing evidence is insufficient to draw a conclusion on benefits and harms.

Though the effectiveness of ivermectin is currently being evaluated in various randomized clinical trials, the World Health Organization (WHO) excluded ivermectin from its co-sponsored Solidarity Trial for COVID-19 treatments (5), a global effort to find an effective treatment for COVID-19.

The Mectizan® (ivermectin) Expert Committee Statement on Potential Efficacy of Ivermectin on COVID-19 (6) emphasized that the laboratory results showing efficacy of ivermectin to reduce viral loads in laboratory cultures, at dosage levels far beyond those approved by the FDA for treatment of parasitic diseases in humans, are not sufficient to indicate that ivermectin will be of clinical benefit to reduce viral loads in COVID-19 patients. Chaccour et al. (7,8) caution against using *in vitro* findings as more than a qualitative indicator of potential efficacy and emphasize that “due diligence and regulatory review are needed before testing ivermectin in COVID-19.”

Despite this, ivermectin is incorrectly being used for the treatment of COVID-19, without any scientific evidence of its efficacy and safety for the treatment of this disease (7-9). Injectable ivermectin formulated for veterinary use has also wrongly been used for treatment of COVID-19, according to some reports (9).

WHO and PAHO encourage the use of unproven therapies to be undertaken in the context of a randomized clinical trial (RCT). WHO’s position on off-label use of treatments for COVID-19 can be found at <https://www.who.int/news-room/commentaries/detail/off-label-use-of-medicines-for-covid-19>

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For all the reasons mentioned and in accordance with the Organization's position on use of medicines without scientific evidence of their benefit for COVID-19 (10), PAHO advises against using ivermectin for any purposes other than for those for which use is authorized.

References

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