Question

What is the best-available evidence about the use of colchicine and ivermectin for COVID-19?

What we found

We searched the COVID-END inventory of best-evidence syntheses (on the page for evidence about clinical management under the sections for drugs to prevent severe COVID-19 infection and drugs to treat COVID-19) for evidence about colchicine and ivermectin and all combinations with other drugs (e.g., azithromycin).

These sections of the COVID-END inventory of best-evidence syntheses are routinely updated.

We pulled findings from four top evidence-synthesis teams (COVID-NMA, McMaster/BMJ, Copenhagen Trials Unit, and PAHO/L*VE) that have provided evidence about colchicine and ivermectin (the COVID-END inventory is routinely updated with findings from these sources). We also identified one protocol for a living systematic review that will assess whether ivermectin is effective for COVID-19.

Colchicine was only found as a treatment for COVID-19, and not as a prophylactic treatment. Findings from the living systematic reviews outline that:

- adding colchicine to standard care may reduce disease progression and it probably increases the risk of adverse events and the effects on other outcomes are uncertain (COVID-NMA; site last checked 5 April 2021);
- colchicine may reduce mortality, mechanical ventilation, and duration of hospitalization in non-severe patients, but its effects are uncertain for hospitalized patients (McMaster/BMJ; site last checked 5 April 2021); and
- colchicine may reduce mortality and mechanical ventilation requirements, but the certainty of the available evidence is low (PAHO/L*VE; site last checked 8 April 2021).

In addition, while the Copenhagen Trials Unit does not currently profile colchicine in their conclusions, but a summary of findings table that is included as an Appendix outlines that outcomes...
have very low certainty of the evidence and, as a result, the conclusion from that review are that effects of adding colchicine to standard care are uncertain.

For ivermectin, findings from the living systematic reviews indicate that:

- the effects of using ivermectin as a prophylactic treatment for COVID-19 are uncertain (McMaster/BMJ; site last checked 5 April 2021);
- the effects of ivermectin to treat COVID-19 patients are also uncertain (McMaster/BMJ; site last checked 5 April 2021);
- the effects of using ivermectin with iota-carrageenan as a prophylactic treatment for COVID-19 are uncertain (McMaster/BMJ; site last checked 5 April 2021);
- adding ivermectin to standard care may reduce all-cause mortality and may have little or no difference on clinical improvement, whereas the risk of adverse events is uncertain (COVID-NMA; site last checked 5 April 2021);
- the effects of adding ivermectin + doxycycline to standard care are uncertain (COVID-NMA; site last checked 5 April 2021);
- synthesis findings are pending for an evaluation of ivermectin + doxycycline vs hydroxychloroquine + azithromycin (COVID-NMA; site last checked 5 April 2020); and
- results from the only four RCTs classified as having a low risk of ivermectin may not significantly reduce mortality and probably does not improve time to symptom resolution (PAHO/L*VE; site last checked 8 April 2021).


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