McMaster University | HEALTH FORUM

COVID-END COVID-19 Evidence Network to support Decision-making ... in Canada

COVID-19 existing resource response #8

(Last updated 9 April 2021)

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

Box 1: Our approach

COVID-END in Canada responds to requests for evidence syntheses about topics related to COVID-19 that are likely to be explicitly considered by high-level decision-makers in multiple Canadian jurisdictions. This includes conducting rapid evidence profiles, living evidence profiles, rapid syntheses and living evidence syntheses. Examples of these evidence products can be viewed here.

Sometimes requests are submitted about questions that have already been addressed by one or more recently updated, high-quality evidence syntheses or will be addressed soon by work underway (e.g., through a rapid synthesis underway with or being planned by a Canadian team, registered synthesis protocol or CIHR funding to conduct a synthesis). In these situations, we prepare a response that profiles these existing resources. These responses are typically prepared by a combination of: 1) searching both the COVID-END domestic inventory and the COVID-END global inventory; and 2) contacting 40+ Canada evidence-synthesis teams to identify any additional resources or work underway that is relevant to the question posed in a request. Such an existing resource response is equivalent to a rapid evidence profile prepared with the same turn-around time.

We followed this approach to prepare this existing resource response, which was prepared in a half of a business day (and hence the equivalent to a half-day rapid evidence profile) to inform next steps in evidence synthesis, guideline development and/or decision-making related to the question that was posed.

have very low certainty of the evidence and, as are 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).

Mansilla C, Wilson MG, Lavis JN. COVID-END in Canada existing resource response #8: What is the best-available evidence about the use of colchicine and ivermectin for COVID-19?. Hamilton: McMaster Health Forum, COVID-END in Canada, 9 April 2021.

The COVID-19 Evidence Network to support Decision-making (COVID-END) is supported by an investment from the Government of Canada through the Canadian Institutes of Health Research (CIHR). To help Canadian decision-makers as they respond to unprecedented challenges related to the COVID-19 pandemic, COVID-END in Canada is preparing rapid evidence responses like this one. The opinions, results, and conclusions are those of the evidence-synthesis team that prepared the rapid response, and are independent of the Government of Canada and CIHR. No endorsement by the Government of Canada or CIHR is intended or should be inferred.

COVID-END
COVID-19 Evidence Network to support Decision-making ... in Canada

>>Contact us
c/o McMaster Health Forum
1280 Main St. West, MML-417
Hamilton, ON, Canada L8S 4L6
+1.905.525.9140 x 22121
forum@mcmaster.ca

>> Find and follow us
COVID-END.org
@COVID_E_N_D