



Coronavirus (COVID-19): does Ivermectin prevent transmission or aid in the treatment of COVID-19?

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COCHRANE REVIEW: Popp M, Stegemann M, Metzendorf M-I, Gould S, Kranke P, Meybohm P, Skoetz N, Weibel S. Ivermectin for preventing and treating COVID-19. Cochrane Database of Systematic Reviews 2021, Issue 7. Art. No.: CD015017. doi: 10.1002/14651858.CD015017.pub2.¹

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BACKGROUND: On 11 March 2020 the World Health Organisation (WHO) declared the novel coronavirus (COVID-19) outbreak a global pandemic.² As the world comes to terms with this new virus many existing treatments have been repurposed and trialled to determine efficacy and prevention against for COVID-19 infection. Ivermectin is one of these treatments. Ivermectin was discovered in the late 1970s and was the first in a list of new antiparasitic drugs.³ Following the outbreak of COVID-19 Ivermectin was shown to inhibit the replication of SARS-CoV-2 in vitro.⁴ Clinical studies⁵ rapidly ensued but as a result of poor trial methodology and small sample sizes it has been hard to get a clear picture of the overall effect of Ivermectin on patients suffering with COVID-19. The Cochrane review reported on here, set out to determine the effect of treatment and prevention when Ivermectin is used to combat COVID-19 in randomised controlled trials.¹

CLINICAL BOTTOM LINE: This Cochrane review found that at this stage there are very few completed well conducted studies examining the effect of Ivermectin on both the prevention and treatment of COVID-19. When reporting the primary analyses there is no apparent difference between Ivermectin and standard care or placebo for the treatment or transmission of COVID-19.¹ There are currently 31 trials underway looking at Ivermectin as a possible treatment for COVID-19¹ but until the results of these are known there is currently no evidence to support its use outside of clinical trials.

References

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| Outcome Measured | Findings | Evidence | Harms |
|---|---|--|--|
| Comparing Ivermectin to placebo or standard care for inpatients | All-cause Mortality There was no proven difference between groups | This evidence is of very low quality and is based on 185 participants from two studies | Randomised controlled trials did not show any difference in adverse events between Ivermectin and standard care or no treatment. This could be the result of very low sample numbers |
| | Clinical Worsening – mechanical ventilation There was no proven difference between groups | This evidence is of very low quality and is based on 185 participants from two studies | |
| | Viral Clearance at 7 days There was no proven difference between groups | This evidence is of very low quality and is based on 159 participants from two studies | |
| Comparing Ivermectin to placebo or standard care for outpatients | All-cause Mortality There was no proven difference between groups | This evidence is of very low quality and is based on 422 participants from two studies | |
| | Clinical Worsening – mechanical ventilation There was no proven difference between groups | This evidence is of very low quality and is based on 398 participants from one study | |
| | Viral Clearance at 7 days There was no proven difference between groups | This evidence is of low quality and is based on 24 participants from one study | |
| Comparing Ivermectin to no treatment for the prevention of COVID-19 | All-cause Mortality There was no proven difference between groups (there were no deaths in either group) | This evidence is of very low quality and is based on 304 participants from one study | |