

Are inhaled corticosteroids effective for treating COVID-19?

Clinical Question	How effective and safe are inhaled corticosteroids for the treatment of coronavirus disease 2019 (COVID-19)?
Bottom Line	<p>For people with a confirmed diagnosis of COVID-19 and mild disease: Inhaled corticosteroids may result in little to no difference in all-cause mortality in outpatients with mild COVID-19 (low-certainty evidence).</p> <p>Inhaled corticosteroids probably reduce the risk of admission to hospital or death at up to day 30 (moderate-certainty evidence). Further, the intervention probably increases the resolution of all initial symptoms at day 14 and may decrease the duration to symptoms resolved (low-certainty evidence).</p> <p>Inhaled corticosteroids may result in little to no difference in the incidence of mild to moderate adverse events (low certainty evidence). In terms of serious adverse events, the evidence is very uncertain about the effect of inhaled corticosteroids (very-low certainty evidence).</p>
Caveat	All studies investigated participants with mild disease in outpatient settings. Currently, there is no evidence for people with asymptomatic COVID-19 infection or inpatients with moderate-to-severe disease.
Context	Inhaled corticosteroids are well established for the long-term treatment of inflammatory respiratory diseases such as asthma or chronic obstructive pulmonary disease. They have been investigated for the treatment of COVID-19. The anti-inflammatory action of inhaled corticosteroids might have the potential to reduce the risk of severe illness resulting from hyperinflammation in COVID-19.
Cochrane Systematic Review	Griesel M, Wagner C, Mikolajewska A, Stegemann M, Fichtner F, Metzendorf M-I, Nair AAnil, Daniel J, Fischer A-L, Skoetz N. Inhaled corticosteroids for the treatment of COVID-19. Cochrane Database of Systematic Reviews 2022, Issue 3. Art. No.: CD015125. DOI: 10.1002/14651858.CD015125. This review contains 3 trials with a total of 2,164 participants.

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Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD015125/full>