

# SHOULD INHALED CORTICOSTEROIDS BE USED TO TREAT COVID-19?

Rapid Review for COVID-19

## THE KEY REVIEW QUESTION

This review aimed to determine whether inhaled corticosteroids (ICS) be used to treat patients with COVID-19 not requiring oxygen therapy, in hospital or in ambulatory settings.

This review incorporates additional evidence. View [full rapid review of inhaled corticosteroids](#).

## WHAT WAS INCLUDED IN REVIEW?

- Systematic review of evidence from **seven randomised placebo-controlled trials** (RCTs) evidenced in four electronic databases [PubMed](#), [Epistemonikos](#), the [Cochrane COVID-19 Study Register](#) and [COVID-NMA](#).
- The initial review was conducted in July 2021, with updated research done until May 2022 in the Cochrane library and COVID-NMA.

## BACKGROUND

Inhaled corticosteroids (ICS) are well established for the long term treatment of inflammatory respiratory diseases such as asthma or COPD.

ICS have been proposed as a potential treatment for COVID-19 in ambulant patients due to the prevalence of chronic respiratory diseases being lower in patients hospitalised with SARS-CoV2 infection than in the general population.



ADDITIONAL RAPID COVID-19 REVIEWS CAN BE FOUND [HERE](#).



health

Department:  
Health  
REPUBLIC OF SOUTH AFRICA



## WHAT DID THE REVIEW FIND?



Low degree of certainty for differences in progression to oxygen therapy, mechanical ventilation, hospitalisation or death

LOW  
CONFIDENCE



Very low certainty of evidence for differences in negative SARS-CoV-2 PCR results at 14 days or adverse events

VERY LOW  
CONFIDENCE

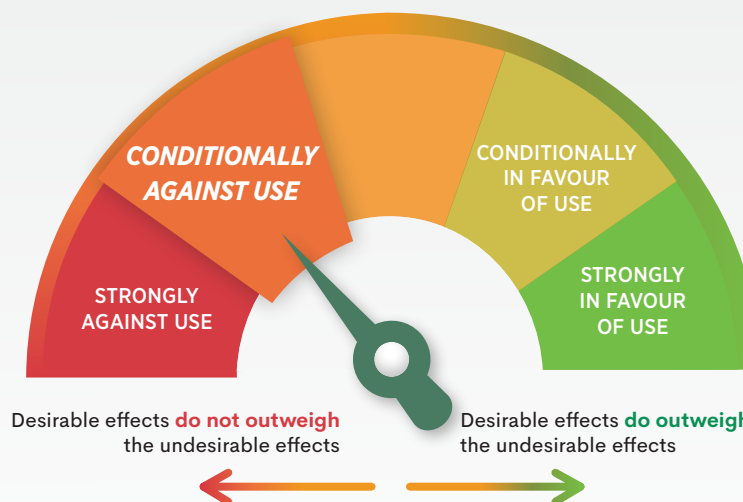


Very low degree of certainty of difference in patients reporting resolution of symptoms after 28 days



Very low degree of certainty for difference in time to resolution of symptoms

## RECOMMENDATION OF THE NATIONAL ESSENTIAL MEDICINES LIST COMMITTEE ON COVID-19 THERAPEUTICS ON USE OF INHALED CORTICOSTEROIDS TO TREAT COVID-19



SA GRADE IS SUPPORTED THROUGH FUNDING FROM CEBHA+ AND READ-IT: [DETAILS HERE](#).

## CONSIDERATIONS

- There is low certainty evidence of a modest reduction in the time to self-reported resolution of symptoms.
- It is unclear if this benefit justifies the cost and potential adverse events associated with the use of inhaled corticosteroids.
- There are also concerns of national supply constraints and the negative impact on the availability of inhaled corticosteroids for use by patients with asthma or chronic obstructive pulmonary disease.

## SUGGESTION

The current very low- to low-certainty evidence **does not suggest any clear benefit to the use of inhaled corticosteroids.**

**NEML MAC suggests that inhaled corticosteroids not be used routinely in the management of COVID-19, unless indicated for other reasons.**

REVIEW PUBLICATION DATE  
6 June 2022 (2nd update)