

## UPDATE ALERTS

### Update Alert: Should Remdesivir Be Used for the Treatment of Patients With COVID-19? Rapid, Living Practice Points From the American College of Physicians (Version 2)

This is an update of the American College of Physicians' living, rapid practice points about using remdesivir for treatment of COVID-19 (1), which is based on an updated systematic review done through 10 May 2021 (2-4). The evidence update identified 1 new study that could inform Practice Point 1 (5). No new studies were identified as supporting evidence for Practice Points 2 or 3. The new study did not have an effect on our prior conclusions (1) and resulted in no changes to the practice points (see the next section and the Supplement). We have changed the term mechanical ventilation to invasive ventilation to better reflect most of the patient populations informing the practice points. We define invasive ventilation as administering supplemental oxygen with positive pressure to the lungs via an endotracheal or tracheostomy tube. The Supplement summarizes the evidence, evidence gaps, and clinical considerations.

### PRACTICE POINTS

Evidence is emerging about the effectiveness and harms of remdesivir in patients with COVID-19 and whether they vary by symptom duration, disease severity (defined by proxy as respiratory support requirements, including the need for invasive ventilation or extracorporeal membrane oxygenation [ECMO]), and treatment duration. The following practice points are based on best available evidence. The target patient population includes all hospitalized, nonpregnant, adult patients with COVID-19.

#### Practice Point 1: Consider Remdesivir for 5 Days to Treat Hospitalized Patients With COVID-19 Who Do Not Require Invasive Ventilation or ECMO

##### Updated Rationale

The living, rapid systematic review identified 1 new randomized controlled trial that met inclusion criteria, comparing a 5-day course of remdesivir to standard care in adults hospitalized with COVID-19 not requiring invasive ventilation at baseline (5). The new study, however, was determined to be of poor quality (high risk of bias). In contrast to the conclusions from the previous update of the systematic review (3, 4), the new study showed a numerically higher but not statistically significant difference in mortality and new need for mechanical ventilation (not previously reported for 5-day

course compared with standard care) with the 5-day course of remdesivir. The inclusion of this new study did not change our previous conclusions and rationale that current evidence suggests an overall net benefit with both a 5- and 10-day course of remdesivir compared with placebo or standard care, and that 5 days may be as effective as 10 days, with no increase in potential harms (2-4).

#### Practice Point 2: Consider Extending the Use of Remdesivir to 10 Days to Treat Hospitalized Patients With COVID-19 Who Require Invasive Ventilation or ECMO Within a 5-Day Course

The update did not identify any relevant studies for Practice Point 2; our previous conclusions are unchanged (1).

#### Practice Point 3: Avoid Initiating Remdesivir to Treat Hospitalized Patients With COVID-19 Who Are Already on Invasive Ventilation or ECMO

The update did not identify any relevant studies for Practice Point 3; our previous conclusions are unchanged (1).

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## LETTERS

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**Note:** Practice points are meant to guide care based on the best available evidence and may not apply to all patients or individual clinical situations. They should not be used as a replacement for a clinician's judgment. Any reference to a product or process contained in a guideline is not intended as an endorsement of any specific commercial product. All ACP practice points are considered automatically withdrawn or invalid 5 years after publication, or once an update has been issued.

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