

In Patient Treatment of COVID-19: An Update

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Disclosures

- None



COVID-19 Treatment Guidelines

Coronavirus Disease 2019 (COVID-19) Treatment Guidelines

<https://www.covid19treatmentguidelines.nih.gov>

NIH Guidelines

- **Rating of Recommendations:**
 - A = Strong; B = Moderate; C = Optional
- **Rating of Evidence:**
 - I = One or more randomized trials without major limitations
 - IIa = Other randomized trials or subgroup analyses of randomized trials
 - IIb = Nonrandomized trials or observational cohort studies
 - III = Expert opinion

What's New?

Outpatient Treatment

- The Panel **recommends against** the use of **chloroquine** or **hydroxychloroquine** with or without **azithromycin (AI)**. The
- Panel **recommends against** the use of **dexamethasone** or **other systemic glucocorticoids** in outpatients in the absence of another indication **(AIII)**.
- The Panel **recommends against** the use of **antibacterial therapy** (e.g., **azithromycin, doxycycline**) in the absence of another indication **(AIII)**.

Colchicine

- There are insufficient data for the COVID-19 Treatment Guidelines Panel (the Panel) to recommend either for or against the use of colchicine for the treatment of nonhospitalized patients with COVID-19.
- The Panel **recommends against** the use of colchicine in hospitalized patients for the treatment of COVID-19, except in a clinical trial (**AIII**).

Dexamethasone in patients Not Requiring Supplemental Oxygen

Patients Who Are Hospitalized With Moderate COVID-19 but Who Do Not Require Supplemental Oxygen

Recommendations

- The Panel **recommends against** the use of **dexamethasone** or **other corticosteroids (AIIa)**. Patients who are receiving dexamethasone or another corticosteroid for other indications should continue therapy for their underlying conditions as directed by their health care provider.
- There are insufficient data to recommend either for or against the routine use of remdesivir in these patients. The use of remdesivir may be appropriate in patients who have a high risk of disease progression.

Convalescent Plasma

- *Last Updated: April 21, 2021*
- The COVID-19 Treatment Guidelines Panel (the Panel) **recommends against** the use of **low-titer COVID-19 convalescent plasma** for the treatment of COVID-19 **(AIIb)**.
 - Low-titer COVID-19 convalescent plasma is no longer authorized through the convalescent plasma EUA.

Convalescent Plasma

- The Panel **recommends against** the use of COVID-19 **convalescent plasma** for the treatment of COVID-19 in mechanically ventilated patients **(AI)**.
- The Panel **recommends against** the use of **high-titer COVID-19 convalescent plasma** for the treatment of COVID-19 in hospitalized patients who do not require mechanical ventilation, except in a clinical trial **(AI)**

Antibiotics

- In patients with COVID-19 and severe or critical illness, there are insufficient data to recommend empiric broad-spectrum antimicrobial therapy in the absence of another indication.
- If antimicrobials are initiated, the Panel recommends that their use should be reassessed daily in order to minimize the adverse consequences of unnecessary antimicrobial therapy **(AIII)**.

Tocilizumab

- The Panel recommends using **tocilizumab** (single intravenous [IV] dose of tocilizumab 8 mg/kg actual body weight up to 800 mg) **in combination with dexamethasone** (6 mg daily for up to 10 days) in hospitalized patients who are exhibiting rapid respiratory decompensation due to COVID-19.

Which Patients Should Receive Tocilizumab?

- Recently hospitalized patients (i.e., within first 3 days of admission) who have been admitted to the intensive care unit (ICU) within the prior 24 hours and who require invasive mechanical ventilation, noninvasive ventilation, or high-flow nasal canula (HFNC) oxygen (>0.4 FiO_2 /30 L/min of oxygen flow) **(BIIa)**; *or*

Which Patients Should Receive Tocilizumab?

- Recently hospitalized patients (i.e., within first 3 days of admission) not admitted to the ICU who have rapidly increasing oxygen needs and require noninvasive ventilation or HFNC oxygen and who have significantly increased markers of inflammation (CRP ≥ 75 mg/L) (**BIIa**).

Ivermectin

- There are insufficient data for the Panel to recommend either for or against the use of ivermectin for the treatment of COVID-19.
 - Results from adequately powered, well-designed, and well-conducted clinical trials are needed to provide more specific, evidence-based guidance on the role of ivermectin in the treatment of COVID-19.

DISEASE SEVERITY

PANEL'S RECOMMENDATIONS

Hospitalized but Does Not Require Supplemental Oxygen

There are insufficient data to recommend either for or against the routine use of remdesivir. For patients at high risk of disease progression, the use of remdesivir may be appropriate.

Hospitalized and Requires Supplemental Oxygen

Use one of the following options:

- **Remdesivir^{a,b}** (e.g., for patients who require minimal supplemental oxygen) **(BIIa)**
- **Dexamethasone^c plus remdesivir^{a,b}** (e.g., for patients who require increasing amounts of supplemental oxygen) **(BIII)^{d,e}**
- **Dexamethasone^c** (e.g., when combination therapy with remdesivir cannot be used or is not available) **(BI)**

Hospitalized and Requires Oxygen Delivery Through a High-Flow Device or Noninvasive Ventilation

Use one of the following options:

- **Dexamethasone^c (AI)^e**
- **Dexamethasone^c plus remdesivir^{a,b} (BIII)^{d,e}**

For patients who were recently hospitalized^f with rapidly increasing oxygen needs and systemic inflammation:

- Add **tocilizumab^g** to one of the two options above **(BIIa)**

Hospitalized and Requires Invasive Mechanical Ventilation or ECMO

- **Dexamethasone^c (AI)^h**

For patients who are within 24 hours of admission to the ICU:

- **Dexamethasone^c plus tocilizumab^g (BIIa)**

Thank You!