



## What's New in the Guidelines

---

*Last Updated: September 26, 2022*

The *Coronavirus Disease 2019 (COVID-19) Treatment Guidelines* is published in an electronic format that can be updated in step with the rapid pace and growing volume of information regarding the treatment of COVID-19.

The COVID-19 Treatment Guidelines Panel (the Panel) is committed to updating this document to ensure that health care providers, patients, and policy experts have the most recent information regarding the optimal management of COVID-19 (see the [Panel Roster](#) for a list of Panel members).

New Guidelines sections and recommendations and updates to existing Guidelines sections are developed by working groups of Panel members. All recommendations included in the Guidelines are endorsed by a majority of Panel members (see [Guidelines Development](#) for additional details on the development process).

Major revisions to the Guidelines within the past month are as follows:

### September 26, 2022

#### [Clinical Spectrum of SARS-CoV-2 Infection](#)

Oxygen saturation measured by pulse oximetry (SpO<sub>2</sub>) is commonly used in estimating blood oxygen levels and is a key parameter used to define disease severity in patients with COVID-19. In this update, the Panel discusses some important limitations of using pulse oximetry to detect hypoxemia. Some studies have noted that occult hypoxemia (defined as arterial oxygen saturation <88% despite SpO<sub>2</sub> >92%) is more common in some patient populations, especially in patients with darker skin pigmentation. Because of these limitations, the Panel emphasizes that SpO<sub>2</sub> should always be interpreted within the context of a patient's clinical presentation.

The following sections of the Guidelines were also updated with discussions about the limitations of pulse oximetry in accurately estimating oxygen saturation:

- [General Management of Nonhospitalized Adults With Acute COVID-19](#)
- [Oxygenation and Ventilation for Adults](#)
- [Oxygenation and Ventilation for Children](#)

#### [Therapeutic Management of Nonhospitalized Adults With COVID-19](#)

The Panel made 2 key changes regarding the management of nonhospitalized patients discharged from the emergency department (ED) and patients discharged after hospitalization.

Previously, the Panel provided treatment recommendations for patients with COVID-19 who, because of limited hospital resources, are discharged from the ED despite having new or increasing supplemental oxygen requirements. Because these situations are currently quite rare, the Panel removed this case scenario from this section.

The Panel also combined the recommendations for patients discharged from the hospital in stable condition, with or without supplemental oxygen, into a single recommendation. For these patients, the Panel **recommends against** continuing the use of **remdesivir (AIIa)**, **dexamethasone (AIIa)**, or

**baricitinib (AIIa)** for the treatment of COVID-19 after hospital discharge.

### **Ritonavir-Boosted Nirmatrelvir (Paxlovid)**

In this revision, the Panel notes that concerns related to SARS-CoV-2 viral rebound and the recurrence of COVID-19 symptoms should not be a reason to avoid the use of ritonavir-boosted nirmatrelvir. To date, the recurrence of symptoms following the use of ritonavir-boosted nirmatrelvir has not been associated with progression to severe COVID-19. Furthermore, viral rebound and symptom recurrence can also occur in the absence of treatment with ritonavir-boosted nirmatrelvir.

### **Drug-Drug Interactions Between Ritonavir-Boosted Nirmatrelvir (Paxlovid) and Concomitant Medications**

The Panel added drugs to Box 1 and Box 2, including Janus kinase inhibitors, anti-orthopoxvirus agents, and conjugated monoclonal antibody products. The Panel also reviewed the updated Emergency Use Authorization fact sheet for ritonavir-boosted nirmatrelvir and incorporated the information into this section.

### **Molnupiravir**

The Panel notes that there is a lack of definitive data regarding the benefit of molnupiravir in patients who are vaccinated and at high risk of progressing to severe COVID-19. Due to the fetal toxicities that have been reported in animal studies of molnupiravir, the Panel **recommends against** the use of **molnupiravir** for the treatment of COVID-19 in pregnant patients unless there are no other options and therapy is clearly indicated (**AIII**). It is not yet known how often SARS-CoV-2 viral rebound occurs after molnupiravir treatment.

### **Antithrombotic Therapy in Patients With COVID-19**

The text and clinical data table for this section were updated with data from 2 randomized controlled trials that assessed the use of prophylactic doses of low-molecular-weight heparin (LMWH) in outpatients with COVID-19. Neither of these studies showed a reduction in the risk of hospitalization or death among patients with COVID-19 who received LMWH.

### **Special Considerations in Pregnancy**

This section has been revised with updated data regarding the epidemiology of COVID-19 in pregnancy, including obstetric and perinatal outcomes and rates of vertical transmission of SARS-CoV-2. The Panel also discusses the safety and efficacy of administering COVID-19 vaccines to pregnant people.

The Panel emphasizes that pregnant individuals who qualify for SARS-CoV-2 pre-exposure prophylaxis (PrEP) or treatment for COVID-19 should receive it, with the following exceptions:

- The Panel **recommends against** the use of **molnupiravir** for the treatment of COVID-19 in pregnant patients unless there are no other options and therapy is clearly indicated (**AIII**).
- Pregnant patients were not included in most of the clinical trials that evaluated therapeutic anticoagulation in the setting of COVID-19, and there is a potential for increased maternal risks if bleeding occurs during pregnancy. Therefore, there is insufficient evidence for the Panel to recommend either for or against the use of therapeutic anticoagulation in pregnant patients with COVID-19 who do not have evidence of venous thromboembolism.

## ***Minor Updates to the Guidelines***

Minor updates were made to the following Guidelines sections:

- [Remdesivir](#)
- [Interleukin-6 Inhibitors](#)
- [Vitamin C](#)
- [Vitamin D](#)
- [Zinc](#)