

Ontario COVID-19 Drugs and Biologics Clinical Practice Guidelines Working Group
Therapeutic Management of Adult Patients with COVID-19

Recommendations apply to patients >18 years of age. Recommendations are based on the best available data and may change as additional data becomes available. Science Briefs can be found on the [Ontario COVID-19 Science Advisory Table](#) website.



SEVERITY OF ILLNESS	RECOMMENDATIONS		
<p>Critically Ill Patients</p> <p>Patients requiring ventilatory and/or circulatory support, including high-flow nasal oxygen, non-invasive ventilation, invasive mechanical ventilation, or ECMO.</p> <p>These patients are usually managed in an intensive care setting.</p>	<ul style="list-style-type: none"> ● Dexamethasone 6 mg PO/IV daily for 10 days (or until discharge if sooner) is recommended for critically ill patients with suspected or confirmed COVID-19. ● Tocilizumab (dosed according to body weight) is recommended for critically ill patients with suspected or confirmed COVID-19, who are on recommended doses of dexamethasone therapy (or a dose-equivalent corticosteroid) AND are within 14 days of hospital admission (or within 14 days of a new COVID-19 diagnosis if the infection was nosocomially acquired). <ul style="list-style-type: none"> • A second dose of tocilizumab may be considered after 24 hours if the patient is not improving. • The dose of intravenous tocilizumab may be determined by a weight-based dose strategy (8 mg/kg, maximum dose 800 mg) OR by a weight-based dose banding strategy (800 mg if weight >90 kg; 600 mg if weight >65 and ≤90 kg; 400 mg if weight >40 and ≤65 kg; and 8 mg/kg if weight ≤40 kg). 	<ul style="list-style-type: none"> ● Prophylactic dose low molecular weight or unfractionated heparin is recommended in critically ill patients hospitalized with COVID-19. ■ These patients should not receive therapeutic dose anticoagulation unless they have a separate indication for this treatment. ■ Remdesivir is not recommended for critically ill patients with COVID-19 receiving mechanical ventilation. ▲ In critically ill patients receiving high-flow oxygen (i.e., oxygen by mask, oxygen by high-flow nasal cannula, or non-invasive mechanical ventilation), remdesivir 200 mg IV on day 1, then 100 mg IV daily for 9 days may be considered for suspected or confirmed COVID-19. ■ Bacterial co-infection is common in COVID-19 pneumonia at presentation. Do not add empiric antibiotics for bacterial pneumonia unless bacterial infection is strongly suspected. Continue empiric antibiotics for no more than 5 days and de-escalate on the basis of microbiologic results and clinical judgment. 	<p>CURRENTLY NOT RECOMMENDED</p> <p>There is insufficient evidence to support the use of the following therapies in the treatment of COVID-19 outside of clinical trials or where other indications would justify its use:</p> <ul style="list-style-type: none"> ◆ Anti-SARS-CoV-2 monoclonal antibodies ◆ Colchicine ◆ Interferon (with or without lopinavir-ritonavir and ribavirin) ◆ Vitamin D
<p>Moderately Ill Patients</p> <p>Patients newly requiring low-flow supplemental oxygen.</p> <p>These patients are usually managed in hospital wards.</p>	<ul style="list-style-type: none"> ● Dexamethasone 6 mg PO/IV daily for 10 days (or until discharge if sooner) is recommended for moderately ill patients with suspected or confirmed COVID-19. ▲ If patients are discharged with home-based oxygen therapy, dexamethasone 6 mg PO daily until oxygen is no longer required (for a maximum of 10 days) may be considered. ● Remdesivir 200 mg IV on day 1, then 100 mg IV daily for 9 days is recommended for moderately ill patients with suspected or confirmed COVID-19. ▲ Therapeutic dose anticoagulation may be considered over prophylactic dose anticoagulation in moderately ill patients who are felt to be at low risk of bleeding. ● All other patients should receive prophylactic dose anticoagulation. 	<p>Tocilizumab (dosed according to body weight) is recommended for moderately ill patients with suspected or confirmed COVID-19, who have evidence of systemic inflammation, (defined as a serum CRP of 75 mg/L or higher, AND have evidence of disease progression (i.e., increasing oxygen or ventilatory requirements) despite 24-48 hours of recommended doses of dexamethasone therapy (or a dose-equivalent corticosteroid), AND are within 14 days of hospital admission (or within 14 days of a new COVID-19 diagnosis if the infection was nosocomially acquired).</p> <ul style="list-style-type: none"> • A second dose of tocilizumab may be considered after 24 hours if the patient is not improving, with dosing strategies being the same as for critically ill patients. 	<p>RECOMMENDED AGAINST</p> <p>The following therapies are not recommended for the treatment of COVID-19 due to lack of benefit, potential harm, and system implications of overuse:</p> <ul style="list-style-type: none"> ■ Antibiotics (azithromycin) ■ Hydroxychloroquine or chloroquine ■ Ivermectin ■ Lopinavir/ritonavir
<p>Mildly Ill Patients</p> <p>Patients who do not require new or additional supplemental oxygen from their baseline status, intravenous fluids, or other physiological support.</p> <p>These patients are usually managed in an ambulatory/outpatient setting.</p>	<ul style="list-style-type: none"> ■ Dexamethasone is not recommended for mildly ill patients with suspected or confirmed COVID-19. ■ Remdesivir is not recommended for mildly ill patients with suspected or confirmed COVID-19. ■ Tocilizumab is not recommended outside of clinical trials for mildly ill patients with suspected or confirmed COVID-19. ◆ There is currently insufficient evidence to make a recommendation around anticoagulation for mildly ill patients. 	<ul style="list-style-type: none"> ◆ The panel was unable to reach a consensus on the use of inhaled budesonide based on the available evidence. At this time, a recommendation cannot be made for its use to change disease course or serious disease outcomes. In selected patients with increased risk of adverse COVID-19 outcomes (≥65 years, or ≥50 years with one or more of: immunosuppression; heart disease; hypertension; asthma; lung disease; diabetes; liver disease; stroke; neurologic disease; or obesity, inhaled budesonide 800 mcg twice daily for 14 days may reduce patient-reported symptoms and time to recovery. 	

[Click here for dosing and pharmacologic considerations for medications approved or under investigation for COVID-19](#)