

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	CURRENTLY NOT RECOMMENDED
<h3>Critically Ill Patients</h3> <p>Patients requiring ventilatory and/or circulatory support, including high-flow nasal oxygen, non-invasive ventilation, invasive mechanical ventilation, or ECMO</p>	<ul style="list-style-type: none"> Dexamethasone 6 mg PO/IV daily for 10 days (or until discharge if sooner) is recommended. Tocilizumab is recommended for patients 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"> In drug shortage situations, a single dose of tocilizumab 400 mg IV or sarilumab 400 mg IV should be used for all eligible patients. A second dose of tocilizumab or sarilumab should not be given to any patient. Baricitinib 4 mg PO/NG daily for 14 days (or until discharge if sooner) may be considered in patients who are on recommended doses of dexamethasone therapy (or a dose-equivalent corticosteroid) or who have a contraindication to corticosteroid treatment. The panel does not recommend combined use of baricitinib and IL-6 inhibitors due to absence of safety and efficacy evidence. Prophylactic dose low molecular weight or unfractionated heparin is recommended. <ul style="list-style-type: none"> These patients should not receive therapeutic dose anticoagulation unless they have a separate indication for this treatment. Remdesivir is not recommended for patients receiving mechanical ventilation. Remdesivir 200 mg IV on day 1, then 100 mg IV daily for 4 days may be considered in patients requiring high-flow oxygen (i.e., oxygen by mask, oxygen by high-flow nasal cannula, or non-invasive mechanical ventilation). SARS-CoV-2 neutralizing antibodies are not recommended for critically ill patients. For symptomatic inpatients with nosocomial infection, see mildly ill recommendations below for sotrovimab. 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 microbiology results and clinical judgment. 	<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"> Colchicine Interferon (with or without lopinavir-ritonavir and ribavirin) Vitamin D
<h3>Moderately Ill Patients</h3> <p>Patients newly requiring low-flow supplemental oxygen</p>	<ul style="list-style-type: none"> Dexamethasone 6 mg PO/IV daily for 10 days (or until discharge if sooner) is recommended. 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 4 days is recommended. Therapeutic dose anticoagulation may be considered over prophylactic dose anticoagulation in patients who are felt to be at low risk of bleeding. All other patients should receive prophylactic dose anticoagulation. SARS-CoV-2 neutralizing antibodies are not recommended for moderately ill patients. For symptomatic inpatients with nosocomial infection, see mildly ill recommendations below for sotrovimab. Tocilizumab is recommended for patients 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., increased 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). <ul style="list-style-type: none"> In drug shortage situations, a single dose of tocilizumab 400 mg IV or sarilumab 400 mg IV should be used for all eligible patients. A second dose of tocilizumab or sarilumab should not be given to any patient. Baricitinib 4 mg PO daily for 14 days (or until discharge if sooner) may be considered in patients who are on recommended doses of dexamethasone (or a dose-equivalent corticosteroid) or who have a contraindication to corticosteroid treatment. The panel does not recommend combined use of baricitinib and IL-6 inhibitors due to absence of safety and efficacy evidence. 	<h3>RECOMMENDED AGAINST</h3> <p>The following therapies are not recommended for 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) Casirivimab-imdevimab due to lack of neutralizing activity against the Omicron variant Hydroxychloroquine or chloroquine Ivermectin Lopinavir/ritonavir
<h3>Mildly Ill Patients</h3> <p>Patients who do not require new or additional supplemental oxygen from their baseline status</p>	<ul style="list-style-type: none"> Sotrovimab 500 mg IV x 1 dose is recommended for mildly ill patients who present within 7 days of symptom onset and meet any of the following criteria: <ul style="list-style-type: none"> Symptomatic residents of long-term care facilities, retirement homes, and other congregate care settings Symptomatic inpatients with nosocomial infection High-risk patients: (a) ≥70 years of age AND have at least one additional risk factor; or (b) ≥50 years of age AND are First Nations, Inuit, or Métis, AND have at least one additional risk factor (e.g., obesity (BMI ≥30), dialysis or stage 5 kidney disease (eGFR <15 mL/min/1.73 m²), diabetes, cerebral palsy, intellectual disability of any severity, sickle cell disease, receiving active cancer treatment, solid organ or stem cell transplant recipients) Sotrovimab may be considered in patients who do not meet the above criteria if they present within 7 days of symptom onset and if, in the opinion of a physician, they have other important risk factors for disease progression (e.g., immunosuppression, receipt of immunosuppressants). <p>Previous SARS-CoV-2 infection and vaccination status do not need to be considered. Serologic testing does not need to be done.</p> <p>It is recommended that monoclonal antibody therapy be administered to non-hospitalized individuals across Ontario using a hybrid network that includes, but is not limited to, mobile integrated healthcare services, community paramedicine, and outpatient infusion clinics.</p> Budesonide 800 mcg inhaled twice daily for 14 days may be considered for symptomatic high-risk outpatients (as described under sotrovimab recommendation for mildly ill patients). Fluvoxamine 50 mg PO daily titrated up to 100 mg PO TID for 15 days may be considered for mildly ill patients presenting within 7 days of symptom onset. This recommendation is based on very low certainty evidence of reduction in hospitalization, and the need for outpatient treatment options with a reasonable safety profile during an anticipated spike in COVID-19 cases due to the Omicron variant. Pharmacist consultation and outpatient provider follow-up is important to avoid any significant adverse drug interactions with fluvoxamine. There is currently insufficient evidence to make a recommendation around anticoagulation for mildly ill patients. The following therapies are not recommended in mildly ill patients: dexamethasone, remdesivir, tocilizumab, and baricitinib. 	<p>Click here for dosing and pharmacologic considerations for medications approved or under investigation for COVID-19</p>

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