

Ontario COVID-19 Clinical Practice Guidelines Antimicrobial and Immunomodulatory Therapy in Adult Patients with COVID-19



Recommendations in this document apply to patients >18 years of age. For special populations, refer to the complete guidelines.



Recommendations are based on the best available data and may change as additional data becomes available.



Infectious diseases consultation (where available) is recommended before any investigational treatment is offered to a patient with COVID-19 outside of a clinical trial.

SEVERITY OF ILLNESS

Critically III Patients

Hospitalized, ICU-based

Patients requiring ventilatory

also includes patients requiring

higher concentrations of oxygen

and/or circulatory support;

high-flow nasal cannula,

by mask

non-invasive ventilation, or

ANTIVIRAL

▶ Remdesivir: It is not recommended to initiate remdesivir for patients on ECMO or receiving mechanical ventilation outside of a clinical trial.

No recommendation can be made on the initiation of remdesivir in those on high-flow nasal cannula, non-invasive ventilation, or higher concentrations of oxygen by mask. (Reason: lack of consensus)

- ▶ Chloroquine or hydroxychloroquine is not recommended for treatment of COVID-19.
- ▶ Lopinavir/ritonavir is not recommended for treatment of COVID-19.
- **Bamlanivimab** is **not** recommended outside of clinical trials.

IMMUNOMODULATORY

Dexamethasone 6 mg PO/IV daily x 10 days (or until discharge if sooner) is recommended for critically ill patients.

- ▶ Tocilizumab 8 mg/kg (maximum 800 mg) IV as a single dose can be considered for critically ill patients who have been recently (i.e. within 24 h) placed on ventilatory support (high-flow nasal oxygen at 30 L/min at 0.40 FiO₂ or higher, non-invasive ventilation, or invasive mechanical ventilation) due to COVID-19. Patients can receive this drug outside of an ICU setting if requiring the above support to maintain SaO₂ above 90%. Patients admitted to hospital with COVID-19 for more than 14 days of COVID-19 symptoms should not receive tocilizumab for this indication.
- ▶ COVID-19 convalescent plasma is currently unavailable in Canada in critically ill patients and is unavailable outside of clinical trials.
- ▶ Interferon (with or without combination of lopinavir-ritonavir and ribavirin) is not recommended outside of clinical trials.

ANTIBACTERIAL

- Bacterial co-infection is uncommon 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.

Moderately III Patients

Hospitalized, ward-based

Patients requiring low-flow supplemental oxygen

Mildly III Patients

Ambulatory, outpatient

Patients who do not require supplemental oxygen, intravenous fluids, or other physiological support

- ▶ **Remdesivir** 200 mg IV loading on Day 1, then 100 mg IV daily x 4 days or until discharge (whichever comes first) can be considered for moderately ill patients. Preference should be given to enrolling in eligible clinical trials evaluating remdesivir.
- ▶ Chloroquine or hydroxychloroquine (with or without azithromycin) is not recommended for treatment of COVID-19.
- ▶ Lopinavir/ritonavir is not recommended for treatment of COVID-19.
- **Bamlanivimab** is **not** recommended outside of clinical trials.
- ▶ **Remdesivir** is **not** recommended for **mildly ill** patients outside of a clinical trial.

- **Dexamethasone** 6 mg PO/IV daily x 10 days (or until discharge if sooner) is recommended for moderately ill patients.
- ▶ Tocilizumab is not recommended outside of clinical trials.
- ▶ COVID-19 convalescent plasma is not recommended outside of clinical trials (unavailable outside of clinical trials).
- Interferon (with or without combination of lopinavir-ritonavir and ribavirin) is not recommended outside of clinical trials.
- **Dexamethasone** is **not** recommended for **mildly ill** patients.

Antibacterial therapy is **not** routinely recommended outside of clinical trials or where other indications would justify its use.



Click here for dosing and pharmacologic considerations for medications approved or under investigation for management of COVID-19