Ontario COVID-19 Drugs and Biologics Clinical Practice Guidelines Working Group

Antimicrobial and Immunomodulatory Therapy in Adult Patients with COVID-19

SCIENCE TABLE
COVID-19 ADVISORY FOR ONTARIO

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.

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

SEVERITY OF ILLNESS	ANTIMICROBIAL	IMMUNOMODULATORY
Critically Ill Patients **Hospitalized, ICU-based** Patients requiring ventilatory and/or circulatory support; also includes patients requiring high-flow nasal cannula, non-invasive ventilation, or higher concentrations of oxygen by mask	◆ **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) ◆ **Bamlanivimab** is **not recommended outside of clinical trials**. ■ 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. ■ **Chloroquine** or **hydroxychloroquine** is **not recommended** for treatment of COVID-19. ■ **Lopinavir/ritonavir** is **not recommended** for treatment of COVID-19.	● **Dexamethasone** 6 mg PO/IV daily x 10 days (or until discharge if sooner) **is recommended** for critically ill patients. ● **Tocilizumab is recommended** for patients who are critically ill with suspected or confirmed COVID-19, who: are on optimal dexamethasone therapy; AND are within 14 days of hospital admission (or within 14 days of a new COVID-19 diagnosis if nosocomially acquired). • 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 kg and ≤90 kg; 400 mg if weight >40 kg and ≤65 kg; and 8 mg/kg if weight ≤40 kg). ◆ **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**.
Moderately Ill Patients **Hospitalized, ward-based** Patients requiring low-flow supplemental oxygen	▲ **Remdesivir** 200 mg IV loading on Day 1, then 100 mg IV daily x 4 days or until discharge (whichever comes first) **may be considered** for moderately ill patients. **Preference should be given to** enrolling in eligible clinical trials evaluating remdesivir. ◆ **Bamlanivimab** is **not recommended outside of clinical trials**. ◆ **Antibacterial therapy** is **not routinely recommended outside of clinical trials** or where other indications would justify its use. **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.	● **Dexamethasone** 6 mg PO/IV daily x 10 days (or until discharge if sooner) **is recommended** for moderately ill patients. ● **Tocilizumab is recommended** for patients who are moderately ill with suspected or confirmed COVID-19, who: have evidence of systemic inflammation, defined as a CRP 75 mg/L or higher; AND have evidence of disease progression (i.e., increasing oxygen or ventilatory requirements) despite 24-48 hours of optimal dexamethasone therapy; AND are within 14 days of hospital admission (or within 14 days of a new COVID-19 diagnosis if nosocomially acquired). • 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 kg and ≤90 kg; 400 mg if weight >40 kg and ≤65 kg; and 8 mg/kg if weight ≤40 kg). ◆ **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**.
Mildly Ill Patients **Ambulatory, outpatient** Patients who do not require supplemental oxygen, intravenous fluids, or other physiological support	◆ **Remdesivir** is **not recommended outside of clinical trials** for mildly ill patients. ◆ **Bamlanivimab** is **not recommended outside of clinical trials**. ◆ **Antibacterial therapy** is **not routinely recommended outside of clinical trials** or where other indications would justify its use. ■ **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.	■ **Dexamethasone** is **not recommended** for mildly ill patients. ◆ **Tocilizumab** is **not recommended outside of clinical trials** for patients who are mildly ill with suspected or confirmed COVID-19. ◆ **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**.

Version 1.0 | Updated February 19, 2021
https://doi.org/10.47326/ocsat.cpg.2021.1.0