SUMMARY

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 recommendations in special populations, refer to the complete guidelines. Last updated on October 22, 2020

There is emerging evidence to guide antiviral management for ill patients with COVID-19.

The guidelines recommend that infectious diseases consultation (where available) be obtained before any investigational treatment is offered to a patient with COVID-19 outside of a clinical trial, and that informed consent be obtained from the patient or substitute decision-maker.

SEVERITY OF ILLNESS	ANTIVIRAL	IMMUNOMODULATORY	ANTIBACTERIAL
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) ▸ **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** (IL-6 inhibitor) should **not** be offered routinely outside of clinical trials; may be considered on an individual basis in patients with cytokine storm (with expert consultation) ▸ **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	▸ **Ceftriaxone** 1 g IV q24h x 5 days is recommended if there is concern for bacterial co-infection (Alternative for severe beta-lactam hypersensitivity: levofloxacin 750 mg IV or moxifloxacin 400 mg IV q24h x 5 days) ▸ Add azithromycin 500 mg IV q24h x 5 days to ceftriaxone empiric therapy if *Legionella* infection is suspected (azithromycin is not needed if empiric therapy is levofloxacin or moxifloxacin) ▸ De-escalate on the basis of microbiology results and clinical judgment
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) **can be considered** for **moderately ill** patients. **Preference should be given to** enrolling in eligible clinical trials evaluating remdesivir.	▸ **Dexamethasone** 6 mg PO/IV daily x 10 days (or until discharge if sooner) is **recommended** for **moderately ill** patients	▸ Antibacterial therapy is **not** routinely recommended outside of clinical trials or where other indications would justify its use
Mildly Ill Patients **Ambulatory, outpatient** Patients who do not require supplemental oxygen, intravenous fluids, or other physiological support	▸ **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 ▸ **Remdesivir** is **not** recommended for **mildly ill** patients outside of a clinical trial.	▸ **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	Click here for dosing and pharmacologic considerations for medications under investigation

- Numerous therapies (e.g. vitamin C, ivermectin) have shown a theoretical or mechanistic basis to be beneficial in the management against COVID-19, however clinical data for these therapies are lacking. Refer to the guidelines for further discussion.
- Recommendations in this document are based on best available data and may change as additional data become available. The complete and most up-to-date version of the guidelines is available at www.antimicrobialstewardship.com/covid-19.