### Antiviral Therapy

**Remdesivir** is not recommended outside of approved clinical trials.

Based on the current scientific evidence and best-practice guidelines, the College of Physicians and Surgeons of BC, the College of Pharmacists of BC, the BC College of Nurses and Midwives and the CTC do not approve of the use of ivermectin for either treatment or prophylaxis for COVID-19 and BC registrants must not prescribe it for this purpose. Ivermectin should not be used outside of approved clinical trials.

**Tocilizumab** 400 mg IV (single dose) *is recommended* (REMAP-CAP RECOVERY) for patients requiring life support due to confirmed COVID-19. This includes low-flow oxygen support (e.g., Optiflow) if flow rate > 30 L/min and FiO2 > 0.4 or non-invasive ventilation OR vasopressor or inappropriate support. Tocilizumab/Sarilumab must be administered within 24 hours of the initiation of support measures. Patients admitted to hospital for more than 14 days with symptoms of COVID-19 should not receive tocilizumab/Sarilumab for this indication. Tocilizumab/Sarilumab should only be initiated when life support is required because of COVID-19 rather than other causes (such as bacterial infection, pulmonary embolism, etc). Tocilizumab or sarilumab should not be combined with baricitinib.

**If tocilizumab is not available due to drug shortages,** baricitinib is recommended as an alternative.

**Baricitinib** 4 mg po daily (for GFR > 60 mL/min) or 2 mg po daily (for GFR 30-59 mL/min) or 2 mg po every 2nd day (for GFR 15-29 mL/min) up to 14 days*; for patients randomized to tocilizumab not receiving the drug, the CTC recommends prioritizing tocilizumab use only for critically ill patients at this time, which is the population shown to benefit in both the REMAP and RECOVERY trials. *Limited data exist on baricitinib in pregnancy. Risks and benefits of baricitinib should be discussed on a case by case basis with pregnant women with severe COVID-19.

**Monoclonal antibodies** (mAbs; Bamlanivimab/etesevimab, REGEN-COV, Sotrovimab, Regdanvimab) are **not recommended**. An RCT of REGEN-COV in this population was halted due to signals of harm. Regdanvimab and REGEN-COV conditions for use state that it may be associated with worse outcomes in the critically ill. RECOVERY showed no benefit in the subgroup that required organ support. Various guidelines (ISDA, IDN, INESSS) recommend against mAbs in this setting.

**Colchicine and other biologics** (Anakirina) are not recommended outside of approved clinical trials.

### Immuno-modulatory Therapy

**Remdesivir** 6 mg IV/SC/PO q24h for up to 10 days **is strongly recommended** (RECOVERY trial) unless higher doses are clinically indicated.* Hydrocortisone 50-100 mg IV q6h is recommended as an alternative (REMAP-CAP trial). If hydrocortisone and hydrocortisone are not available, methylprednisolone 32 mg IV q24h or prednisone 40 mg QD daily are recommended.

* e.g. shock, exacerbation, refractory septic shock, history of chronic steroid use, obstetric use for fetal lung maturation

**Tocilizumab** 400 mg IV (single dose) *is recommended* (REMAP-CAP RECOVERY) for patients requiring life support due to confirmed COVID-19. This includes low-flow oxygen support (e.g., Optiflow) if flow rate > 30 L/min and FiO2 > 0.4 or non-invasive ventilation OR vasopressor or inappropriate support. Tocilizumab/Sarilumab must be administered within 24 hours of the initiation of support measures. Patients admitted to hospital for more than 14 days with symptoms of COVID-19 should not receive tocilizumab/Sarilumab for this indication. Tocilizumab/Sarilumab should only be initiated when life support is required because of COVID-19 rather than other causes (such as bacterial infection, pulmonary embolism, etc). Tocilizumab or sarilumab should not be combined with baricitinib.

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**Monoclonal antibodies** (mAbs; Bamlanivimab/etesevimab, REGEN-COV, Sotrovimab, Regdanvimab) are **not recommended**. An RCT of REGEN-COV in this population was halted due to signals of harm. Regdanvimab and REGEN-COV conditions for use state that it may be associated with worse outcomes in the critically ill. RECOVERY showed no benefit in the subgroup that required organ support. Various guidelines (ISDA, IDN, INESSS) recommend against mAbs in this setting.

**Colchicine and other biologics** (Anakirina) are not recommended outside of approved clinical trials.

### Other Therapeutics

**Prophylactic-intensity dosing of low molecular weight heparin (LMWH) is recommended** for VTE prophylaxis in patients who do not have suspected or confirmed VTE (or other indications for therapeutic anticoagulation). There is a high probability of harm when therapeutic anticoagulation is initiated in patients who have received organ support for greater than 48 hours (>1074 NIH). Patients receiving therapeutic anticoagulation for COVID-19 prior to organ support should remain on therapeutic anticoagulation and continue for up to 14 days or until hospital discharge.

**Antibiotic therapy is not routinely recommended** for the treatment of COVID-19 pneumonia. If VTE thromboembolic infection is suspected, follow local practice guidelines for CAP, HAP and VAP.

**ACE inhibitors and ARBs** should not be discontinued solely on the basis of COVID-19.

**NSAIDs** should not be discontinued solely on the basis of COVID-19.

**Therapeutic anticoagulation (LMWH preferred) may be considered** in patients with high risk features for venous thromboembolic disease (VTE) or organ support. If used, anticoagulation for COVID-19 should start within 72 hours of admission for up to 14 days or until hospital discharge. Patients who decompensate and require organ support while on therapeutic anticoagulation should continue on therapeutic anticoagulation. Therapeutic anticoagulation was superior to standard of care for composite 21-day organ support free survival in the ATTACC/ACTIV-4a/REMAP-CAP trials. Benefits appear to be driven by reducing progression to high-flow oxygen, non-invasive ventilation, or vasopressors. There was insufficient certainty on whether therapeutic anticoagulation improves mortality or intubation. Therapeutic anticoagulation reduces thrombotic events (1.4% vs 2.7%) but may increase major bleeding (1.8% vs 0.9%).

**High risk features for bleeding include: age 75 or greater, eGFR less than 30 mL/min, any coagulopathy, platelet count < 50,000.** The use of dual antithrombotic therapy, recent history of bleeding or recent intra/contradrial condition (stroke, myocardial infarction, cancer), spinal or epidural.

**ACE inhibitors and ARBs** should not be discontinued solely on the basis of COVID-19.

**NSAIDs** should not be discontinued solely on the basis of COVID-19.