### Critical Ill Patients

- Patients requiring respiratory support (high-flow oxygen, noninvasive ventilation, mechanical ventilation) and/or vasopressor/inotropic support

- **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 iviremcin for either treatment or prophylaxis for COVID-19 and BC registrants must not prescribe it for this purpose. Iviremcin should not be used outside of approved clinical trials.

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

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

- **Tocilizumab, Sarilumab OR Baricitinib is recommended for patients requiring life support due to confirmed COVID-19. This includes high-flow oxygen (PIO2 > 40), invasive mechanical ventilation (neuromuscular blockade or inotropic support). Tocilizumab, Sarilumab OR Baricitinib must be administered within 24 hours of the initiation of life support measures. Data supporting the use of these immunomodulatory agents suggest similar benefit and have similar limitations; the ultimate choice of agent is based on drug availability and patient characteristics (see below for dosage and practical considerations).**

- **Tocilizumab 400 mg IV (single dose) OR Sarilumab 400 mg IV (single dose) is recommended (REMAP-CAP, RECOVERY). Patients admitted to hospital 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. OR

- **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, or until discharge from hospital (whichever occurs first) is recommended (COV-BARRIER). Baricitinib should only be initiated when life support is required because of COVID-19 rather than other causes (such as bacterial infection, pulmonary embolism, etc.). Baricitinib should not be administered to patients with neutrophils < 1.0 giga/L, lymphocytes < 0.2 giga/L, ALT or AST > 5 x ULN or eGFR < 15 mL/min (or receiving renal replacement therapy). Baricitinib should not be combined with tocilizumab or sarilumab.****

- **Limited data exist regarding 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, Regdanivamab) are not recommended.** An RCT of REGEN-COV in this population was halted due to signals of harm. Regdanivam 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 (IDSA, NIH, INESSS) recommend mAbs in this setting.

- **Colchicine and other biologics (e.g., anakinra) are not recommended outside of approved clinical trials.**

### Severely Ill Patients

- **Remdesivir has not demonstrated benefit in survival, progression to ventilation or length of hospital stay and remains uncertain with respect to shortening time to recovery by 5 days.** The World Health Organization (WHO) has issued a conditional recommendation against the use of remdesivir in patients hospitalized for COVID-19. Further evaluation in approved clinical trials is strongly encouraged. If remdesivir is used outside of clinical trials, full disclosure of risks and benefits with consideration of patient values and preferences is necessary, as it is not considered standard of care. Furthermore, it should not be used in patients requiring non-invasive or invasive mechanical ventilation.

- **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 iviremcin for either treatment or prophylaxis for COVID-19 and BC registrants must not prescribe it for this purpose. Iviremcin should not be used outside of approved clinical trials.**

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

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

- **Tocilizumab is not recommended for patients receiving low-flow oxygen support. The RECOVERY trial found a survival benefit of 4% (tocilizumab 29% vs. usual care 33% 28-day mortality) in patients who had CRP > 75 mg/L AND low-flow oxygen, non-invasive respiratory support, or invasive mechanical ventilation. Tocilizumab should be prioritized to the persons with both the highest need and the greatest likelihood of benefiting from the therapy. Combined with outstanding issues in the preliminary findings of the RECOVERY trial (e.g. 17% of 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 both in the REMAP and RECOVERY trials.**

- **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*, or until hospital discharge (whichever occurs first) is recommended (COV-BARRIER). Baricitinib should be administered within 24 hours of initiation or change in baseline use of oxygen due to COVID-19 pneumonia (not from other causes such as heart failure, pulmonary embolism, etc.). Considerations for use include certainty of COVID-19 as cause of deterioration, clinical progression, evidence of inflammation (e.g. elevated C-reactive protein > 50 mg/L, ferritin > 1000 µg/L), and potential for life-threatening complications. Baricitinib should not be administered to patients with neutrophils < 1.0 giga/L, lymphocytes < 0.2 giga/L, ALT or AST > 5 x ULN, or eGFR < 15 mL/min (or receiving renal replacement therapy).** Baricitinib should not be combined with tocilizumab or sarilumab.

- *Limited data exist regarding 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, Regdanivamab) are not recommended.** An RCT of REGEN-COV in this population was halted due to signals of harm. Regdanivam 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 (IDSA, NIH, INESSS) recommend mAbs in this setting.

- **Colchicine and other biologics (e.g., anakinra) are not recommended outside of approved clinical trials.**

### Mildly-Moderately Ill Patients

- **See the CTC Clinical Practice Guide and Practice Tool #1:** Step-by-Step Assessment for treatment recommendation for ambulatory, LTC in-patients with mild-moderate COVID-19 with nirmatrelvir/ritonavir, sotrovimab and remdesivir. Recommendations regarding colchicine, fluvoxamine and inhaled corticosteroids are also included in these resources.

- **No COVID-19 specific medications are recommended on discharge (includes corticosteroids and DVT prophylaxis, e.g., LMWH or rivaroxaban; unless indicated for other reasons)**

- **Bamlanivimab-etesevimab and REGEN-COV are not recommended due to resistance of Omicron to these agents. In general, due to the lack of reliable rapid tests to identify the target population within the prophylaxis window, lack of impact on hospitalization rates or mortality and low generalizability of these studies, administration of any mAbs, even if active against Omicron, is not recommended for postexposure prophylaxis.**

### Other Therapeutics

- **Prophylaxis:**

  - For patients who have no known COVID-19 exposure and who have not received 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 (n=1074, NIH-REACT). 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 bacterial co-infection if COVID-19 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.**

### Summary

- **Latest updated Mar 14th, 2022**