ANTIVIRAL THERAPY

Remdesivir is not recommended in patients with COVID-19 outside of approved clinical trials as it has not demonstrated to improve survival or time to recovery.

Tozicilumab AND/OR Baricitinib are recommended for patients requiring life support due to confirmed COVID-19. This includes high-flow oxygen support (e.g., Optiflow) if flow rate > 30 L/min and FiO2 > 0.4 on invasive or non-invasive ventilation or vasopressor or inotropic support. While benefits of baricitinib are still under evaluation, the addition of tocilizumab to baricitinib is a reasonable approach in these patients.

Monoclonal antibodies (mAbs; Bamlanivimab-etesevimab, REGEN-COV, Sotrovimab, Regdanvimab) are not recommended. A RCT of REGEN-COV in this population was halted due to signals of harm. It is recommended for use by state or local public health authorities in the critically ill. RECOVERY showed no benefit in the subgroup that required organ support. Various guidelines (IDSA, NIH, INESSS) recommend against mAbs in this setting.

IMMUNOMODULATORY THERAPY

Baricitinib may be added for tocilizumab 29% vs. usual care 33%) in patients who had CRP >75 mg/L AND on low-flow oxygen, non-invasive respiratory support, or invasive mechanical ventilation. However, considering the scarcity of IL-6 blockers in Canada, CTC and CTRAWG recommend prioritizing tocilizumab use only for critically ill patients at this time, which is the population shown to benefit most in both 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 initiated at the lowest possible dose when other agents (prophylactic anticoagulation, empirical, etc.) should not be administered to patients with neutrophils <1.0 * 10^9/L, lymphocytes < 0.2 * 10^9/L, ALT or AST > 5 uL. or eGFR <15 mL/min (or receiving renal replacement therapy).

COVID-19 in clinical trials, or high-quality clinical trials are REMAIN uncertain about the use of corticosteroids for the treatment of COVID-19 patients. However, the low utility of oral glucocorticoids has been confirmed in clinical trials and real-world practice. The use of corticosteroids should be considered on a case-by-case basis in patients with severe COVID-19.

Other Therapeutics

Prophylactic-intensity dosing of low molecular weight heparin (LMWH) is recommended for patients with COVID-19 outside of approved clinical trials as it has not demonstrated to improve survival or time to recovery.

Severely ill Patients

Hospitalized, ICU-bed, long-term care

No COVID-19 specific therapies are recommended on discharge. In patients with COVID-19, therapeutic anticoagulation (LMWH preferred) may be considered in patients without high-risk features for venous thromboembolism (VTE) who are not on VTE prophylaxis by the time of admission and continue for 14 days or until hospital discharge. Use of therapeutic anticoagulation continues to be more robustly supported while on therapeutic anticoagulation should continue on therapeutic anticoagulation, if the risk of VTE reduction is likely to increase. High-risk features for VTE may include, but are not limited to those with elevated D-dimer level or advanced cancer.

Mildly-Moderate Illness Patients

Outpatients, hospitalization avoided, long-term care

Antiviral therapy is not recommended for 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 (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 COVID-19 infections. If VTE reduction 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.

Not recommended for any severity

Conventional Plasma, IgV, chloroquine or hydroxychloroquine, lopinavir/ritonavir, interferon IV/ SC and ribavirin have been evaluated across all disease severities and have not been found to be effective against COVID-19 in clinical trials, or high-quality clinical trials are lacking. These agents are not recommended for prevention or treatment of COVID-19 across all disease severities.