Therapeutic Management of Adult Patients with COVID-19

SEVERITY OF ILLNESS	ANTIVIRAL	IMMUNOMODULATORY	NEUTRALIZING ANTIBODIES
Critically Ill Patients Hospitalized/Intensive Care Unit (ICU) Patients requiring respiratory (high-flow oxygen, noninvasive ventilation, mechanical ventilation) and/or circulatory (vasopressor/inotropes) support	**Remdesivir** is recommended for patients acutely ill with COVID-19 or immunocompromised, who are not mechanically ventilated. See formulary for details.	**Dexamethasone** is strongly recommended. **Tocilizumab** or **baricitinib or sarilumab** are recommended for patients experiencing significant progressive respiratory failure. See formulary for details. If available, preferred over casirivimab-imdevimab in critically ill patients.	**Casirivimab-imdevimab (4 g/4 g)** may be considered for patients who test seronegative for COVID-19 antibodies or who are severely immunocompromised. It should NOT be used in patients with the Omicron variant, as it is ineffective. See formulary for details.
Severely Ill Patients Hospitalized, ward-based Patients requiring supplemental oxygen	**Remdesivir** is recommended for patients acutely ill with COVID-19 or immuno-compromised COVID-19 patients. See formulary for details.	**Dexamethasone** is strongly recommended. **Tocilizumab or baricitinib or sarilumab** are recommended in this patient population if they require supplemental oxygen > 6 L/min to achieve a minimum SpO2 of 90% or they require non-invasive ventilation. See formulary for details.	**Casirivimab-imdevimab (4 g/4 g)** is recommended for patients who test seronegative for COVID-19 antibodies or who are severely immunocompromised. It should NOT be used in patients with the Omicron variant, as it is ineffective . See formulary for details. **Sotrovimab** is recommended in certain high-risk patients ADMITTED FOR NON-COVID REASONS. It is not recommended for patients hospitalized due to COVID-19. See formulary for details.
Mildly Ill Patients Ambulatory, outpatient Patients who do not require supplemental oxygen, intravenous fluids, or other physiological support	**Remdesivir** is not recommended for mildly ill patients.	**Oral corticosteroids** are not recommended unless otherwise indicated. **Inhaled budesonide** via dry powder inhaler may be recommended for mildly ill outpatients. **Tocilizumab** and **baricitinib and sarilumab** are not recommended in this patient population due to a lack of evidence for benefit.	**Casirivimab-imdevimab** is not currently recommended. **Sotrovimab** is recommended for: 1.Unvaccinated and one of the following: -Age 55+, regardless of comorbidities, -Age 18+ with at least one qualifying comorbidity, -Pregnant 2. Immunocompromised, regardless of vaccination status See formulary for list of qualifying comorbidities and definition of immunocompromised status
Agents NOT recommended except in approved clinical trials	Ivermectin Lopinavir/ritonavir	Colchicine Fluvoxamine	
Agents NOT recommended		Chloroquine or hydroxychloroquine (with or without azithromycin) Interferon Convalescent plasma	

ANTICOAGULATION: In moderately sick hospitalized COVID-19 patients (requiring oxygen up to 15 L/min via nasal cannula) with no contraindications to anticoagulation and low bleeding risk, therapeutic dose tinzaparin (175 u/kg) is recommended for 14 days or until discharge, to increase the probability of survival until hospital discharge and reduce the need for ICU-level organ support. In critically ill hospitalized COVID-19 patients with no contraindications to anticoagulation, prophylactic dose tinzaparin (75 u/kg) is recommended.

ANTIBACTERIALS: Bacterial co-infection in patients with early COVID-19 is uncommon. In patients who are not critically ill, do not routinely add antibacterials unless bacterial infection is strongly suspected. In critically ill patients, empiric antibiotics are reasonable, as long as there is a focus on de-escalation as soon as appropriate on the basis of clinical review, microbiology results, and laboratory and imaging findings. Continue empiric antibiotics for no more than 5 days.

Created and Maintained by the AHS COVID-19 Therapeutics Working Group
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Recommendations in this document apply to patients ≥ 18 years of age

Recommendations are based on best available data, are current only to date of document and will be updated as new information becomes available

Alberta Health Services