BC Women's Hospital and British Columbia COVID-19 Therapeutics Committee (CTC) Clinical Practice Guidance for

Therapy in Adult Pregnant Patients with COVID-19

SEVERITY OF ILLNESS	ANTIVIRAL THERAPY	IMMUNOMODULATORY THERAPY	OTHER THERAPIES
Critically Ill *Hospitalized, ICU-based* Patients requiring respiratory support (high-flow oxygen, noninvasive ventilation, mechanical ventilation) and/or vasopressor/ inotropic support	**Chloroquine** or **Hydroxychloroquine** is **NOT** recommended **Lopinavir/ritonavir** is **NOT** recommended **Remdesivir** is **NOT** recommended outside of approved clinical trials **Interferon IV/SC** is **NOT** recommended **Ribavirin/Interferon (Inhaled)** is **NOT** recommended outside of approved clinical trials **Ivermectin** is **NOT** recommended outside of approved clinical trials	**Dexamethasone 6mg IV/SC/PO q24 for up to 10 days is recommended**. Alternatives include Hydrocortisone 50mg IV q6h or Methylprednisolone 32mg IV q24h for up to 10 days. The choice of steroid will depend on individual risk factors and family preference, balancing the needs of the mother against potential fetal risk. The steroid with the greatest potential for maternal benefit is Dexamethasone (RECOVERY), however as it has the highest placental transfer, families and care providers may elect an alternative regimen at bioequivalent dose. Only in cases where delivery is predicted in the next 7 days, a short-term course of higher dose Dexamethasone (6mg IV/SC q12h x 4 doses) may be given to promote fetal lung maturity in consultation with Obstetric services. **Tocilizumab* 8mg/kg IV (single dose; up to maximum 400mg) is recommended (REMAP-CAP, RECOVERY) and must be administered within 24 hours of the initiation of organ support.** Patients admitted to hospital for more than 14 days with symptoms of COVID-19 should not receive tocilizumab for this indication. * Biologic agents cross the placenta to the fetus; there is the possibility that these agents (e.g. Tocilizumab) may impact neonatal immune function. As such, delay of live attenuated vaccines is sometimes recommended, and the current recommendation is for consultation with the BCCH immunization services for infants born to pregnant persons who received Tocilizumab in the third trimester of pregnancy There are very limited data on baricitinib in pregnancy and tocilizumab should be considered first. If there is no access to an IL-6 inhibitor (due to global shortage), Baricitinib 4mg PO daily can be considered on a **case-by-case basis**, if the potential for maternal benefit is deemed sufficient to outweigh the potential risk. Care must be taken to convey the experimental nature of this treatment to patients/families.	**Prophylactic-dose of LMWH (low molecular weight heparin)* is recommended,** according to weight-based protocol, is recommended. (ATTACC). The ongoing use of LMWH should be reviewed with Obstetric and Anaesthesia teams, given the implications for delivery. **Use LMWH pre-filled syringes (multi-dose vials contain benzyl alcohol) **Antimicrobials: Ceftriaxone 1-2g IV q24h x 5 days is recommended** if there is bacterial co-infection Azithromycin 500mg IV q24x 3 days is recommended if atypical bacterial infection is suspected or in the case of ceftriaxone allergy. De-escalate based on microbiology results and clinical judgement.
Severely Ill *Hospitalized, ward-based* Patients requiring supplemental oxygen therapy	**Remdesivir** has not demonstrated benefit in survival, progression to ventilation or length of hospital stay. Therefore, while trials evaluating this therapy are ongoing, **it is NOT recommended** in pregnant women. **Chloroquine/ Hydroxychloroquine & Lopinavir/ Ritonavir** and **Interferon IV/SC** are **NOT** recommended **Ribavirin/Interferon (Inhaled)** and **Ivermectin** are **NOT** recommended outside of approved clinical trials	**Dexamethasone 6mg IV/SC/PO q24 for up to 10 days is recommended**. Alternatives include Hydrocortisone 50mg IV q6h or Methylprednisolone 32mg IV q24h for up to 10 days. The choice of steroid will depend on individual risk factors and family preference, balancing the needs of the mother against potential fetal risk. The steroid with the greatest potential for maternal benefit is Dexamethasone (RECOVERY), however as it has the highest placental transfer, families and care providers may elect an alternative regimen at bioequivalent dose. Only in cases where delivery is predicted in the next 7 days, a short-term course of higher dose Dexamethasone (6mg IV/SC q12h x 4 doses) may be given to promote fetal lung maturity in consultation with Obstetric services. **Tocilizumab/Sarilumab** 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% in 28-day mortality) in patients who had CRP >75 mg/L AND low-flow oxygen, non-invasive respiratory support, or invasive mechanical ventilation. However, due to the scarcity of IL-6 blockers in Canada, therapy should be prioritized to the persons with the greatest likelihood of benefit. **Passive Immunotherapies (Convalescent Plasma/IVIG/Monoclonal antibodies/Antibody cocktail therapies (Regn-COV2, Bamlanivimab), Colchicine** and **biologics (Anakinra)** are **NOT recommended** outside of approved clinical trials	**Therapeutic anticoagulation can be considered in patients predicted to be at low risk of needing delivery within 24h or without high-risk features for serious bleeding.** Compared to standard of care, in non-pregnant adults, the addition of therapeutic anticoagulation was associated with improved 21-day organ support-free survival (ATTACC/ACTIV-4a/REMAP-CAP). Pregnancy is a hypercoagulable state; pregnancy should not preclude this therapy in an individual who would benefit. However, given the risk if urgent delivery is needed (including need to escalate care to the ICU), the decision to initiate therapeutic anticoagulation should include Obstetric services. LMWH is preferred - in cases of imminent delivery, unfractionated heparin may be used instead. **Use LMWH pre-filled syringes (multi-dose vials contain benzyl alcohol)
Mildly Ill *Ambulatory, outpatient* Patients who do not require supplemental oxygen, intravenous fluids, or other support	**Chloroquine, Hydroxychloroquine Lopinavir/ritonavir** and **Interferon IV/SC** are **NOT** recommended **Ribavirin/Interferon (Inhaled)** and **Ivermectin** are **NOT** recommended outside of approved clinical trials	**Inhaled budesonide** has not been shown to be beneficial in adults less than 50 years old and is **NOT recommended.** **Colchicine is NOT recommended** as it has not shown to be beneficial in patients less than 40 years old. It has not been evaluated in pregnant patients over 40 years of age. **Monoclonal Antibodies (mAbs)** have demonstrated a small reduction in hospitalization in *unvaccinated* patients aged > 40 with other comorbid conditions. They have not been evaluated in pregnancy and are **NOT recommended.** **Passive Immunotherapies (Convalescent Plasma/IVIG)** and **biologics (Anakinra, Baricitinib)** are **NOT recommended** outside of approved clinical trials	