**Tocilizumab**

Tocilizumab is an anti-IL6 receptor mAb that may have a role in selected patients with COVID-19 who progress to or have hyperinflammatory response syndrome.

Criteria for use:

- Confirmed COVID-19 positive
- Critical illness associated with COVID-19 (respiratory failure requiring mechanical ventilation, shock, combined failure of other organs requiring ICU care)
- Evidence of two or more abnormality associated with cytokine release: D-Dimer > 1 mcg/mL, serum ferritin > 600 mcg/L, persistent fever > 38.3°C, CRP > 100 mg/L, IL-6 ≥ 3x ULN
- Ordered/recommended by infectious diseases or pulmonology with review and approval by secondary provider(s) not directly involved in the patients care.
- ALT/AST < 5x ULN
- Platelet Count is ≥ 50,000/mm3
- Absolute Neutrophil Count (ANC) is ≥ 500/mm3
- No presence of active or strongly suspected bacterial or fungal infection. Stability of these infections with appropriate antibiotics/antifungals and proceeding with tocilizumab should be carefully weighed by ordering/consulting infectious diseases and/or pulmonology physician.
- Consider avoiding use for significantly elevated procalcitonin levels (i.e > 2 ng/mL), as this may represent an active bacterial infection
- History of untreated or inadequately treated TB, or latent TB infection
- Caution if high risk of GI perforation (primarily reported as a complication of diverticulitis)

Ordering Procedure:

- Lab: Quantiferon x 1, do not wait for results to initiate tocilizumab (prechecked)
- Tocilizumab: 400 mg IV once (8mg/kg if body weight < 50kg), infuse over 60 minutes, do not infuse other drugs in same line, protect from light
- Monitoring:
  - Infusion reaction, rare (routine use of pre-medications or prn rescue medications for reaction not recommended)
  - Signs and symptoms of new or worsening infection
  - CBC with differential and LFTs

References:

