Message from
Dr. Vijayalakshmi Nagappan, Infectious Disease Attending
Beaumont, Dearborn and Taylor

COVID-19 Update

Treatment guidelines for hospitalized patients with COVID-19 (living document – last updated April 23, 2020).

Below is a summary of the above document:
Mild disease – no supplemental oxygen and no risk factors: no treatment
Mild disease – no supplemental oxygen plus one or more risk factors present for progression to severe disease: no treatment but monitor closely for clinical worsening to moderate disease
Risk factors: BMI more than 40, Age more than 60; DM, CAD, chronic lung disease, chronic kidney disease, immunocompromised (solid organ transplant, hematologic malignancy, active chemotherapy, chronic steroids > 0.5 mg/kg/day prednisone equivalent, congenital or acquired immunodeficiency, splenectomy, biologic agents for immunosuppression)

All hospitalized adult patients should receive prophylactic enoxaparin unless active bleeding and platelets less than 25

Moderate to Severe Disease (on supplemental oxygen or requiring mechanical ventilation)

- Remdesvir (investigational agent) for 5 to 10 days if inclusion criteria met: SARS-CoV2 confirmed by pcr; hospitalized with saturation less than 94% on room air; ALT less than 5 times upper limit of normal; symptom onset less than 7 days; ferritin more than 1500; CRP more than 200; LDH more than 245; D Dimer more than 1000; Absolute lymphocytes less than 0.9; exclusion criteria: vasopressor use; ECMO use; creatinine clearance less than 30 mL/min, or on dialysis or Continuous Veno-Veno Hemofiltration; ALT more than 5 times normal

- Therapeutic Anticoagulation: if no evidence for thrombosis consider 5 days of therapeutic anticoagulation (longer duration per physician discretion) If the following criteria met: 7 days since symptom onset; D dimer more than 2500- if d dimer less than 2500 and if patient has increasing oxygen requirement, consider repeating d dimer within 24 to 48 hours; patient on more than 6 liters of nasal cannula oxygen or 50% increase in oxygenation within 24 hours. Consider enoxaparin trough anti-Xa if concern for accumulation; d dimer monitoring not needed once patient on anticoagulation

- Steroids: reasonable to start steroids methyl prednisone 40 mg iv every 12 hours or prednisone 50 po bid for 5 days if following criteria are met: sudden decline in oxygenation status with significant worsening of cxr and/or abrupt increase in crp , d dimer, ferritin and IL 6; if no improvement can consider extending steroids to 7 days, and consider tolicizumab; if patient has refractory septic shock and covid 19, follow sepsis guidelines and use hydrocortisone 200 mg iv per day in divided doses

- Tolicizumab: consider in patients with persistent fevers, progressive increase in inflammatory markers, and PaO2/Fio2 ratio less than 300 or SpO2 less than 93% refractory to steroids ; inclusion criteria: authorization from approval group (Dr Big for Dearborn; Dr Varanasi for Taylor); confirmed SARS -CoV2 test; increasing oxygen requirements; bilateral lung disease; persistent fevers; progressive increase in inflammatory markers – IL 6 more than 30; OR D dimer more than 1000, ferritin more than 1000; CRP more than 100; LDH more than 500; exclusion criteria – ALT/AST 5 times upper limit of normal; ANC less than 500; platelets less than 50; Patients with TB or suspected bacterial or fungal infection; hypersensitivities to tolicizumab; for solid organ transplant patients, site level ID physician to consult Dr Dilip Samarapungavan regarding risk of administration

- Suggested lab monitoring – obtain at baseline and with any decline in oxygenation status:
  Cbc; cmp; ldh; d dimer; ferritin; crp; esr; procalcitonin; ck; fibrinogen; severe/icu patients check IL 6

Full treatment guidelines can be found here.