

COVID-19 Treatment in Hospitalized Pediatric Patients

Dexamethasone not typically recommended; can consider if radically increasing O2 requirements (esp if >/= 12 No Patient with COVID-19, weight > 3 kg, AND > 28 days old Discuss with yo or >/= 7 days of **Pediatric** Yes symptoms) or no Infectious Disease improvement after 48 hours Enoxaparin prophylaxis if Is the patient requiring supplemental high risk of clot** Is the patient requiring oxygen (including NC for flow) and/or Yes No Is the patient requiring invasive mechanical hypoxia HFNC or non-invasive (SpO₂ <90%) and/or increase in baseline ventilation? mechanical ventilation? Nο home oxygen support? Yes Yes No Dexamethasone Is the patient >/= 12 yo, high risk for severe recommended COVID-19 progression and within 7 days of Obtain baseline CMP and PT/INR No remdesivir symptom onset? Recommend remdesivir If >/= 2 yo, consider No Recommend dexamethasone tocluzumab* or baricitinib* Yes Enoxaparin prophylaxis if high Start enoxaparin risk of clot** prophylaxis The patient does not meet the criteria to receive remdesivir Obtain baseline CMP and PT/INR Suggest remdesivir If no significant prophylaxis (3 days) improvement within 12-24 hours and >/= 2 years of age, consider adding: *Requires discussion with ID & PICU Toclizumab (IV)* **Criteria for high risk of clot: -OR-Age >/= 12 yo Baricitinib (PO)* Intubated Presence of central venous catheter

Obtain baseline CMP and

Recommend remdesivir

PT/INR

COVID-19 Treatment Therapies in Hospitalized Pediatric Patients

- Remdesivir: IV
 - Dosing: 5 mg/kg daily (max 200 mg) x1 day; Followed by: 2.5 mg/kg daily (max 100 mg) x5 days or until hospital discharge (whichever is sooner)
 - Monitor: Baseline CMP baseline (if ALT >10 times the ULN, do not administer remdesivir) and PT/INR; repeat as necessary based on initial labs
- Dexamethasone: IV or PO
 - Dose: 0.15 mg/kg/dose daily (max 6 mg) x10 days or upon hospital discharge (whichever is sooner)
 - o If patient is admitted with asthma exacerbation in setting of acute COVID infection, use methylprednisolone or prednisolone at asthmatic dosing
- Toclizumab IV (for ages >/= 2 yo) requires EUA fact sheet (see below)
 - < 30kg: 12mg/kg IV as a single dose</p>
 - >/= 30kg: 8mg/kg IV as a single dose (max 800 mg)
 - o Contraindications for use: Received live, attenuated vaccine(s) in the past 2 weeks
 - o actemra eua patient fact sheet.pdf
- Baricitinib PO (for ages >/2 yo) requires EUA fact sheet (see below)
 - Age 2 to <9 yo: 2mg daily x14 days or until hospital discharge (whichever is sooner)
 - Age >/=9 yo: 4mg daily x14 days or until hospital discharge (whichever is sooner)
 - o Contraindications for use: ALC < 200, ANC <500, platelets > 1500K, ALT/AST > 5x ULN
 - o Monitoring: Baseline CBC and CMP; Daily SCr and CBC with diff
 - o baricitinib-eua-factsheet-patient.pdf

COVID-19 Prophylaxis Therapies in Hospitalized Pediatric Patients at High Risk for Severe Progression

- Remdesivir: IV
 - o Dosing: 5 mg/kg daily (max 200 mg) x1 day; Followed by: 2.5 mg/kg daily (max 100 mg) x2 days
 - Monitor: Baseline CMP baseline (if ALT >10 times the ULN, do not administer remdesivir) and PT/INR; repeat
 as necessary based on initial labs

Contact Infectious Disease Team for the Following Situations:

- If the patient is admitted for COVID-19 and less than 28 days old or <3kg
- If the patient does not improve after 24 hours after starting remdesivir and/or dexamethasone and considering adding toclizumab or baricitinib
- If considering extending remdesivir duration beyond 5 days

Patients who are Considered High Risk for Severe COVID-19 Progression

- Obesity (BMI >/=95th percentile for age), especially severe obesity (BMI >120% of 95th percentile for age)
- Medical complexity with dependence on respiratory technology
- Severe neurologic, genetic, metabolic, or other disability that results in impaired airway clearance or limitations in self-care or activities of daily living
- Severe asthma or other severe chronic lung disease requiring >/=2 inhaled or >/=1 systemic medications daily
- Immunocompromised
- Pregnancy
- Severe congenital or acquired cardiac disease
- Multiple moderate to severe chronic diseases
 - </=1 year of age</p>
 - Prematurity in children </=2 years old
 - Sickle Cell Disease
 - o Non-severe cardiac, neurologic, or metabolic disease
 - Diabetes Mellitus (poorly controlled)
 - Chronic Kidney Disease

Guidance for prevention and management of COVID-19 in children and adolescents: A consensus statement from the Pediatric Infectious Diseases Society Pediatric COVID-19 Therapies Taskforce: https://pubmed.ncbi.nlm.nih.gov/38339996/