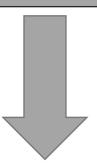
# INITIAL EVALUATION for COVID 19 PUI (ER or CLINIC) REQUIRING ADMISSION\*

#### **Initial Evaluation**

- Fever present at presentation in <50%
- Avoid OVER-aggressive fluid resuscitation
  - Goal of <30mL/kg crystalloid</li>
- Admissions for hypoxia
- +/- Emp CAP tx
  - Azithromycin +/- Ceftriaxone
- MUST Address Code status
- ICU eval in pts with NEWS ≥5 & >4L O2 requirement



#### Labs for PUI/Positive Admission

- Resp Biofire PCR (to include Flu)
- COVID test
- CBC with diff
- LDH, ferritin, CRP, ESR, D-dimer
- Procalcitonin
- Troponin, BNP, EKG
- CXR

# WARD EVALUATION AND TREATMENT

#### **PPE for Medical Wards**

- Droplet and Contact precautions
   FOR PUI and positive
- Avoid aerosolizing procedures
- NO Nebs
- Limit no. of providers

#### **COVID Negative PUI (with high suspicion)**

• Consider repeat COVID test

#### **Medical Ward Algorithms**

- Triage patient to COVID risk category (CovRC)
- Consider treatment outlines based on CovRC
- Cont. pulse ox, consider tele for QTc eval.
- Empiric bacterial PNA coverage
- Care as normal for viral pneumonia
- Avoid steroids for treatment of PNA
- ICU eval for ↑ O2 requirement of >6L,
   NEWS ≥5 & >4L O2 requirement



# Covid-19 Risk Categories for Severe Dx

#### Demo Risk Factor (DRF)

 Age >55, pulm disease, CKD, hx of HTN, Hx of CAD, immunosuppressed

#### Vital sign Risk Factor (VRF)

- Resp Rate >24
- HR >125
- >2L O2 requirement for sat of 90% <u>Laboratory Risk Factor (LRF)</u>
- Lymphocyte <0.8,</li>
- D-Dimer >1000
- CRP >100, LDH >245, Ferritin >300
- ↑ Trop

### **Covid-19 Therapy** *Suggestions*

#### General

- Avoid steroids (unless tubed ARDS)
- Avoid NSAIDs
- Continue/start statin therapy

#### Mild Disease Category

- 1 DRF, No VRF or LRF
- Supportive care

## Moderate/Sever Risk Category

- ≥1 DRF +/- ≥ 1 VRF or LRF
- Consider HCQ+Azi or Remdecivir \*\*
  - May require clinical trial
  - Please review dosing on back

\*This algorithm is intended for inpatients requiring admission for further observation based on comorbidities, clinical presentation. Utilize clinical expertise to determine need for admission

This is a suggested algorithm and is subject to change (3/25/2020)

**ICU Transfer** 

\*\*Monitor HCQ+AZM tx for QTc prolongation QTc of >470 associated with Torsades de Pointes Consider ID consult for HCQ OR COVID+

# Treatment Considerations for SARS-CoV-2 Infection (COVID-19)

Disease severity	Therapy Options	Specifics
<ul> <li>Mild</li> <li>Outpatients</li> <li>OR</li> <li>Hospitalized patients with no oxygen requirement (SpO2 &gt;94%) and NO radiographic evidence of pneumonia</li> </ul>	<ul> <li>Supportive therapy only</li> <li>OR</li> <li>Azithromycin (AZM) for 5 days</li> </ul>	Consider admission for:  Hypoxia, HR>125, RR>24  Age >55  Underlying pulmonary disease, CKD, Coronary Artery Dx Immunosuppression
<ul> <li>Moderate</li> <li>Hospitalized patients with SpO2&lt;94%</li> <li>Radiographic evidence of pneumonia</li> </ul>	<ul> <li>Supportive therapy only</li> <li>Consider Remdesivir** clinical trial protocol</li> <li>Consider Hydroxychloroquine*+ Azithromycin(HCQ+AZM) ¥</li> <li>If discharged, discontinue hydroxychloroquine</li> </ul>	<ul> <li>Robust clinical data on hydroxychloroquine (HCQ) is limited. Consult ID prior to use.</li> <li>ECG is required prior to initiation of hydroxychloroquine, repeated after initiating thearpy.</li> <li>Prolonged QTc may result in Torsades de Pointes</li> <li>Avoid other QTc prolonging medications</li> </ul>
Severe disease with hypoxic respiratory failure  • Mechanical ventilation° Caveats:  • Not on vasopressors  • CrCl>30 ml/min  • ALT < 5x ULN	<ul> <li>Consider Remdesivir** per compassionate use or clinical trial protocol</li> <li>OR</li> <li>Consider HCQ+AZM¥</li> <li>AND</li> <li>Consider Methylpred 1-2 mg/kg/day for 5-7 days (ONLY in ARDS pts)</li> </ul>	<ul> <li>Remdesivir should not be used concomitantly with hydroxychloroquine or other antivirals</li> <li>ECG is required prior to initiation of hydroxychloroquine, repeated after initiating thearpy.</li> <li>Prolonged QTc may result in Torsades de Pointes</li> <li>Avoid other QTc prolonging medications</li> </ul>
Severe disease with multi-organ failure  • Mechanical ventilation°  AND (any one of the following)  • Vasopressors  • CrCl<30 ml/min (or requiring RRT)  • ALT > 5x ULN	<ul> <li>Consider Remdesivir** per compassionate use or clinical trial protocol</li> <li>OR</li> <li>Consider HCQ+AZM¥</li> <li>Consider Inhaled nitric oxide (ineligible for remdesivir unless via trial protocol)</li> </ul>	<ul> <li>ECG is required prior to initiation of hydroxychloroquine</li> <li>Avoid other QTc prolonging medications</li> </ul>
Cytokine release syndrome/Secondary hemophagocytic lymphohistocytosis  Unremitting fever  Cytopenias  Hyperferritinemia  Elevated Hscore	Very limited clinical experience. Seek expert guidance.  • Consider tocilizumab/anakinra/sarilumab  • Medication availability and ongoing clinical trials to dictate care  • Consider Heme/onc consult regarding HLH pathologic eval.	*Hydroxychloroquine is currently restricted due to limited supply and minimal robust data. Consult ID for use.  ¥ HCQ+AZM: Hydroxychloroquine of 400mg PO daily q12hr x 2doses, 400mg PO daily thereafter for 5-10 days + Azithromycin for 5 days  **Remdesevir is available via compassionate use or clinical trial Use of Hydroxychloroquine may preclude entering into trial.
Elevated IL-6, Fibrinogen, d-dimer, CRP	°For mechanical ventilation, target ARDSnet high PEEP lower FiO2, lung- protective tidal volume (4-8 mL/kg ideal body weight), and lower	

inspiratory pressures (plateau pressure <30 cm H2O)

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Consult ID for direction

