

# Suggested Protocol For Treatment Of Confirmed COVID-19 Infection

- The purpose of the protocol is to assist physicians in management of patients with confirmed COVID-19 infection.
- Those recommendations are based on case series, registered and observational trials on patients with MERS CoV, SARS and COVID-19.
- Strict infection control measures should be maintained all the time.
- Samples should be collected in negative pressure room (if not available single room with HEPA FILTERS)
- Staff should wear full personal protective equipment PPE (Gown, gloves, N95 mask, face shield (goggles))
- Combined nasopharyngeal/ oropharyngeal swab is recommended.
- If positive, repeat the swab every 7 days (for patient whom home isolation is suitable like Nationals, stable resident with families) or every 14 days (for patients whom home isolation is not suitable e.g. laborers...) from the first sample collection date till negative.
- If negative repeat after 24 hours.
- If 2 consecutive negative results isolation can be discontinued
  - Lower respiratory specimen is preferred when the patient is intubated.
  - Airborne / contact isolation is recommended
  - Confirmed cases can be cohorted in case of shortage of single isolation rooms
  - For further information contact your infection control practitioner
- Discharged patients will be kept in Home isolation /Quarantine for 4 weeks from the first positive COVID-result.
- Request CBC, CMP, CRP, Chest X-ray, Respiratory panel including COVID-19 PCR as baseline investigations.
- Request G6PD level.
- Request electrocardiogram (ECG) for all patients.
- Consider QuantiFERON test for patient whom will be started on Tocilizumab.
- For patients on Ribavirin monitor for hemolysis (retic count, LDH, Hb).
- Monitoring of CBC and LFT is recommended for patients on Interferon treatment.
- Consider repeating other blood tests, CT Chest if clinically indicated.
- Appropriate PPE should be applied during laboratory investigation (specimen collection and transport) performing ECG and radiological investigations.
- Monitor for drug -drug interactions (consult with your clinical pharmacist)

## Suggested Treatment Protocol for Asymptomatic Adult Patients with Positive COVID-19 PCR

No Risk Factors For Severe Disease			
Admit the patient for observation, no treatment is recommended Strict infection control measures should be maintained all the time.			
With Risk Factors For Severe Disease			
Admit the patient.			
+			
Hydroxychloroquine 400 mg BID for 1 day then 400 mg OD	PO	For 5 days	
+			
Azithromycin 500 mg OD	PO	For 5 days	

## Suggested Treatment Protocol for Asymptomatic Pregnant Females with Positive COVID-19 PCR

No Risk Factors For Severe Disease			
Admit the patient for observation, no treatment is recommended Strict infection control measures should be maintained all the time. To be evaluated by obstetrician.			
With Risk Factors For Severe Disease			
Admit the patient.			
+			
Hydroxychloroquine 400 mg BID for 1 day then 400 mg OD	PO	For 5 days	
+			
Azithromycin 500 mg OD	PO	For 5 days	

Risk Factors for Severe Disease (2)	Sample Collection and Infection Control Measures
<b>Risk Factors:</b> <ol style="list-style-type: none"> <li>Older adults age more than 60 years</li> <li>People with comorbidities such as:                             <ul style="list-style-type: none"> <li>Cardiovascular disease</li> <li>Diabetes</li> <li>Lung disease</li> <li>Cancer patients</li> <li>Chronic kidney disease</li> </ul> </li> <li>Immunosuppressed patients</li> </ol>	<ol style="list-style-type: none"> <li>Samples should be collected in negative pressure room (if not available room with HEPA FILTERS)</li> <li>Staff should wear full personal protective equipment PPE (Gown, gloves, N95 mask, face shield (goggles))</li> <li>Combined nasopharyngeal/ oropharyngeal swab is recommended</li> <li>If positive repeat every 7-14 days from the date of sample collection till negative.</li> <li>If negative repeat after 24 hours</li> <li>If 2 consecutive negative isolation can be discontinued</li> </ol>

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## Suggested Treatment Protocol for Symptomatic Adult Patients with Positive COVID-19 PCR

### A. Positive COVID-19 PCR with Uncomplicated Upper Respiratory Tract Infection

No Risk Factors For Severe Disease			
Admit the patient Strict infection control measures should be maintained all the time.			
+			
Hydroxychloroquine 400 mg BID for 1 day then 400 mg OD	PO	For 5 days	
+			
Azithromycin 500 mg OD	PO	For 5 days	
With Risk Factors For Severe Disease			
Admit the patient Strict infection control measures should be maintained all the time.			
+			
Hydroxychloroquine 400 mg BID for 1 day then 400 mg OD	PO	For 5 days	
+			
Oseltamivir 150 mg BID	PO	For 5 days	
+			
Azithromycin 500 mg OD	PO	For 5 days	

### B. Pregnant Females with Positive COVID-19 PCR with Uncomplicated Upper Respiratory Tract Infection

No Risk Factors For Severe Disease			
Admit the patient Strict infection control measures should be maintained all the time.			
+			
Hydroxychloroquine 400 mg BID for 1 day then 400 mg OD	PO	For 5 days	
+			
Azithromycin 500 mg OD	PO	For 5 days	
With Risk Factors For Severe Disease			
Admit the patient Strict infection control measures should be maintained all the time.			
+			
Hydroxychloroquine 400 mg BID for 1 day then 400 mg OD	PO	For 5 days	
+			
Oseltamivir 150 mg BID	PO	For 5 days	
+			
Azithromycin 500 mg OD	PO	For 5 days	

Risk Factors for Severe Disease	Definition of Uncomplicated Upper Respiratory Tract Viral Infection
<ol style="list-style-type: none"> <li>Older adults age more than 60 years</li> <li>People with comorbidities such as:                             <ul style="list-style-type: none"> <li>Cardiovascular disease</li> <li>Diabetes</li> <li>Lung disease</li> <li>Cancer patients</li> <li>Chronic kidney disease</li> </ul> </li> <li>Immunosuppressed patients</li> </ol>	Patients with uncomplicated upper respiratory tract viral infection, may have non-specific symptoms such as fever, cough, sore throat, nasal congestion, malaise, headache, muscle pain or malaise. The elderly and immunosuppressed may present with atypical symptoms. These patients do not have any signs of dehydration, sepsis or shortness of breath.

### C. Suggested Treatment Protocol for COVID-19 Pneumonia (Documented pneumonia in CXR/CT Scan)

Admit the patient Strict infection control measures should be maintained all the time.			
START			
Hydroxychloroquine 400 mg BID for 1 day then 400 mg OD	PO	For 10 days	
+			
Oseltamivir 150 mg BID	PO	For 10 days	
+			
(Darunavir /Cobicistat) (Rezolsta ®) Darunavir 800 mg/Cobicistat 150 mg, <b>Or</b> Ritonavir + Lopinavir (Kaletra) 500mg (1,2)	PO	OD for 2 weeks, BID for 2 weeks	
+			
Azithromycin 500 mg OD	IV	For 10 days	
+			
Ceftriaxone 2 gm	IV	OD	

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## D. Suggested Treatment Protocol for Pregnant Females with COVID-19 Pneumonia

Admit the patient Strict infection control measures should be maintained all the time.			
START			
Hydroxychloroquine 400 mg OD	PO	For 10 days	
+			
Oseltamivir 150 mg BID	PO	For 10 days	
+			
Ritonavir + Lopinavir (Kaletra) 500mg (1,2)	PO	BID for 2 weeks	
+			
Azithromycin 500 mg OD	IV	For 10 days	
+			
Ceftriaxone 2 gm	IV	OD	

### Definition of Pneumonia:

#### Mild Pneumonia

Patient with pneumonia and no signs of severe pneumonia.

#### Severe Pneumonia

Adolescent or adult: fever or suspected respiratory infection, plus one of:

- Respiratory rate >30 breaths/min
- Severe respiratory distress, or SpO2 <90% on room air

N.B: CURB65 and/or PSI can be used to assess pneumonia severity

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