







**CLINICAL GUIDANCE FOR MANAGEMENT OF ADULT COVID-19 PATIENTS** Revised on 05/01/2023

# Adult patient diagnosed with COVID-19

# Mild disease

Upper respiratory tract symptoms and/or fever WITHOUT shortness of breath or hypoxia

# **Home Isolation & Care** (Refer to relevant guideline)



#### **MUST DOS**

- Physical distancing, indoor mask use, hand hygiene
- **Symptomatic management** (hydration, anti-pyretics, antitussive)
- Monitor temperature and oxygen saturation (by applying a SpO probe to fingers)
- Stay in contact with treating physician

#### Seek immediate medical attention if:

- Difficulty in breathing or SpO<sub>2</sub> ≤ 93%
- High grade fever/severe cough, particularly if lasting for >5 days
- A low threshold to be kept for those with any of the high-risk features\*

# \*High-risk for severe disease or mortality

- Age > 60 years
- Cardiovascular disease and CAD
- Diabetes mellitus and other immunocompromised states (such as HIV)
- Active tuberculosis
- Chronic lung/kidney/liver disease
- Cerebrovascular disease
- Obesity
- Unvaccinated
- Antibiotics should not be used unless there is clinical suspicion of bacterial
- Possibility of coinfection of COVID-19 with other endemic infections must be considered
- Systemic corticosteroids are not indicated in mild disease

#### **DO NOT USE IN COVID-19**

- Lopinavir-ritonavir Hydroxychloroquine

- Convalescent plasma

- Azithromycin
- Doxycycline

### **Moderate disease**

#### Any one of:

- 1. Respiratory rate ≥ 24/min, breathlessness
- 2.**SpQ : 90% to ≤ 93% on room air**

#### Severe disease

# Any one of:

- Respiratory rate >30/min, breathlessness
- $2.\text{SpO}_2 < 90\%$  on room air

#### **ADMIT IN WARD**

#### **Oxygen Support:**

- Target SpO<sub>2</sub>: 94-96% (88-92% in patients with COPD)
- Preferred devices for oxygenation: non-rebreathing face mask
- Awake proning encouraged in all patients requiring supplemental oxygen therapy (sequential position changes every 2 hours)

#### Anti-inflammatory or immunomodulatory therapy:

- Dexamethasone 6 mg/day or equivalent dose of methylprednisolone (32 mg in 4 divided doses) usually for 5 to 10 days or until discharge, whichever is earlier.
- Patients may be initiated or switched to oral route if stable and/or improving
- There is no evidence for benefit for systemic steroids in those NOT requiring oxygen supplementation, or on continuation after discharge
- Anti-inflammatory or immunomodulatory therapy (such as steroids) can have risk of secondary infection such as invasive mucormycosis when used at higher dose or for longer than required

#### **Anticoagulation:**

Prophylactic dose of unfractionated heparin or Low Molecular Weight Heparin (weight based e.g., enoxaparin 0.5mg/kg per day SC). There should be no contraindication or high risk of bleeding

# Monitoring:

- ( ) Clinical Monitoring: Respiratory rate, Hemodynamic instability, Change in oxygen requirement
- Serial CXR; HRCT chest to be done ONLY if there is worsening
- Lab monitoring: CRP, D-dimer, blood sugar 48 to 72 hrly; CBC, KFT, LFT 24 to 48 hrly

# **ADMIT IN HDU/ICU**

# **Respiratory & Cardiovascular Support:**

- Consider use of NIV (Helmet or face mask interface depending on availability) in patients with increasing oxygen requirement, if work of breathing is LOW
- Consider use of HFNC in patients with increasing oxygen requirement
- Intubation should be prioritized in patients with high work of breathing /if NIV is not tolerated
- Use institutional protocol for ventilatory management when required
- Need for vasopressors to be considered based on clinical situation

#### **Anti-inflammatory or** immunomodulatory therapy:

- Dexamethasone 6 mg/day or equivalent dose of methylprednisolone (32 mg in 4 divided doses) usually for 5 to 10 days or until discharge, whichever is earlier. No evidence for benefit in higher doses.
- Anti-inflammatory or immunomodulatory therapy (such as steroids) can have risk of secondary infection such as invasive mucormycosis when used at higher dose or for longer than required

#### **Anticoagulation:**

Prophylactic dose of unfractionated heparin or Low Molecular Weight Heparin (weight based e.g., enoxaparin 0.5mg/kg per day SC). There should be no contraindication or high risk of bleeding

#### Supportive measures:

- Maintain euvolemia (if available, use dynamic measures for assessing fluid responsiveness)
- If sepsis/septic shock: manage as per existing protocol and local antibiogram

# **Monitoring:**

- Clinical Monitoring: Work of breathing, Hemodynamic instability, Change in oxygen requirement
- Serial CXR; HRCT chest to be done ONLY if there is worsening
- Lab monitoring: CRP, D-dimer, blood sugar 48 to 72 hrly; CBC, KFT, LFT 24 to 48 hrly

After clinical improvement, discharge as per revised discharge criteria

# Additionally in moderate or severe disease at high risk of progression

# Consider Remdesivir for up to 5 days (200 mg IV on day 1 followed by 100 mg IV OD for next 4 days)

- To be started within 10 days of onset of symptoms, in those having moderate to severe disease with high risk of progression (requiring supplemental oxygen), but who are NOT on IMV or ECMO
- No evidence of benefit for treatment more than 5 days NOT to be used in patients who are NOT on oxygen support or in
- home setting
  Monitor for RFT and LFT (remdesivir not recommended if eGFR
  <30 ml/min/m2; AST/ALT >5 times UNL) (not an absolute contraindication)

# Additionally in rapidly progressing moderate or severe disease

Consider Tocilizumab preferably within 24-48 hours of onset of severe disease/ ICU admission [4 to 6 mg/kg (400 mg in 60 kg adult) in 100 ml NS over 1 hour] if the following conditions are met:

- Rapidly progressing COVID-19 not responding adequately

- to steroids and needing oxygen supplementation or IMV Preferably to be given with steroids Significantly raised inflammatory markers (CRP and/or IL-6) Rule out active TB, fungal, systemic bacterial infection Long term follow up for secondary infections (such as reactivation of TB, flaring of Herpes)