Treatment Guidelines for COVID-19

Department of Medical Services, together with professional associations, representatives of universities' Faculty of Medicine, and academic centers conducted reviewing of current literatures including patient’s treatment record and develop treatment guidelines for COVID-19 for physicians and healthcare personnel as a guide for decision making in treatment of patient.

The treatment of COVID-19 was categorized into 3 cases (as shown in Figure 1)

1. **Mild case**
   With no risk, recommend symptomatic treatment (no need to give antiretroviral drug)

2. **Mild case in high risk group** with any of the following conditions; age >60 years, lymphopenia, chronic pulmonary disease, chronic kidney disease, heart failure, obesity, cirrhosis and any immunocompromised condition, recommend the following dual therapy
   - **Chloroquine** (250 -500 mg) per day
   - **Lopinavir/Ritonavir** (400/100) two times per day or alternative regimens such as **Darunavir/Ritonavir** (900/100) once daily or **Darunavir/Ritonavir** (600/100) two times per day. If infiltration is found on chest x-ray within 48 hours, add **Favipiravir**, same as treatment of pneumonia case for 10 days.

3. **Pneumonia case** recommend three drugs combination including of
   - **Chloroquine** (500-1000 mg) per day
   - **Favipiravir** (200 mg) 8 tablets two times on Day1 then 3 tablets two times per day from Day 2-10 or **Favipiravir** 60 mg/kg of bodyweight (in patient with BMI ≥35 kg/m²).
   - **Lopinavir/Ritonavir** (400/100) two times per day or alternative regimens **Darunavir/Ritonavir** (900/100) once daily or **Darunavir/Ritonavir** (600/100) two times per day.

However, potential adverse event from drugs used for treatment of COVID-19 may occur, consider adjusting the doses as appropriate base on patient’s condition.

Version 1 (13032020)

For more information please visit [www.dms.moph.go.th](http://www.dms.moph.go.th)
Treatment Guidelines for Confirmed COVID-19 cases

Treatment guidelines for Confirmed COVID-19 cases (11 March 2020)

Mild case in high risk group

Any of the following risk factors:
1. Age > 60
2. Lymphopenia (< 1000 cells/mm³)
3. Chronic lung disease, COPD GOLD ≥ 3 or ≥ B
4. Chronic kidney disease stage ≥ 3B
5. Heart failure; NYHA ≥ 2
6. Obesity (BMI ≥ 35 kg/m²)
7. Cirrhosis; Child-Pugh ≥ B
8. Immunocompromised host

Treatment: 2 drugs combination (5 days)
1. Chloroquine (250-500 mg/day)
2. Lopinavir/Ritonavir (400/100) bid or
   Alternative drug: Darunavir/ Ritonavir (900/100) OD, or (600/100) bid

Progression of infiltration on CXR in 24-48 Hrs.
Add Favipiravir same as pneumonia case (10 days)

Mild case

Pneumonia

Treatment: 3 drugs combination (10 days)
1. Chloroquine (500-1000 mg/day)
2. Favipiravir (200 mg) start D1: 8 tabs bid then D2-10: 3 tabs bid or 60 mg/kg (if BMI≥ 35 kg/m²)
3. Lopinavir/ Ritonavir (400/100) bid or
   Alternative drug: Darunavir/ Ritonavir (900/100) OD or (600/100) bid

Supportive Treatment (no antiretroviral Drug)

No risk

Note: Consult SMEs: [http://www.ddc.moph.go.th/viralpneumonia/](http://www.ddc.moph.go.th/viralpneumonia/)
Adverse Event: Lopinavir/Ritonavir + Chloroquine > 10 days in CKD with hypokalemia: QT prolongation
Darunavir/Ritonavir: diarrhea, hepatitis
Lopinavir: nausea, vomiting

Figure 1. Treatment guideline for COVID-19 (updated 11 March 2020)