

COVID-19 (SARS-CoV-2) Treatment of Confirmed Cases

This document is **for confirmed COVID-19**. For recommendations on suspected cases of COVID-19, Community-Acquired Pneumonia and Influenza, see separate summaries on <u>antimicrobialstewardship.com</u>.

EMPIRIC CHOICE - MILD TO MODERATE CASES

None

- **No antiviral** (including oseltamivir and ribavirin) has been demonstrated to have clinical activity against SARS-CoV-2.
- The WHO recommends NO corticosteroids based on emerging clinical evidence from the COVID-19 pandemic and prior coronavirus and influenza outbreaks (1-5)
- Antibiotics do not have activity against viruses, and have no benefit in viral infections.

EMPIRIC CHOICE - SEVERE CASES (requiring ventilatory and/or circulatory support)

- ceftriaxone 1 gm IV q24h x 5 days (unless bacterial infection ruled out)
 - if risk factors for MRSA, *Pseudomonas spp.*, or resistant Gram negative organisms, consider modification of therapy
 - In influenza, secondary bacterial infection—especially due to *S. pneumoniae*—is occasionally associated with severe illness. The incidence of bacterial coinfection with COVID-19 is unknown, but antibiotic therapy has not appeared to be beneficial in the early experience in Wuhan, China.¹
- Severe cases may warrant consideration for experimental/novel treatment. Use of these should be done in the setting of a clinical trial or compassionate use. Consult Infectious Diseases if this is being considered.

ALTERNATIVES FOR ALLERGIES – SEVERE CASES

- moxifloxacin 400mg IV q24h x 5 days (unless bacterial infection ruled out)
 - if risk factors for MRSA, *Pseudomonas spp.*, or resistant Gram negative organisms, consider modification of therapy In influenza,

IMMUNOCOMPROMISED HOST CONSIDERATION

Patients infected with SARS-CoV-2 who are severely immunocompromised (e.g. hematological malignancies, transplantation, immunosuppressive agents, etc.) should receive the same empiric antibacterial therapy as severe cases. Consult Immunocompromised Infectious Diseases.

⁵ Stockman LJ, Bellamy R, Garner P. SARS: systematic review of treatment effects. *PLoS medicine* 2006;**3**:e343.





¹ Guan WJ, Ni ZY, Hu Y, et al. Clinical Characteristics of Coronavirus Disease 2019 in China. N Engl J Med 2020.

² Arabi YM, Mandourah Y, Al-Hameed F, et al. Corticosteroid Therapy for Critically III Patients with Middle East Respiratory Syndrome. *Am J Respir Crit Care Med* 2018;**197**:757-67.

³ Delaney JW, Pinto R, Long J, et al. The influence of corticosteroid treatment on the outcome of influenza A(H1N1pdm09)-related critical illness. *Crit Care* 2016;**20**:75.

⁴ Rodrigo C, Leonardi-Bee J, Nguyen-Van-Tam J, Lim WS. Corticosteroids as adjunctive therapy in the treatment of influenza. *Cochrane Database Syst Rev*2016;**3**:CD010406.