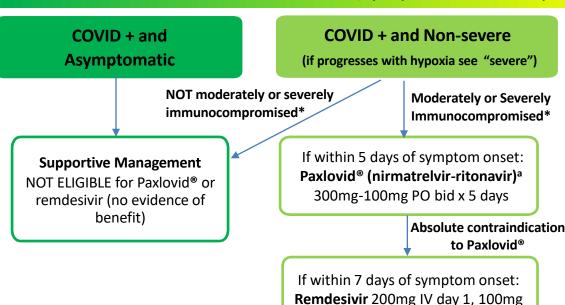
Therapeutic Management of Hospitalized Adults with COVID-19⁽³⁾



COVID-19 Positive (symptomatic or asymptomatic): Assess Severity and Monitor for Change



IV daily days 2-3

COVID + and Severe disease (SpO2 < 94% on room air or requiring supplemental O₂)

> **Dexamethasone** 6mg PO or IV daily x 10^b days or until off O₂ or discharged

> > AND

Remdesivir 200mg IV day 1, 100mg IV daily days 2-5 COVID + and requiring: >6 LPM O_2 or $FiO_2 > 0.5$ or mechanical ventilation (MV)

> **Dexamethasone** 6mg PO or IV daily x 10^b days or until off O₂ or discharged

> > AND

If ≤ 7 days since hospital admission for COVID or, for nosocomial COVID, ≤ 7 days of symptoms:

Tocilizumab^c 400mg single dose IV (if MV, most effective within 24h of MV start)

OR

Baricitinib^c 4mg PO daily x 14 days or until discharge

OR

If tocilizumab unavailable:

Sarilumab^c 400mg single dose IV (if MV, most effective within 24h of MV start)

* Severe Immunocompromise:

- L. Recipient of solid organ transplant
- 2. Treatment for malignant hematologic condition
- 3. Bone marrow transplant-, stem cell transplant-, or transplant-related immunosuppressant use
- 4. Receipt of anti-CD20 drugs or B-cell depleting drugs in the past 2 years
- 5. Severe primary immunodeficiencies

* Moderate immunocompromise:

- Treatment for cancer, including solid tumours
- 2. Treatment with significantly immunosuppressing drugs:
 - a) Biologic or other immunosuppressing medication in the past 3 months
 - b) Oral steroid (20 mg/day of prednisone equivalent on an ongoing basis) in the past month
- Advanced HIV infection (untreated, or treated with CD4 count ≤ 200/mm³
- 4. Moderate primary immunodeficiencies
- 5. Renal conditions: Dialysis (hemodialysis or peritoneal dialysis), eGFR < 15 mL/min, glomerulonephritis being treated with steroids)

ANTICOAGULATION: In moderately sick hospitalized COVID-19 patients (requiring oxygen up to 15 L/min via nasal cannula) with no contraindications to anticoagulation and low bleeding risk, therapeutic dose tinzaparin (175 units/kg) is recommended for 14 days or until discharge, to increase the probability of survival and reduce the need for ICU-level organ support. In critically ill hospitalized COVID-19 patients with no contraindications to anticoagulation, prophylactic dose tinzaparin (75 units/kg) is recommended.

[♦] Orange/red arms reflect the need for oxygen or mechanical ventilation (MV) related to COVID.

Treatment Footnotes



a. Paxlovid®

Contraindications:

- Transplant patient (except if under the guidance of the transplant team)
- Drug interactions that cannot be managed with medication changes (check Lexi-Comp via https://krs.libguides.com or the Liverpool COVID-19 Drug Interactions Checker at https://www.covid19-druginteractions.org/checker)

AHS supports crushing and splitting of Paxlovid® to be administered orally or for enteral tube administration – see Paxlovid crushing and splitting guidance.

Dosage:

	eGFR > 60mL/min	eGFR ≤ 60mL/min and ≥ 30mL/min	eGFR < 30mL/min	Dialysis
Paxlovid 150mg/100mg (Nirmatrelvir/Ritonavir)	300 mg nirmatrelvir + 100 mg ritonavir both twice a day for 5 days	150 mg nirmatrelvir + 100 mg ritonavir both twice a day for 5 days	300 mg nirmatrelvir + 100 mg ritonavir both on day 1, then 150 mg nirmatrelvir + 100 mg ritonavir once a day for 4 more days	300 mg nirmatrelvir + 100 mg ritonavir both on day 1 then 150 mg nirmatrelvir + 100 mg ritonavir once a day for 4 more days, to be dosed after dialysis ¹

b. **Dexamethasone duration**: Standard 10-day course. Some data suggests similar benefit with a 7-day course, so 7 days may be reasonable depending on risk to benefit ratio (prescriber discretion), see reference: *Open Forum Infectious Diseases*, Volume 10, Issue 3, March 2023, ofad105, https://doi.org/10.1093/ofid/ofad105

c. Receipt **of tocilizumab**, **baricitinib**, **sarilumab** in patients with highly suspected or proven non-COVID infections and severe underlying immunocompromise may increase the risk of secondary infection. Specialist consultation is suggested in these cases.

If patient meets tocilizumab / baricitinib / sarilumab criteria at presentation, favour one of these agents over remdesivir. If an immunocompetent patient has met criteria for, and been given tocilizumab / baricitinib / sarilumab, the presumption is that they are in a phase of their illness where remdesivir has not been proven beneficial, would not be expected to yield benefit, and should not be used.

Only one of baricitinib / sarilumab / tocilizumab should be used in the same patient; they all work on the same inflammatory pathway, they are unlikely to have added benefit and are potent immunosuppressants, so combination use could have adverse effects.

Adjust baricitinib dose based on eGFR:

- 30 to < 60 mL/min/1.73 m2: 2 mg PO/NG once daily
- 15 to < 30 mL/min/1.73 m2: 2 mg PO/NG every other day
- <15 mL/min/1.73 m2: Use is not recommended.