COVID-19 Antiviral Treatment Algorithm

Not requiring consistent supplemental oxygen support (or no increase from home requirement)

High risk for progression (must meet one of the following)

- 1) Age ≥ 65
- 2) Immunocompromising condition or medications¹
- 3) ≥ 2 risk factors (CDC Webpage)

Yes No

≤ 5 days of symptom onset
& no exclusions to Paxlovid²

Yes No

Paxlovid

Remdesivir 200mg x 1 dose, then 100mg IV x 2 days or until discharge (whichever comes first)

*Risk of hepatotoxicity with a baseline AST/ALT >5x ULN is unknown. Weigh risk vs benefit. Requiring consistent low-flow supplemental oxygen support (≤ 5L to maintain an O₂ Sat of 92%); increased from home requirement

≤ 5 days of symptom onset & no exclusions to Paxlovid²

Yes

Paxlovid

Remdesivir 200mg x 1 dose, then 100mg IV x 4 days or until discharge (whichever comes first)

No

*Risk of hepatotoxicity with a baseline AST/ALT >5x ULN is unknown. Weigh risk vs benefit.

Ordering antiviral:

- Pharmacy consult to evaluate criteria & approve
 Paxlovid or remdesivir (pharmacists can select based
 on approved algorithm unless rationale specified for
 alternate agent)
- 2) Pharmacists can automatically dose adjust Paxlovid³

Requiring high-flow oxygen, noninvasive ventilation, mechanical ventilation or ECMO

Antiviral therapy is generally not recommended (can consider on case by case basis after discussions w/ID/antimicrobial stewardship

²Exclusions to Paxlovid:

- 1) Unable to take oral therapy (can be crushed)
- Severe hepatic impairment (Child-Pugh Class C)
- High risk for serious toxicity due to drug interactions unmanageable via therapy modification

¹Immunocompromising condition or medications: solid organ transplant, bone marrow transplant, hematologic malignancy, b-cell depleting therapy (ex: rituximab), active malignancy and receiving chemotherapy, primary immunodeficiency, autoimmune diseases requiring immunosuppressive therapy (hydroxychloroquine or sulfasalazine is not sufficient), advanced or untreated HIV infection

³ Nirmatrelvir/ritonavir (Paxlovid)	
Estimated glomerular filtration rate (eGFR)	Renal dose adjustment
≥ 60 mL/min	300/100mg BID x 5 days
≥30 to <60 mL/min	150/100mg BID x 5 days
<30 mL/min or HD	300/100mg x 1 dose, then 150/100mg daily x 4 days (if HD, schedule doses for 1800)

Common drug interaction: For patients receiving atorvastatin consider "recommending hold atorvastatin during treatment course. If need to continue due to high risk for or recent cardiac event, reduce atorvastatin dose to 10mg PO daily"