FLOW CHART

CONSIDERATION FOR TREATMENT OPTIONS IN PATIENTS PRESENTING WITH COVID-19

START HERE!

Is the patient pregnant?

YES

Is the pregnant patient vaccinated?

YES

Is the pregnant patient high-risk?

YES

Treat, in order of preference with:
- Paxlovid (1st choice)
- Sotrovimab (2nd choice)
- Remdesivir (3rd choice)

NO

Low priority for treatment if supply of medication is limited.

NO

Treat, in order of preference with:
- Sotrovimab (1st choice)
- Paxlovid (2nd choice)

NO

Is the patient high-risk?

YES

- Sotrovimab (1st choice)
- Paxlovid (2nd choice)
- Remdesivir (3rd choice)
- Molnupiravir (4th choice)

NO

Low priority for treatment if supply of medication is limited

NOTE: Do not give molnupiravir to pregnant patients

If choosing to treat with Paxlovid or Remdesivir, the patient should understand that there is little data regarding safety of use in pregnancy *AND* the patient should provide informed consent.

***When prescribing Paxlovid, it is necessary to:**

- Review all potential Drug to Drug interactions
- Determine if Paxlovid is appropriate, and
- Make necessary dose modification or discontinue drugs that may potentially interact during the course of Paxlovid treatment

INSTRUCTIONAL VIDEOS:

- Introduction to Considerations for Treatment
- Risk Determination & Prioritization
- Management of the Pregnant Patient with COVID-19 Infection
- Management of the Non-Pregnant Patient with COVID-19 Infection

NOTE: This information is provided as of January 2022 as a resource to aid clinicians and does not supplant or supersede sound clinical judgement. Furthermore, this information may change and may become out of date at any time. Clinicians and prescribers should consult current recommendations and best practices at the time of the patient encounter and decision making.

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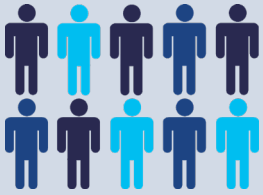
CONSIDERATION FOR USE

PAXLOVID AND MOLNUPIRAVIR

Guidance & Recommendations from NIH COVID-19 Treatment Guidelines Panel:
High-Risk, Nonhospitalized Patients With Mild to Moderate COVID-19
Use of Anti-SARS-CoV-2 Monoclonal Antibodies or Remdesivir for the Treatment of COVID-19 in Nonhospitalized Patients When Omicron Is the Predominant Circulating Variant



AT RISK PATIENT CONSIDERATION

- Evaluate the risk of each patient to progress to severe illness

- Confirm eligibility for each potential treatment option.

- The NIH Advisory Panel states that risk prioritization should be based on 4 key elements:
  - Age
  - Vaccination status
  - Immune status, and
  - Clinical risk factors

TIERED RISK MODEL FOR PATIENTS

HIGHEST RISK	Immunocompromised individuals not expected to mount an adequate immune response to COVID vaccination or SARS-CoV-2 infection due to their underlying conditions, regardless of vaccine status
SECOND HIGHEST RISK	Unvaccinated individuals at the highest risk of severe disease
THIRD HIGHEST RISK	Vaccinated individuals at higher risk for severe disease (with high risk vaccinated patients that have not received a booster vaccine given higher priority).

CHOOSING APPROPRIATE OUTPATIENT COVID-19 TREATMENT

(in order of preference)

PAXLOVID ORAL	Paxlovid Oral (300 mg nirmatrelvir (two 150 mg tablets) with 100 mg ritonavir (one 100 mg tablet), with all three tablets taken together) twice daily for 5 days
SOTROVIMAB IV	Sotrovimab IV for 1 dose *(unvaccinated pregnant women may be highest priority group – see "Pregnant patients" below)*
REMDESIVIR IV	Remdesivir IV daily for 3 days
MOLNUPIRAVIR	Molnupiravir 800 mg (four 200 mg capsules) oral twice daily for 5 days- should only be administered when the other 3 options are not available or cannot be used
PREGNANT PATIENTS	▪ **Paxlovid:** minimal data. See Paxlovid Fact Sheet ▪ **Sotrovimab:** may be best choice for unvaccinated pregnant women ▪ **Remdesivir:** minimal data ▪ **Molnupiravir:** Contraindicated in pregnancy *(see FDA Fact Sheet for exceptions)*

LOGISTICAL CONSIDERATIONS

When logistical or supply constraints limit the availability of anti-SARS-CoV-2 mAbs or antivirals, consider prioritizing the use of oral anti-COVID medications for patients at highest risk of clinical progression.

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FACT SHEET

	PAXLOVID **Pfizer** **Paxlovid FDA Fact Sheet** nirmatrelvir + ritonavir	MOLNUPIRAVIR **Merck** **Molnupiravir FDA Fact Sheet** molnupiravir
MECHANISM OF ACTION:	Protease & CYP3A Inhibitors	Inhibits SARS-CoV-2 replication
DOSAGE	300 mg nirmatrelvir (two 150 mg tablets) with 100 mg ritonavir (one 100 mg tablet), with all three tablets taken together twice daily for 5 days	Four 400 mg capsules po q12H for 5 days
TIMING	Initiate as soon as possible after COVID-19 diagnosis and within 5 days of symptom onset	Initiate as soon as possible after COVID-19 diagnosis and within 5 days of symptom onset
EFFECTIVENESS	Reduced hospitalizations and deaths by 89%	Reduced hospitalizations and deaths by 30%
PATIENT SELECTION	Positive SARS-CoV-2 test at high risk of progressing to severe disease, hospitalization, or death	Positive SARS-CoV-2 test at high risk of progressing to severe disease, hospitalization, or death *Verified not pregnant*
NOT AUTHORIZED FOR	• Patients < 12 years of age or for patients <18 years of age who weigh <88 lbs • Initiation of treatment in patients requiring hospitalization owing to COVID-19 • Use for >5 consecutive days • Preexposure or postexposure prophylaxis for prevention of COVID-19	• Patients < 18 years of age • Initiation of treatment in patients requiring hospitalization owing to COVID-19 • Use for >5 consecutive days • Preexposure or postexposure prophylaxis for prevention of COVID-19
RENAL FAILURE	• Dose reduction for moderate renal impairment (eGFR ≥30 to <60 mL/min: 150 mg nirmatrelvir (one 150 mg tablet) with 100 mg ritonavir (one 100 mg tablet), with both tablets taken together twice daily for 5 days. • Not recommended in patients with severe renal impairment (eGFR <30 mL/min)	• Mild or moderate (eGFR >30 mL/min): No dosage adjustment necessary • Severe (eGFR <30 mL/min), end-stage renal disease, or patients on dialysis: Pharmacokinetics not evaluated; not expected to have a significant effect on NHC (N4-hydroxycytidine) exposure
HEPATIC FAILURE	• Not recommend in patients with severe hepatic impairment (Child-Pugh Class C)	• Mild to severe (Child-Pugh Class A to C): No dosage adjustment required • Preclinical data indicate that hepatic elimination is not expected to be a major route of NHC elimination
PREGNANCY & LACTATION	PREGNANCY: • There are no available human data on the use of nirmatrelvir during pregnancy to evaluate for a drug-associated risk of major birth defects, miscarriage, or adverse maternal or fetal outcomes. • Published observational studies on ritonavir use in pregnant women have not identified an increase in the risk of major birth defects. Published studies with ritonavir are insufficient to identify a drug-associated risk of miscarriage • There are maternal and fetal risks associated with untreated COVID-19 in pregnancy. LACTATION: No data	PREGNANCY • Not recommended for pregnant patients (see FDA fact sheet for exceptions) LACTATION • No risk info. Crosses placental barrier in rats

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FACT SHEET

	PAXLOVID **Pfizer** Paxlovid FDA Fact Sheet nirmatrelvir + ritonavir	MOLNUPIRAVIR **Merck** Molnupiravir FDA Fact Sheet molnupiravir
CONTRACEPTION	Use of ritonavir may reduce the efficacy of combined hormonal contraceptives. Advise patients using combined hormonal contraceptives to use an effective alternative contraceptive method or an additional barrier method of contraception	None known
DRUG INTERACTIONS	PAXLOVID is an inhibitor of CYP3A and may increase plasma concentrations of drugs that are primarily metabolized by CYP3A which may elevate plasma concentrations which is associated with serious and/or life-threatening events. **DRUGS WHOSE LEVELS MAY INCREASE INCLUDE:** • Antiarrythmics • Cancer drugs • Warfarin and rivaroxaban • Anticonvulsives • Antidepressants • Calcium channel blockers & digoxin • Statins • Corticosteroids • Midozalam • Fentanyl • Immunosuppressants **FOR A COMPLETE LIST, SEE TABLE 1 ON PP 9-15 ON THE** Paxlovid FDA Fact Sheet. Co-administration with other CYP3A substrates may require an dose adjustment of either Paxlovid or the inyteracting drug or additional monitoring. **SEE TABLE 1 ON PP 9-15 ON THE** Paxlovid FDA Fact Sheet.	None known
ADVERSE REACTIONS	Distorted taste, diarrhea, hypertension, and myalgia	Diarrhea, nausea, dizziness

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