THERAPEUTIC OPTIONS FOR NONHOSPITALIZED PATIENTS WITH OMICRON COVID-19 VARIANT (1-18-22)

TREATMENT: The National Institutes of Health (NIH) recommend the following therapies for non-hospitalized patients with confirmed COVID-19 and mild or moderate symptoms at high risk for progression to hospitalization or death.[1] For a list of risk factors, see the CDC webpage Underlying Medical Conditions Associated with High Risk for Severe COVID-19.

The NIH recommends preference for these therapies in order listed in the table below.[1]

Therapeutic Agent	Dose	Prevention of Hospitalizations or Death over 28 days	Clinical Considerations
1. Ritonavir-boosted Nirmatrelvir (PAXLOVID)[2]	Nirmatrelvir 300 mg plus ritonavir 100 mg, orally twice daily for 5 days, within 5 days of symptom onset	• ARR: 6.3% → 0.8% • RRR: 88% • NNT: 19	• Significant drug-drug interactions • No known risk of ritonavir in pregnancy • Decrease nirmatrelvir to 150 mg if eGFR ≥30 to <60 mL/min • Avoid in severe hepatic impairment
2. Sotrovimab[3]	500 mg IV once, within 10 days of symptom onset	• ARR: 7.2% → 1.0% • RRR: 85% • NNT: 17	• No drug-drug interactions • Only mAb on this list; safer option in pregnancy
3. Remdesivir (VEKLURY)[4]	200 mg IV day 1, within 7 days of symptom onset, then 100 mg IV on Days 2 and 3	• ARR: 5.3% → 0.7% • RRR: 87% • NNT: 22	• Option if IV services easily accessible • Commercially available; not available through federal distribution
4. Molnupiravir[5]	800 mg, orally twice daily for 5 days, within 5 days of symptom onset	• ARR: 9.7% → 6.8% • RRR: 30% • NNT: 35	• Option if other therapies unavailable[1] • Concern for mutagenicity (theoretical) • Avoid in pregnancy, growing children

Abbreviations: ARR = absolute risk reduction; eGFR = estimated glomerular filtration rate; IV = intravenous; mAb = monoclonal antibody; NNT = number needed-to-treat to prevent one hospitalization or death over 28 days; RRR = relative risk reduction.

PRE-EXPOSURE PROPHYLAXIS: Pre-exposure prophylaxis is an option for individuals who are moderately or severely immunocompromised and who are not expected to mount an adequate response to COVID-19 vaccination. It may also be used for individuals who have medical contraindications to COVID-19 vaccination.

Therapeutic Agent	Dose	Prevention of symptomatic COVID-19 infection over 6 months	Clinical Considerations
Tixagevimab and cilgavimab (EVUSHELD)[6]	Tixagevimab 150 mg and cilgavimab 150 mg, IM once each	• 1.0% → 0.2% • RRR: 77% • NNT: 125	• No dose adjustments needed • Caution with use in patients with CVD • Avoid within 2 weeks of COVID-19 vaccine • May repeat dosing every 6 months

Abbreviations: CVD = cardiovascular disease; IM = intramuscular; NNT = number needed-to-treat to prevent one case of symptomatic COVID-19 infection over 6 months; RRR = relative risk reduction.

POST-EXPOSURE PROPHYLAXIS: No current therapies known to be effective against the Omicron variant have received EUA for post-exposure prophylaxis. Although REGEN-COV (casirivimab plus imdevimab) and bamlanivimab plus etesevimab have received EUA for post-exposure prophylaxis, they are not recommended for the Omicron variant.[1]

THERAPEUTICS ALLOCATION & REQUESTS: Please visit the OHA therapeutics landing page for information and resources on oral antivirals and monoclonal antibodies at: https://www.oregon.gov/oha/covid19/Pages/therapeutics.aspx. Please also note guidance to providers for prescribing of therapeutics in times of constrained supply in this slide deck from U.S. Department of Health and Human Services: https://www.oregon.gov/oha/covid19/Documents/HHS-tiering-recommendation.pdf. Please pay special attention to slides 6-9 as it pertains to prioritization of patients.

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References:

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3. Gupta A, Gonzalez-Rojas Y, Juarez E, Casal MC, et al. Early treatment of Covid-19 with SARS-CoV-2 neutralizing antibody sotrovimab. *N Engl J Med*. 2021; 385(21): 1941-50. doi: 10.1056/NEJMoa2107934.
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6. US Food and Drug Administration. Fact sheet for healthcare providers: emergency use authorization for Evusheld (tixagevimab co-packaged with cilgavimab). Available at: https://www.fda.gov/media/154701/download. Accessed January 18, 2022.