NIH Therapeutics Recommendations (Updated March 2, 2022)

Based upon data generated during the Omicron variant surge, the NIH has revised its recommendations for antiviral therapeutics for non-hospitalized patients with mild-moderate COVID-19 at high risk of progression to severe disease. The drugs are ranked by order of preference.

https://www.covid19treatmentguidelines.nih.gov/therapies/statement-on-therapies-for-high-risk-nonhospitalized-patients/

Order	Medication	Mode of Action	Dose & Route	RRR*	Caveats & Notes†
1	Paxlovid (n irmatrelvir + r itonavir)	 n = protease inhibitor, halts viral replication of all known coronaviruses r = CYP 3A4 inhibitor (boosting agent) 	 n 300 mg + r 100 mg PO bid x 5 days Start ≤5 days of symptom onset Age ≥12 yrs, ≥40 kg 	88%	 Multiple drug-drug interactions, especially antiarrhythmic, anticoagulant, immunosuppressive, antiseizure, antineoplastic and neuropsychiatric drugs dependent on CYP 3A4 for clearance Some drugs can be held; others preclude its use[¶] Halve dose with eGFR <60 mL/min/1.73m²; avoid if eGFR < 30 Avoid with severe liver disease
2	Sotrovimab	Monoclonal antibody	 500 mg IV infusion Start ≤10 days of symptom onset Age ≥12 yrs, ≥40 kg 	85%	Potential for anaphylaxis; infuse in monitored setting and observe 1 hr after infusion
3	Remdesivir	Prodrug of adenosine analog, terminates viral RNA transcription	 200 mg IV day 1 100 mg IV qd days 2-3 Start ≤7 days of symptom onset Age ≥12 yrs, ≥40 kg 	87%	 FDA approved for non-hospitalized patients (January 24th 2022) with EUA for patients <12 yrs, >3.6 kg Potential for anaphylaxis; infuse in monitored setting and observe 1 hr after infusion Requires 3 consecutive days of IV infusion Avoid if eGFR < 30 mL/min/1.73m²
4	Molnupiravir	Prodrug of ß-D-N4- hydroxycytidine (NHC) that induces lethal RNA viral mutagenesis	 800 mg PO bid x 5 days Start ≤5 days of symptom onset Age ≥18 yrs 	30%	 Use ONLY when options 1-3 are unable to be used ¶¶ No data in vaccinated patients Potential for teratogenicity FDA EUA recommends against use in pregnancy (but waiver >10 wks gestation with informed consent)
4	Bebtelovimab	Monoclonal antibody	 175 mg IV infusion Start ≤7 days of symptom onset Age ≥12 yrs, ≥40 kg 	-	 Use ONLY when options 1-3 are unable to be used^{¶¶} Based on in vitro viral susceptibility and Phase 2 safety/efficacy data Infuse in monitored setting and observe 1 hr after infusion

^{*}RRR = Relative risk reduction of hospitalization or death vs. placebo

[†]This table is intended as a summary overview of material on the NIH COVID-19 website. Full prescribing information should be reviewed prior to use of these drugs. At the time of publication, Paxlovid and Sotrovimab are available in very limited quantities.

 $[\]P$ For a full list of drug-drug interactions, see https://www.covid19treatmentguidelines.nih.gov/therapies/statement-on-paxlovid-drug-drug-interactions/

^{¶¶}Molnupiravir and bebtelovimab are both listed as option 4 because the NIH recommends either drug if options 1-3 are unable to be used