

Outpatient COVID-19 Therapies: Mar 2023

Updated for Omicron XBB subvariant

- With the predominance of new Omicron sub-variants in the area, only certain therapies are effective for outpatients diagnosed with COVID-19
 - <u>Monoclonal antibodies previously used are no longer authorized or available for</u> <u>treatment of COVID-19</u>
- There is now adequate supply of multiple other therapies available to <u>order through the</u> <u>Smartset</u>: "COVID-19 Outpatient Treatment Options with Guidance"
 - Oral options: Need to be started within **5 days** of symptom onset:
 - Nirmatrelvir-ritonavir (Paxlovid): 1st line
 - Molnupiravir, only if other options are not appropriate
 - <u>IV options</u>: Need to be started within **7 days** of symptom onset
 - Remdesivir: Preferred if Paxlovid cannot be used

Figure 1: SmartSet designed to help make ordering optimal therapy easier



- <u>Treatment of COVID infection should take into account risk for severe illness.</u> Therapies should be prescribed based on these risk factors and time from symptom onset (see Table 1)
 - Any patients that are deemed at risk of severe illness by providers can now be treated
 - Risk factors in the EMR will be displayed in the SmartSet for discussion with the patient
- There are required questions built into the order to prompt and document that <u>EUA-required</u> medication evaluation and education has been completed, when necessary.
 - Electronically prescribe to any Nebraska Medicine pharmacy location or send to an outside pharmacy, identified via the <u>Therapeutic Locator</u>
 - Patients should have oral therapy prescriptions picked up for them from the pharmacy on the same day as the prescription is written.
 - Pharmacists in clinics or the Emergency Department will continue to assist with determining the best treatment options

Family Switch 👻 🁔	⊇uestionnaires 🇰 References 🎍 Dosage Table 🕌 Appts 🎇 Care Teams 🖹 SmartSets				
ntacts Problem List	BestPractice SmartSets				
▼ Nirmatrelvir-R	itonavir				
Additional guida • Consult the	Ince on nirmatrelvir-ritonavir therapy & drug-drug interactions: FDA fact sheet				
Onirmatrelvir-ri	tonavir (PAXLOVID) 150 mg x 2- 100 mg Tab				
	✓Accept × Cani				
Reference Links:	1. Fact Sheet2. Patient Fact Sheet3. Patient Fact Sheet (Spanish)				
Product: NIRMATRELVIR 300 MG (150 MG X 2)-RITONAVIR 100 MG TABLET (EUA)					
Sig Method:	Specify Dose, Route, Frequency Use Free Text Taper/Ramp Combination Dosage				
Start Date:	5/10/2022 📅 End Date 5/15/2022 🛱				
Dispense:	Days/Fill: Full (5 Days) 30 Days 90 Days				
	Quantity: 1 kit Refill: 0 0 1 2 3 4 5 6 11				
	Do not send renewal requests to me Dispense As Written				
Mark long-	□ NIRMATRELVIR/RITONAVIR				
term:					
Patient Sig:	Take Nirmatrelvir 300 mg (150 mg x 2) with Ritonavir 100 mg (100 mg X 1) by mouth twice daily for 5 days. Fill by date: *** (Th				
	⊕ ⊕ C [?] [?] + Insert SmartText				
*	Take Nirmatrelvir 300 mg (150 mg x 2) with Ritonavir 100 mg (100 mg X 1) by mouth twice daily for 5 days. Fill by date: *** (This is 5 days from symptom onset - if not picked up by this date, prescription should not be dispensed)				
Class:	Normal P Normal Print Phone In No Print Sample				
	(1) This medication will not be e-prescribed. Invalid items: Provider Details				
Note to Pharmacy:	Please provide the emergency use Patient Fact Sheet when dispensing this medication.				
PDA's EUA re	quires the prescriber to discuss with the patient: 1. Contents of the EUA 2. Risks/benefits/alternative treatments available 3.				
Symptom on	et w/in 5 days 4. Potential for drug-drug interactions 5. Appropriate dosing based on renal function Discussion completed				
Authorized Fa	act Sheet for patients and care givers has been provided				
-	Yes Verbally reviewed fact sheet; will be provided by dispensing pharmacy				
c					

Figure 2: Example of ordering screen for Paxlovid with ability to click link and review interacting meds

Reference:

NIH Guidelines on Therapeutic Management of Nonhospitalized Adults With COVID-19 (Dec 2022)

https://www.covid19treatmentguidelines.nih.gov/management/clinical-management-ofadults/nonhospitalized-adults--therapeutic-management/

For treatment of inpatients, see NIH guidelines on hospitalized patients or institutional guidance available at: <u>https://now.nebraskamed.com/infectious-diseases-protocols/</u> *Reviewed and approved by Nebraska Medicine Antimicrobial Stewardship Program*

Table 1: Outpatient COVID-19 Treatment Comparison

	Nirmatrevlir/ritonavir (Paxlovid) PO	Remdesivir IV	Molnupiravir PO	Monoclonal Antibodies IV (-mAbs)
Efficacy in Unvaccinated Populations	RRR: 88% Absolute risk: 6.3→0.8% NNT: 18	RRR: 88% Absolute risk: 6.3→0.8% NNT: 18	RRR: 30% Absolute risk: 9.7%→6.5% NNT: 31	
Indications	Age ≥12 years and ≥40kg AND <u>within 5 days of</u> <u>symptom onset</u>	Age ≥28 days and ≥3.5kg AND <u>within 7 days of</u> <u>symptom onset</u>	Age ≥18 years AND <u>within 5 days of</u> <u>symptom onset</u>	
Dose	Nirmatrelvir 300 mg BID plus ritonavir 100 mg PO BID x 5 days	Ages ≥ 12 years: 200 mg on day 1, followed by 100 mg on D2 and D3	800 mg BID x 5 days	
Available at UNMC	Yes at DOC, LOC, BMC and Univ Health-Lincoln	Yes, 7 days/week at NM Werner Cancer Hospital, and M-F at BMC by request	Yes at DOC, LOC, BMC and Univ Health-Lincoln	No, authorization has been withdrawn by FDA due to high resistance
Common side effects	Dysgeusia, diarrhea	Mild: GI intolerance, LFTs abnormalities, infusion- related reactions	Diarrhea, Nausea, Anemia	
Drug interactions	YES, ritonavir can increase or decrease levels of drugs metabolized by P450 CYP3A and impacts many drugs. <u>Check drug to</u> <u>drug interactions.</u>	No	No	
Renal/Liver adjustment	For GFR 30-60 mL/min, reduce dose to nirmatrelvir 150mg BID w/ Ritonavir 100mg BID Not recommended if GFR <30 mL/min or with severe hepatic impairment (Child-Pugh Class C)	Benefits of use in hospitalized patients with renal disease and severe Covid-19 have outweighed risk, but use caution for patients with CrCl< 30 mL/min or pre- existing liver disease (cirrhosis)	No dose adjustment required but not studied in CKD	
Manipulate oral form?	No	NA	Yes, capsules can be opened and dissolved in applesauce/pudding or water for enteral feeding tube	
Pregnancy	Considered safe	Not contraindicated	Contraindicated	
Cost	Free to patient through mid-2023, dispensing fee billed to insurance	Medication and infusion charge to insurance, and generally covered	Free to patient through mid-2023, dispensing fee billed to insurance	