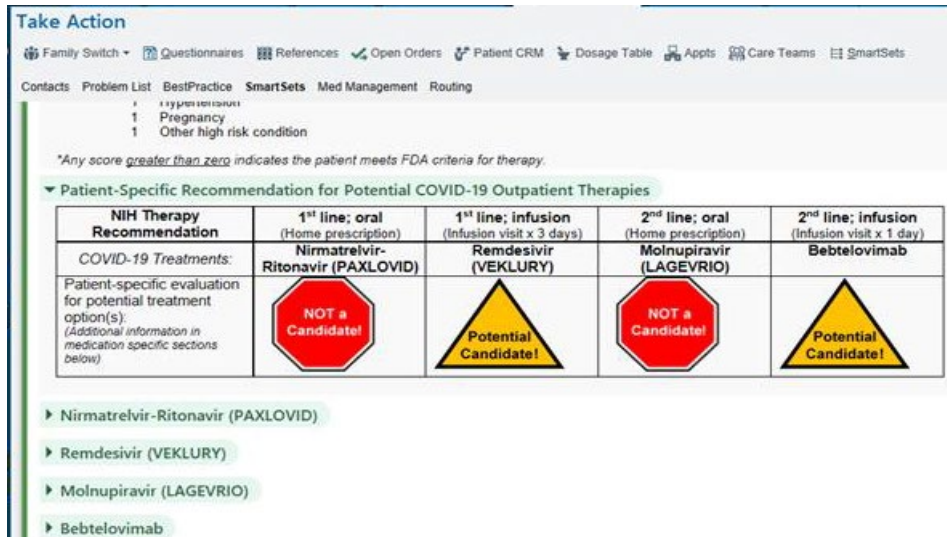


Outpatient COVID-19 Therapies Update (May 2022)

- With the predominance of the Omicron BA.2 variant in the area, many monoclonal antibodies previously used for COVID-19 are no longer effective or available
- There is now an adequate supply of new treatments available to order through the **Smartset: “COVID-19 Outpatient Treatment Options with Guidance” (Figure 1)**
 - Oral options: Must be started within **5 days** of symptom onset:
 - Nirmatrelvir-ritonavir (Paxlovid): 1st line
 - Molnupiravir
 - IV options: Must be started within **7 days** of symptom onset
 - Remdesivir
 - Bebtelovimab (monoclonal antibody)

Figure 1: Example of Smartset for Covid-19 Outpatient Treatment Options with Guidance



Take Action





Family Switch | Questionnaires | References | Open Orders | Patient CRM | Dosage Table | Appts | Care Teams | SmartSets

Contacts | Problem List | BestPractice | SmartSets | Med Management | Routing

1 Pregnancy
1 Other high risk condition

*Any score greater than zero indicates the patient meets FDA criteria for therapy.

▼ Patient-Specific Recommendation for Potential COVID-19 Outpatient Therapies

NIH Therapy Recommendation	1 st line; oral (Home prescription)	1 st line; infusion (Infusion visit x 3 days)	2 nd line; oral (Home prescription)	2 nd line; infusion (Infusion visit x 1 day)
COVID-19 Treatments:	Nirmatrelvir-Ritonavir (PAXLOVID)	Remdesivir (VEKLURY)	Molnupiravir (LAGEVRIO)	Bebtelovimab
Patient-specific evaluation for potential treatment option(s). (Additional information in medication specific sections below)				

► Nirmatrelvir-Ritonavir (PAXLOVID)

► Remdesivir (VEKLURY)

► Molnupiravir (LAGEVRIO)

► Bebtelovimab

- Treatment of COVID infection should consider [risk for severe illness](#) with therapies and time from symptom onset
 - Any patients 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 [EUA-required medication evaluation and education](#) has been completed. (Figure 2)
 - Electronically prescribe oral therapies to any Nebraska Medicine pharmacy location or send to an outside pharmacy, identified via the [Therapeutic Locator](#)
 - Patients should be instructed to pick up oral therapy prescriptions from the pharmacy the same day the prescription is written.
 - Curbside pick-up is preferred. Please include a note on the prescription if a courier is needed.
- Providers may request assistance with ordering therapies through the end of May by sending an email to the Pharmacy Outreach Team: pharmacyoutreachteam@nebraskamed.com or paging Antimicrobial Stewardship at (402) 888-0349

- Pharmacists in clinics or the Emergency Department will continue to assist with determining the best treatment options
- [For instructions on entering a therapy plan](#), please refer to the COVID Therapy Outpatient Infusion Tip Sheet, and contact the Infusion Center Pharmacist (402)559-0900 for assistance if needed
- All these therapies for COVID-19, except remdesivir, are currently available via an [FDA Emergency Use Authorization \(EUA\)](#), therefore off-label prescribing is not allowed

Figure 2: Example of ordering nirmatrelvir-ritonavir with EUA-required questions

Take Action

Family Switch Questionnaires References Dosage Table Appts Care Teams SmartSets

Contacts Problem List BestPractice SmartSets

Nirmatrelvir-Ritonavir

Additional guidance on nirmatrelvir-ritonavir therapy & drug-drug interactions:

- Consult the [FDA fact sheet](#)

nirmatrelvir-ritonavir (PAXLOVID) 150 mg x 2- 100 mg Tab Accept Cancel

Reference: 1. Fact Sheet 2. Patient Fact Sheet 3. Patient Fact Sheet (Spanish)

Links:

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-term: NIRMATRELVIR/RITONAVIR

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: *** (This is 5 days from symptom onset - if not picked up by this date, prescription should not be dispensed)

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 Normal Print Phone In No Print Sample

ⓘ 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.](#)

FDA's EUA requires the prescriber to discuss with the patient: 1. Contents of the EUA 2. Risks/benefits/alternative treatments available 3. Symptom onset w/in 5 days 4. Potential for drug-drug interactions 5. Appropriate dosing based on renal function

Discussion completed

Authorized Fact Sheet for patients and care givers has been provided

Yes Verbally reviewed fact sheet; will be provided by dispensing pharmacy

+ ADD ORDER **+ ADD DX (0)**

Table 1: Comparison of Outpatient COVID-19 Therapies

	Nirmatrelvir/ritonavir (Paxlovid) PO	Remdesivir IV	Molnupiravir PO	Bebtelovimab IV (monoclonal antibody)
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	RRR: Unknown, but expected to work similar to other mAbs (Absolute risk: 7%→1% NNT: 17)
Indications	Age ≥12 years and ≥40kg AND <u>within 5 days of symptom onset</u>	Age ≥28 days and ≥3.5kg AND <u>within 7 days of symptom onset</u>	Age ≥18 years AND <u>within 5 days of symptom onset</u>	Age ≥12 years and ≥40kg AND <u>within 7 days of 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	500 mg as a single IV infusion, over 30 min infusion and 1 hour post infusion observation
Available at UNMC	Yes, 7 days/week at NM DOC, LOC, BMC & University Health-Lincoln pharmacies	Yes, 7 days/week at NM Werner Cancer Hospital, and M-F at BMC by request	Yes, 7 days/week at NM DOC, LOC, BMC & University Health-Lincoln pharmacies	Yes, 7 days/week at NM Werner Cancer Hospital, and M-F at BMC by request
Common side effects	Dysgeusia, diarrhea	Mild: GI intolerance, LFTs abnormalities, infusion-related reactions	Diarrhea, Nausea, Anemia	Infusion-related reactions
Drug interactions	YES , ritonavir can increase or decrease levels of drugs metabolized by P450 CYP3A and impacts many drugs. Check drug to drug interactions.	No	No	No
Dose adjustment for Renal or Hepatic dysfunction	For GFR 30-60 mL/min, reduce dose to nirmatrelvir 150mg BID with Ritonavir 100mg BID Not recommended if GFR <30 mL/min or with severe hepatic impairment (Child-Pugh Class C)	Not recommended for patients with pre-existing liver disease (cirrhosis)	No dose adjustment required but not studied in CKD	No dose adjustment
Pregnancy Category	Not contraindicated	Not contraindicated	Contraindicated	Benefits may outweigh risks
Cost	Free to patient, small dispensing fee billed to insurance	Medication and infusion charge to insurance, and generally covered	Free to patient, small dispensing fee billed to insurance	Medication free to patient, charge for infusion billed to insurance