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
  - Monoclonal antibodies previously used are no longer authorized or available for treatment of COVID-19
- There is now adequate supply of multiple other therapies available to order through the Smartset: “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
  - IV options: 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

- Treatment of COVID infection should take into account risk for severe illness. 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 EUA-required 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 Therapeutic Locator
  - 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
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)

For treatment of inpatients, see NIH guidelines on hospitalized patients or institutional guidance available at: https://now.nebraskamed.com/infectious-diseases-protocols/

Reviewed and approved by Nebraska Medicine Antimicrobial Stewardship Program
<table>
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<tr>
<th></th>
<th>Nirmatrelvir/ritonavir (Paxlovid) PO</th>
<th>Remdesivir IV</th>
<th>Molnupiravir PO</th>
<th>Monoclonal Antibodies IV (-mAbs)</th>
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| **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 within 5 days of symptom onset | Age ≥28 days and ≥3.5kg  
AND within 7 days of symptom onset | Age ≥18 years  
AND within 5 days of symptom onset |  |
| **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. [Check drug to drug interactions.](#) | 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 |  |