

Paxlovid Treatment Guidance

Ritonavir-boosted nirmatrelvir (Paxlovid) is a safe and effective oral treatment for people with COVID-19 to prevent severe disease.

Indications for treatment:

1. Positive test for COVID-19 (rapid antigen test or nucleic acid amplification test)
2. Any symptomatic infection that does not require hospitalization
3. Within five days of symptom onset
4. ≥12 years old and weigh ≥40 kg
5. Any risk factor (see Table 1), including being unvaccinated or not up to date with COVID-19 vaccination

Dosing:

The standard dose of boosted nirmatrelvir is 300 mg of nirmatrelvir with 100 mg of ritonavir, taken twice a day for five days, dispensed as a single course in a blister pack. The dose should be reduced to nirmatrelvir 150 mg with ritonavir 100 mg twice daily in patients with moderate renal impairment (i.e., estimated glomerular filtration rate [eGFR] of ≥30 to <60 mL/min). Ritonavir-boosted nirmatrelvir is not recommended in patients with an eGFR of <30 mL/min or for patients with severe hepatic impairment (i.e., Child-Pugh Class C).

Adverse effects:

The most common adverse effects of ritonavir-boosted nirmatrelvir are dysgeusia, diarrhea, hypertension, and myalgia. Rarely people can develop a rebound of mild COVID-19 symptoms and positive tests after treatment.

Drug-drug interactions:

Ritonavir-boosted nirmatrelvir has significant drug-drug interactions with some medications, primarily due to the ritonavir component. Before prescribing ritonavir-boosted nirmatrelvir, clinicians should carefully review the patient’s concomitant medications, including over-the-counter medicines, herbal supplements, and recreational drugs.

Table 2. Common concomitant medications that interact with ritonavir-booster nirmatrelvir

Temporarily withhold, if clinically appropriate	Alternative COVID-19 therapy recommended	Adjust dose and monitor
Chemotherapy Clonazepam Colchicine HMG-CoA reductase inhibitors (statins) Rivaroxiban Salmeterol Tacrolimus	Amiodarone Carbamazepine Clopidogrel Clozapine Phenytoin Rifampin St. John’s Wort	Amlodipine Apixiban Cyclosporine Digoxin Oxycodone Tamsulosin Trazadone

This table is not a comprehensive list of all the drugs that may interact with ritonavir boosted nirmatrelvir. This table focuses on common concomitant medications that may be prescribed in the outpatient setting. Clinicians should refer to resources such as the [Liverpool COVID-19 Drug Interactions website](#), the [University of Waterloo drug interaction guide](#), and the [EUA fact sheet](#) for ritonavir boosted nirmatrelvir for additional guidance regarding potential drug-drug interactions.

Risk factors for severe COVID-19*

- Age ≥ 50 years old
- Cancer
- Chronic lung disease
- Chronic liver disease
- Chronic kidney disease
- Diabetes
- Disabilities
- Heart disease
- Immunocompromise
- Neurologic conditions
- Overweight/obesity
- Physical inactivity
- Pregnancy
- Smoking (history of)
- Stroke
- Substance use disorders

*For details, see: mass.gov/MedicalConditionsVaccine

