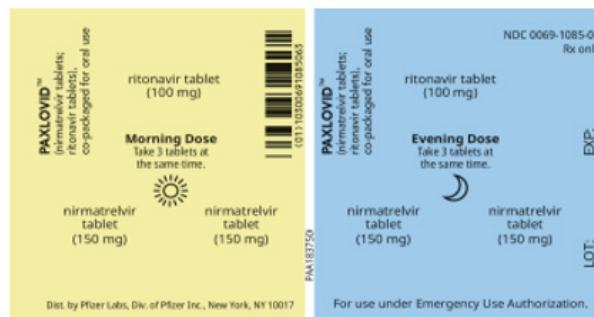


Nirmatrelvir/Ritonavir (Paxlovid™) Point-of-Care Reference

Last reviewed: 5/23/22

Nirmatrelvir/ritonavir (brand name Paxlovid™) has been FDA-authorized for emergency use to treat mild-to-moderate COVID-19 since December 2021.



CLINICAL INFORMATION

Eligibility: The nirmatrelvir/ritonavir EUA covers adults and pediatric patients 12 years and older weighing at least 40 kg (88 lb) with positive SARS-CoV-2 test results who are at high risk for progression to severe COVID-19. Nirmatrelvir/ritonavir is not recommended for patients with severe renal impairment.

Dosing: Nirmatrelvir/ritonavir is dispensed in blister packs that contain two 150 mg tablets of nirmatrelvir and one 100 mg tablet of ritonavir. Nirmatrelvir/ritonavir dosing varies by kidney function, as below, so in some cases, only one of the nirmatrelvir tablets will be needed (a 100 mg ritonavir tablet, however, is always given, regardless of renal function):

EGFR (CKD-EPI formula)	Dose of nirmatrelvir/ritonavir
>60 mL/min	300 mg nirmatrelvir + 100 mg ritonavir, twice daily for 5 days
30≤60 mL/min	150 mg nirmatrelvir + 100 mg ritonavir, twice daily for 5 days
<30 mL/min	Not recommended: Appropriate dosing has not been determined.

Clinical Decision-Making: In ambulatory patients with mild-to-moderate COVID-19 at high risk for progression to severe disease, [IDSA guidelines](#) suggest nirmatrelvir/ritonavir be initiated within 5 days of symptom onset (conditional recommendation, low certainty of evidence). [NIH guidelines](#) also suggest nirmatrelvir/ritonavir for nonhospitalized patients with mild-to-moderate COVID-19 who are at high risk of disease progression.

The Real-Time Learning Network's [COVID-19 Outpatient Treatment Guidelines Roadmap](#) and HHS's [COVID-19 Therapeutics Clinical Decision Aid](#) offer paths to evaluate current U.S. treatment options.

DRUG-DRUG INTERACTION

Because this medication is co-formulated with ritonavir as a pharmacokinetic booster, and ritonavir can alter levels of many drugs, clinicians should be aware of and identify any potential drug interactions. At the same time, NIH guidelines advise that "drug-drug interactions that can be safely managed **should not** preclude the use of this medication."

The following resources may aid clinical decision-making:



[FDA Patient Eligibility Screening Checklist Tool for Prescribers \[PDF\]](#)

This printable checklist includes a patient screening guide and lists drugs with established and/or potentially significant interactions. Drugs are listed as either contraindicated or as requiring additional management (i.e., avoiding and/or holding of the drug, dose adjustment, or special monitoring).



[IDSA Clinical Guide to Management of Nirmatrelvir/Ritonavir Drug Interactions](#)

This clinical reference lists steps to take in order minimize risk of interactions and provides information on the management of commonly prescribed medications that are known to interact with nirmatrelvir/ritonavir.



[NIH Guide to Drug-Drug Interactions Between Ritonavir-Boosted Nirmatrelvir & Concomitant Medications](#)

This visual guide identifies outpatient medications that have clinically relevant drug-drug interactions and suggests several tiers of management strategies; it also lists commonly prescribed medications with no interactions that may be co-administered without dose adjustment/increased monitoring.



[HIVMA Treatment Considerations for People With HIV & Hepatitis C](#)

This resource outlines considerations for treating COVID-19 in people with HCV or HIV, and how to handle their ART and HCV medications.

SAFETY

The FDA EUA [fact sheet for providers](#) lists the following side effects that occurred more frequently among the clinical trial participants taking ritonavir-boosted nirmatrelvir than among those taking placebo: dysgeusia (6% and <1%, respectively), diarrhea (3% and 2%), hypertension (1% and <1%), and myalgias (1% and <1%). The proportions of subjects who discontinued treatment due to an adverse event were 2% in the ritonavir-boosted nirmatrelvir group and 4% in the placebo group.

Viral Rebound

According to [NIH guidelines](#), "case reports have described SARS-CoV-2 viral rebound [i.e., recurrence of positive SARS-COV-2 testing after initially converting to a negative test] and the recurrence of COVID-19 symptoms in some patients who have completed treatment with ritonavir-boosted nirmatrelvir" (see [Charness, May 2022 – preprint, not peer-reviewed](#)). As ongoing safety monitoring continues, "the frequency, mechanism, and clinical implications of these events are not yet known." According to the [FDA fact sheet](#), this phenomenon was also observed in the clinical trials of ritonavir-boosted nirmatrelvir, and viral rebound at Day 10 or Day 14 after treatment initiation occurred in 2% of participants on the study drug as well as 1.5% of participants on placebo, a difference that was not statistically significant. In the initial analysis, there was no clear signal of resistance to ritonavir-boosted nirmatrelvir either at baseline or after treatment, and no difference in possible resistance-associated mutations between the treatment group and the placebo group. Further FDA monitoring of these events is ongoing, and further data and research are needed in order to properly interpret them.

SUPPLY & ACCESS

Distribution: Nirmatrelvir/ritonavir is currently available in limited quantities in the U.S. and is being allocated by the federal government to health departments in states, territories and jurisdictions as well as select community health centers.

For allocation details, refer to [HHS's distribution summaries](#); for information intended for health providers, see [HHS's COVID-19 Therapeutics Locator](#); for patient-facing information, refer to HHS's [Test-to-Treat COVID-19 Medication Locator](#).

CODING, BILLING & REPORTING

Coding:

Drug Name	Dosage	Package Size	NDC
Paxlovid™ EUA	300-100 mg	6 tablets	00069-1085-06
Paxlovid™ EUA	300-100 mg	30 tablets	00069-1085-30
Paxlovid™ EUA	150-100 mg	20 tablets	0069-1101-20

Billing: Paxlovid™ has been added by the Health and Human Services Commission to the Medicaid and Children's Health Insurance Program (CHIP) formularies as a payable pharmacy benefit.

Reporting: Providers are required to report federally purchased course administration daily by 11:59 p.m. ET via HHS's [Health Partner Order Portal](#).

FURTHER INFORMATION

[Real-Time Learning Network Paxlovid™ Literature Reviews](#)

[FDA Paxlovid™ EUA Fact Sheet for Healthcare Providers](#)

[NIH Treatment Guidelines Panel Statement on Patient Prioritization](#)

[HIVMA Considerations for People with HIV and Hepatitis C](#)

[University of Liverpool COVID-19 Drug Interactions](#)

[IDSA Clinical Guide to Management of Nirmatrelvir/Ritonavir \(Paxlovid\) Drug Interactions](#)