

Nirmatrelvir-ritonavir for COVID-19



Guidance for
health care workers

Nirmatrelvir is an orally available antiretroviral 3C-like protease (3CL PRO) inhibitor.

Nirmatrelvir is co-administered with ritonavir, a HIV protease inhibitor, used in this context to boost nirmatrelvir.

Nirmatrelvir and ritonavir should be considered antiviral monotherapy and is active against SARS-CoV-2, including Alpha, Beta, Gamma, Delta and Omicron variants of concern.

CLINICAL INDICATIONS

Patients with confirmed non-severe COVID-19 **AND** those:

- at **highest risk** for hospitalization; and
- with symptoms **less than 5 days**.

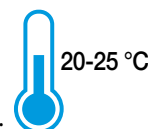
Those at highest risk are typically those that lack COVID-19 vaccination, with older age and/or chronic conditions, such as: hypertension, diabetes, cardiac disease, chronic lung disease, cerebrovascular disease, dementia, mental disorders, chronic kidney disease, immunosuppression (including HIV), obesity, and cancer.

AVAILABLE FORMULATION AND STORAGE

- Nirmatrelvir must be co-administered with ritonavir and is co-packaged.
 - Nirmatrelvir is available in 150 mg tablets.
 - Ritonavir is available in 100 mg tablets.



- Failure to co-administer ritonavir will result in insufficient plasma concentrations of nirmatrelvir to achieve the desired therapeutic effect.
- Store tablets at room temperature (20–25 °C).



DOSAGE AND ROUTE

Route

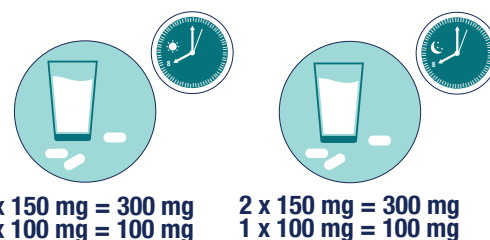
The route of administration is oral (by mouth). Tablets should be swallowed whole and not be chewed, opened, broken or crushed for dispersion.

Dose and duration

In patients with normal renal function, the dose is 300 mg nirmatrelvir (two 150 mg tablets) with 100 mg ritonavir (one 100 mg tablet) taken together orally every 12 hours daily for a total of 5 days.

Dose adjustment

Nirmatrelvir-ritonavir requires adjustment in patients with renal impairment.



eGFR (mL/min/1.73 m ²)	Recommended dose (nirmatrelvir-ritonavir) x 5 days. Adults > 18 years age
≥ 60	300 mg - 100 mg orally every 12 hours
30–60	150 mg - 100 mg orally every 12 hours
< 30	Not recommended
Haemodialysis	Not recommended
Continuous renal replacement therapy (CRRT)	Not recommended

Nirmatrelvir-ritonavir does not require adjustment in patients with hepatic impairment. Caution should be taken when prescribed in those with pre-existing liver diseases, liver enzyme abnormalities or hepatitis. It should not be used in patients with advanced liver disease.

