Ritonavir - boosted Nirmatrelvir (Paxlovid®) prescribing guidelines for the treatment of COVID-19
(Version 2.0)

General Prescribing Guidance:

- Ritonavir-boosted nirmatrelvir (Paxlovid) is an oral antiviral used for the treatment of confirmed mild to moderate COVID-19 cases (no O2 requirements/no evidence of pneumonia but with other symptoms of covid-19e.g., fever) in <u>outpatients</u> (including non- hospitalized patients, patients seen in primary healthcare center, outpatient clinics, outpatient emergency visits) who are at high risk for progression to severe illness.
- This medication should **NOT** be used for hospitalized patients.
- This medication should **NOT** be used for preexposure prophylaxis forprevention of covid-19 disease.
- Patients who are at high risk of progression to severe illness include but are not limited to:
    - Cancer
    - Chronic Kidney Disease (CKD)
    - Chronic liver disease
    - Chronic lung disease
    - Cystic fibrosis
    - Dementia or other neurological conditions
    - Diabetes
    - Patients with disabilities
    - Heart diseases
    - HIV infection
    - Immunocompromised patients
    - Mental health conditions
    - Overweight and obese patients
    - Physical inactivity
    - Pregnancy
    - Sickle cell or thalassemia patients
    - Solid organ or blood stem cell transplant patients
    - Stroke or cerebrovascular disease
    - Substance use disorders
    - Tuberculosis patients
- This medication should <u>only be started within 5 days</u> of onset of symptoms.
- Dosing adjustment in renal failure is required. However, in patients with noknown history of CKD, <u>there is no need for ordering SCr</u> prior to starting therapy

- Inclusion criteria:

1. Age ≥12 years
2. Weighing at least 40 kg
3. Non-hospitalized patients at high risk for progression to severe COVID-19 to prevent hospitalization or death
4. Within 5 days of symptoms onset
5. All patients with symptoms (antigen test positive) who are ≥50 years of age regardless of risk factors.
6. High-risk patients (12-49 years old) with one or more risk factors for disease progression

- Exclusion criteria

1. Age < 12 years
2. Weight < 40 kg
3. Current need for hospitalization/immediate medical attention in a clinic/emergency room service due to COVID-19

Medication name	Dosing information
Ritonavir-boosted Nirmatrelvir (Paxlovid)	**COVID-19 (Mild to Moderate), Patients at high risk for progression to severe COVID-19** • Nirmatrelvir 300 mg (two 150-mg tablets) with ritonavir 100 mg (one 100-mg tablet); administer all three tablets together orally twice daily with or without food for 5 days; initiate as soon as possible after COVID-19 diagnosis and within 5 days of symptom onset. • Missed dose: If a dose is missed within 8 hours of the time it is usually taken, administer as soon as possible and resume the normal dosing schedule; if a dose is missed by more than 8 hours, do not administer the missed dose and instead administer the next dose at the regularly scheduled time. Do notdouble the dose to make up for a missed dose. **Dose Adjustments** • Renal impairment (mild; estimated GFR 60 to less than 90 mL/min): No adjustment necessary • Renal impairment (moderate; estimated GFR 30 to less

	than 60 mL/min): Nirmatrelvir 150 mg and ritonavir 100 mg twice daily for 5 days. If the nirmatrelvir 150 mg/ritonavir 100 mg dose pack is unavailable, removal of 1 nirmatrelvir tablet from themorning and evening doses of all blister packs is required prior to dispensing. Renal impairment (severe; estimated GFR less than30 mL/min): Use not recommended; appropriate dosage for this population has not yet been determined. Systemic exposure of nirmatrelvir increases in renally impaired patients
	• Hepatic impairment (mild to moderate; Child-Pugh Class A or B): No adjustment necessary
	• Hepatic impairment (severe; Child-Pugh Class C): Use not recommended; no pharmacokinetic or safetydata are available for this population
	Pregnancy & Lactation
	Fetal risk cannot be ruled out. *Breast Feeding, Infant risk cannot be ruled out.*

References:

1. Micromedex®: Nirmatrelvir/Ritonavir, last access May 7, 2023
2. Saudi MoH Protocol for Patients Suspected of/Confirmed with COVID-19,(Version 3.9) April 14th, 2023
3. https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html, updated Feb 10, 2023