



Lowering Risks Associated with COVID-19



Routine Vaccination
Recommended for all CKD stages and transplant recipients. Booster doses may be needed.



Infection Prevention
Enhanced hand hygiene and masking in healthcare settings, dialysis units, and crowded areas.



Early Testing & Diagnosis
Monitor for symptoms and engage prompt rapid antigen or PCR testing.

COVID-19 Treatment Options for People with CKD

Treatment is recommended for patients with CKD or kidney transplant recipients and mild/moderate COVID-19 - started as soon as possible, with the goal of reducing progression to hospitalization and death.

PAXLOVID (NIRMATRELVIR/RITONAVIR)

Oral option for adults (and children ≥ 12 years old and ≥ 40 kg under EUA) within 5 days of symptom onset.

Standard Dose Pack (eGFR ≥ 60 mL/min)	Day 1	Day 2	Day 3	Day 4	Day 5
Nirmatrelvir	2 tablets twice daily (morning and bedtime)				
Ritonavir	1 tablet twice daily (morning and bedtime)				
Reduced Dose Pack (eGFR ≥ 30 to <60 mL/min)	Day 1	Day 2	Day 3	Day 4	Day 5
Nirmatrelvir	1 tablet twice daily (morning and bedtime)				
Ritonavir	1 tablet twice daily (morning and bedtime)				
Severe Renal Impairment Dose Pack (eGFR <30 mL/min, including HD)	Day 1	Day 2	Day 3	Day 4	Day 5
Nirmatrelvir	2 tablets	1 tablet once daily			
Ritonavir	1 tablet	1 tablet once daily			

Pertinent Information

- Advise patients to administer all tablets within each blister pack together and swallow tablets whole
- For a missed dose, take as soon as you remember only if <8 hours have passed from the time it was supposed to be taken. Otherwise, skip the dose and take next one as regularly scheduled. Do not double-up doses.
- Complete the full 5-day course as prescribed – do not stop early.
- The most common side effects from clinical trials are **dysgeusia (altered taste)** and **diarrhea**.
- Reports during the Emergency Use Authorization (EUA) period have also included anaphylaxis & hypersensitivity reactions, headache, hypertension, abdominal pain, and malaise.
- Paxlovid (nirmatrelvir/ritonavir) has multiple drug interactions (including herbal supplements and OTC products) via CYP3A4. This is especially critical for kidney transplant recipients. For specific assistance, consult a reliable reference such as the [Liverpool COVID-19 Interaction Checker](#).

VEKLURY (REMDESIVIR)

Pertinent Information

- IV option for adults and pediatric patients ≥ 1.5 kg within 7 days of symptom onset
- Must be administered in a healthcare setting with access to anaphylaxis medications and ability to activate the emergency medical system.
- Prior to initiation, check liver function and prothrombin time as clinically appropriate.
- The most common side effects from clinical trials are **nausea, abdominal pain, diarrhea** and **elevated transaminases**. Rare but serious reactions include anaphylaxis & hypersensitivity reactions, generalized seizure, and rash.
- Reports during the EUA period have also included extravasation and infusion-related reactions.

Dosing

- **Adults and pediatric patients ≥ 40 kg:** 200 mg IV on Day 1; 100 mg IV once daily from Day 2*
- **At least 28 days old and 3 kg to <40 kg:** 5 mg/kg IV on Day 1; 2.5 mg/kg IV once daily from Day 2*
- **Infants <28 days and ≥ 1.5 kg, or ≥ 28 days and 1.5 to <3 kg:** 2.5 mg/kg IV on Day 1; 1.25 mg/kg IV once daily from Day 2*
- ***Recommended treatment duration:**
 - **Outpatient (not hospitalized):** maximum 3 days
 - **Hospitalized patients not requiring invasive mechanical ventilation and/or ECMO:** 5 days, may be extended for up to 5 additional days (max of 10 days).
 - **Hospitalized patients requiring invasive mechanical ventilation and/or ECMO:** 10 days.

LAGEVRIO (MOLNUPIRAVIR)

Pertinent Information

- Oral option for adults within 5 days of symptom onset available under EUA **if options above cannot be used or are unavailable.**
- Dosage is 800mg by mouth every 12 hours for 5 days, with or without food.
- No dosage adjustment needed for eGFR <30 or dialysis, though not studied in these populations.
- Women who can become pregnant and their partners should use birth control. Avoid in pregnant women due to risk of embryo-fetal toxicity.
- For a missed dose, take as soon as you remember only if <10 hours have passed. Otherwise, skip the dose and take next one as regularly scheduled. Do not double-up doses.
- Complete the full 5-day course as prescribed – do not stop early.
- The most common side effects are **diarrhea, nausea, and dizziness**. Reports during the EUA period have also included anaphylaxis & hypersensitivity reactions, vomiting, erythema, pruritic rash, and urticaria.

REFERENCES

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For more information, contact the National Kidney Foundation

Toll-free help line: **855.NKF.CARES** or email: nkfcare@kidney.org



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