

MARY T. BASSETT, M.D., M.P.H. Commissioner

KRISTIN M. PROUD
Acting Executive Deputy Commissioner

September, 2022

Governor

Re: COVID-19 Prevention & Treatment for Patients With HIV: Vaccines and Nirmatrelvir/Ritonavir (Paxlovid)

Dear Colleague,

The importance of fully and appropriately vaccinating your patients with HIV against COVID-19 cannot be understated. Vaccination against COVID-19 protects our patients from severe illness and complications and keeps patients out of hospitals. Whether they are referred to as "boosters" or not, the third and fourth inoculations in the COVID-19 mRNA vaccination series are effective and appropriate for our immunocompromised patients.

Despite the solid and proven effectiveness of the current COVID-19 vaccines, breakthrough infections and the potential for yet more potent or infectious variants continue to pose risks for even those fully vaccinated and boosted as well as those who have not been vaccinated and/or not boosted.

Patients with HIV and COVID-19 are at high risk of progression to severe disease. For all those with mild-to-moderate symptomatic COVID-19 infections oral nirmatrelvir/ritonavir (Paxlovid) should be the immediate therapeutic option to consider. Nirmatrelvir/ritonavir has FDA Emergency Use Authorization (EUA) to treat mild-to-moderate COVID-19 in patients at high risk of progression to severe disease and who are ≥12 years of age and weigh at least 40 kg. (88 lbs.). In such patients, guidelines suggest nirmatrelvir/ritonavir be initiated within 5 days of symptom onset.

Nirmatrelvir/ritonavir (Paxlovid) requires a prescription; and dosing information, per the <u>FDA Fact Sheet</u> <u>for Healthcare Providers</u> is in the chart below. Note that there are dosage adjustments required in patients with renal impairment:

<b>Estimated Glomerular</b>	Nirmatrelvir Dose	Ritonavir Dose
Filtration Rate (eGFR)		
eGFR <u>&gt;</u> 60 mL/minute	300 mg every 12 hours for 5 days	100 mg every 12 hours for 5 days
eGFR ≥ 30 to < 60 mL/minute	150 mg every 12 hours for 5 days	100 mg every 12 hours for 5 days
eGFR ≤ 30 mL/minute	Nirmatrelvir is not recommended	

The availability and supply of nirmatrelvir/ritonavir is dictated by federal allocation. In New York State outside of the 5 boroughs of New York City, the Department of Health and Human Services' <a href="COVID-19">COVID-19</a>
<a href="Therapeutics Locator">Therapeutics Locator</a> and <a href="Medication Locator">Medication Locator</a> should be used. Within New York City the <a href="COVID-19">COVID-19</a>:
<a href="Outpatient Therapeutic Information for Providers - NYC Health should be utilized.</a>

As ritonavir is contained in the product, there are multiple potential drug-drug interactions associated with its use due to its potent effect on CYP450. Many concurrent medications will likely need to be assessed by clinicians prior the use of nirmatrelvir/ritonavir (Paxlovid). The following resources can assist clinicians in minimizing the risk of drug interactions:

- the FDA's PAXLOVID Patient Eligibility Screening Checklist Tool for Prescribers;
- the Infectious Disease Society of America's <u>Management of Drug Interactions With</u> Nirmatrelvir/Ritonavir (Paxlovid®): Resource for Clinicians; and
- the <u>Liverpool COVID-19 Drug Interactions website</u> (This is an ex-US site and may not reflect current guidance in the EUA.)

*Please note:* Of the Top 100 used medications in the United States, two medications are absolute contraindications: rivaroxaban and salmeterol.

Please utilize the resources listed here or other trustworthy sources in ensuring that each patient receiving nirmatrelvir/ritonavir (Paxlovid) has their medications, including over the counter and herbal medications and supplements, screened for potential issues with drug interactions.

For patients receiving concurrent HIV treatment regimens, providers *should not* instruct patients to discontinue or hold their HIV treatment during concurrent nirmatrelvir/ritonavir therapy including patients receiving the HIV "boosters" ritonavir or cobicistat. However, in settings where ritonavir may be considered contraindicated, i.e. in severe hepatic insufficiency, consultation with HIV experts may be warranted. To consult an HIV expert, call the NYSDOH AIDS Institute's CEI Line at 1-866-637-2342, and press option #3.

NIH recommends *prescribing an alternative* COVID-19 therapy for patients receiving any of these medications listed:

amiodarone	dofetilide	ivabradine	ranolazine
apalutamide	dronedarone	lumateperone	rifampin
bosentan	eplerenone	lurasidone	rifapentine
carbamazepine	ergot derivatives,	mexiletine	rivaroxaban
cisapride	flecainide	phenobarbital	sildenafil**
clopidogrel	flibanserin	phenytoin	St. John's wort
clozapine	glecaprevir/pibrent-	pimozide	tadalafil**
colchicine*	asvir	propafenone	ticagrelor
disopyramide		quinidine	vorapaxar

<sup>\*</sup>in patients with renal and/or hepatic impairment \*\*for pulmonary hypertension

NIH recommends withholding or substituting if clinically appropriate if the patient is receiving any of these medications (if withholding is not clinically appropriate, use an alternative medication):

alfuzosin	fentanyl	piroxicam	suvorexant
alprazolam	hydrocodone	propoxyphene	tacrolimus
atorvastatin	lomitapide	rosuvastatin	tadalafil*
avanafil	lovastatin	salmeterol	tamsulosin
clonazepam codeine cyclosporine diazepam	meperidine(pethid- ine) midazolam (oral) oxycodone	sildenafil* silodosin simvastatin sirolimusb	tramadol triazolam vardenafil

everolimus

\*for erectile dysfunction

I thank you for your work in protecting vulnerable people, such as those with HIV, against COVID-19 with the effective, life-saving tools that we now have available to us.

Sincerely,

Charles John Gonzalez, M.D. Medical Director AIDS Institute

## **Additional Resources:**

ClinCalc DrugStats Database

**Eliquis Prescribing Information** 

Fact Sheet for Healthcare Providers: Emergency Use Authorization for Paxlovid®

Nirmatrelvir/Ritonavir (Paxlovid®): What Prescribers and Pharmacists Need to Know

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

Paxlovid Package Insert

Paxlovid® Patient Eligibility Screening Checklist Tool for Prescribers

Pfizer: Potentially Significant Drug Interactions, including Contraindicated Drugs PAXLOVID

**Seroquel Prescribing Information** 

U.S. Department of Health and Human Services Important Paxlovid Updates

For patients:

What People Living with HIV Should Know About COVID-19 Vaccination and Treatment