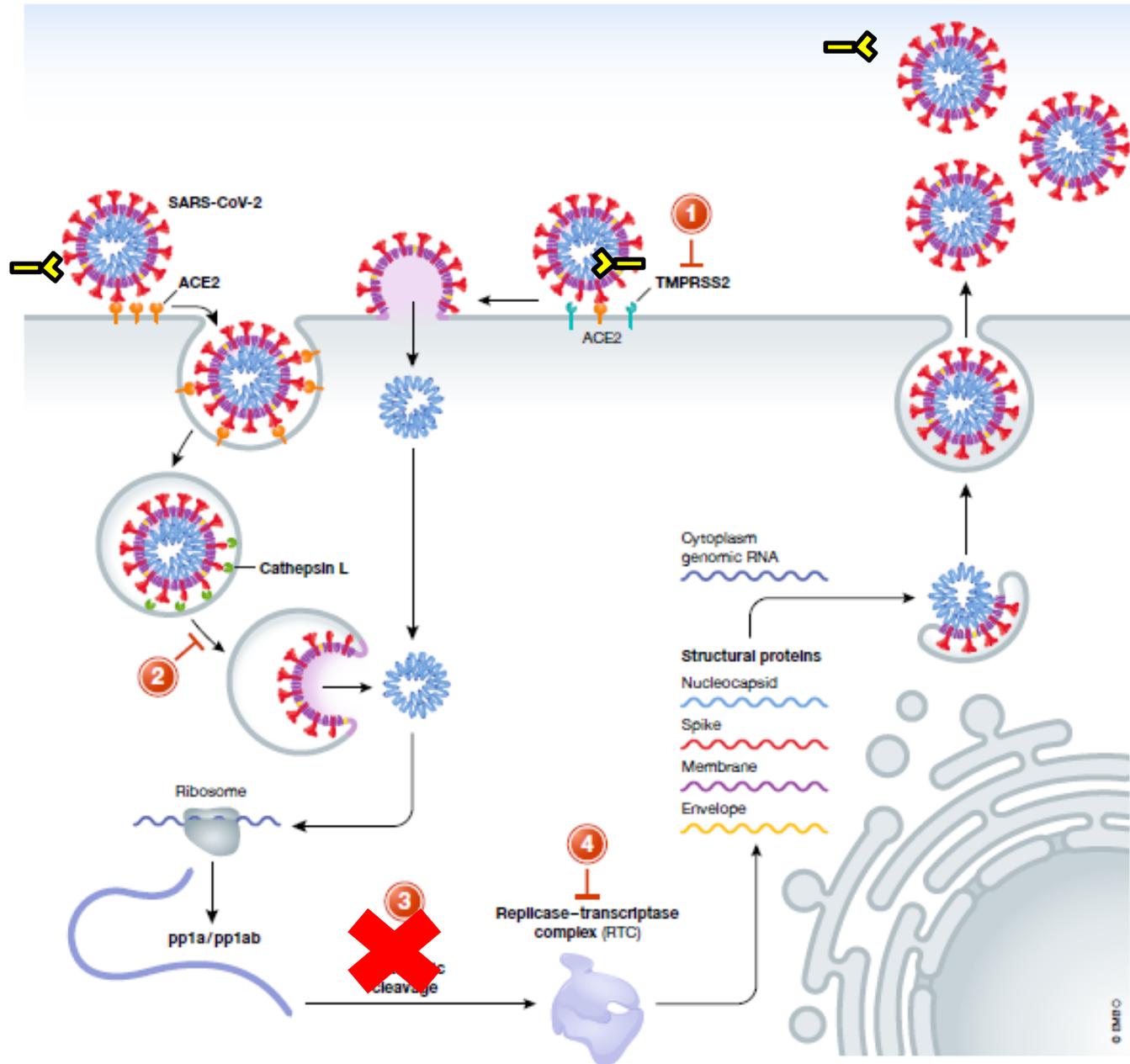


Outpatient Access to COVID-19 Treatments

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 sotrovimab
 Paxlovid

Sotrovimab evidence

- NEJM interim 583 patients Preprint final 1,057 patients
- High risk UNVACCINATED outpatients \leq 5 days sx
 - Age \geq 55 or DM/BMI 30/CKD CrCl $<$ 60/CHF/COPD/Asthma
 - August 2020-March 2021 (native strain, some alpha VOC)
- Primary endpoint: All-cause hospitalization D29 / death
 - Interim: 3/291 (1%) vs. 21/292 (7.2%). 85% reduction p 0.002
 - Final: 6/528 (1.1%) vs. 30/529 (5.7%). 79% reduction p $<$ 0.001

 - NNT 16-22

Paxlovid™ evidence

- EPIC-HR study (not published) July-Dec 2021 (Alpha/Delta)
 - 2,246 unvaccinated adults, confirmed SARS-CoV-2 / symptoms within 5 days
 - At least 1 high risk characteristic
- Within 3 days Sx
 - 5/697 (0.7%) of vs. 44/682 (6.5%) hospitalized or died (deaths 0 vs. 9). $p < 0.0001$
- Within 5 days Sx
 - 8/1039 (0.8%) vs. 66/1046 (6.3%) hospitalized or died (deaths 0 vs. 12). $p < 0.0001$
- Age >65
 - 1/94 (1.1%) vs. 16/98 (16.3%) hospitalised (deaths 0 vs. 6). $p < 0.0001$

Paxlovid™ (nirmatrelvir/ritonavir) vs Sotrovimab - similarities

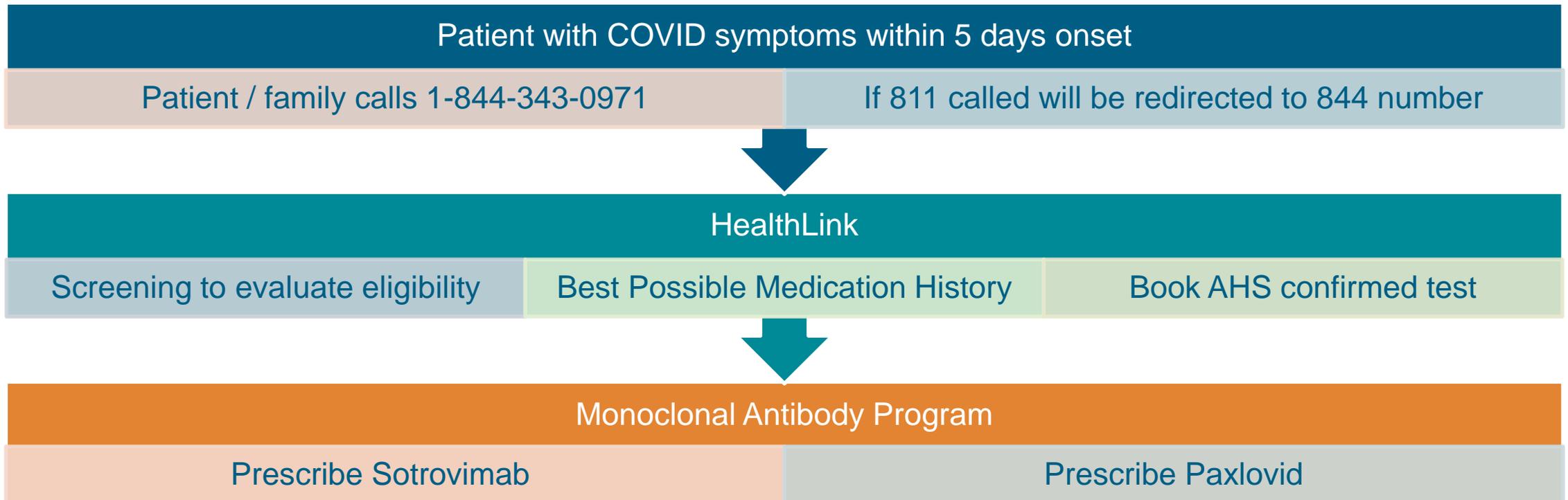
	Sotrovimab 500mg IV once	Nimatrelvir 300mg / Ritonavir 100mg PO BID x 5 days
Eligibility	UNDERvaccinated Age ≥ 55 or UNDERvaccinated Age ≥ 18 AND 1+ high risk medical condition or Immunocompromised, regardless vaccination status	UNDERvaccinated Age ≥ 55 or UNDERvaccinated Age ≥ 18 AND 1+ high risk medical condition** or Immunocompromised, regardless vaccination status
Clinical outcomes	COMET-ICE RR 0.20 hospitalization or death ARR 4.6% NNT 22	EPIC HR RR 0.15 hospitalization or death ARR 5.7% NNT 18

Paxlovid™ (nirmatrelvir/ritonavir) vs Sotrovimab - differences

Administration	Sotrovimab 500mg IV once	Nimatrelvir 300mg / Ritonavir 100mg PO BID x 5 days
Renal dose adjustment	Not required	eGFR \geq 60mL/min/1.73m ² : Nirmatrelvir/ritonavir 300/100mg BID x 5 days (3 pills BID) eGFR 30-59mL/min/1.73m ² : Nirmatrelvir/ritonavir 150/100mg BID x 5 days (2pills BID)
Drug-drug interactions	Minimal	Many

Accessing Paxlovid or Sotrovimab

Information available at: www.ahs.ca/covidopt



Accessing Paxlovid™ or Sotrovimab

- 1-844-343-0971 is the Health Link dedicated line to be evaluated for eligibility
 - This is the number provided to patients when they receive a text notification for a positive AHS confirmed test
 - The caller will be asked to leave a message
 - The target is to respond within the day – clinicians do evaluations 7 days a week from 0800 to 2000
 - A family member can call on their behalf, but a clinician cannot (except in LTC)

Accessing Paxlovid™

- COVID infection within 5 days of symptom onset
- Meet eligibility criteria
- Do not have exclusion criteria
- Are not receiving absolutely contraindicated drugs or are able to manage relatively contraindicated drugs

Paxlovid™ Eligibility criteria

- Patient must have a AHS confirmed COVID-19 infection
 - If the patient has a positive RAT – need to book a AHS confirmed test ASAP to qualify
 - A positive RAT will start Paxlovid™ assessment by MAPP but will require AHS confirmed test to start treatment
 - Patients requiring AHS confirmed test to determine eligibility for Paxlovid™ are prioritized for testing

Paxlovid™ Eligibility criteria

- Received 0 or 1 doses of 2 dose vaccine and
 - Age 55 and older or
 - Age 18 and older with a pre-existing health condition including
 - diabetes (taking medication for treatment)
 - obesity (BMI >30)
 - chronic kidney disease (estimated glomerular filtration rate, <60 ml per minute per 1.73 m² of body-surface area)
 - congestive heart failure (New York Heart Association class II, III, or IV)
 - chronic obstructive pulmonary disease, and moderate-to-severe asthma OR
 - Pregnant

Paxlovid™ Eligibility criteria

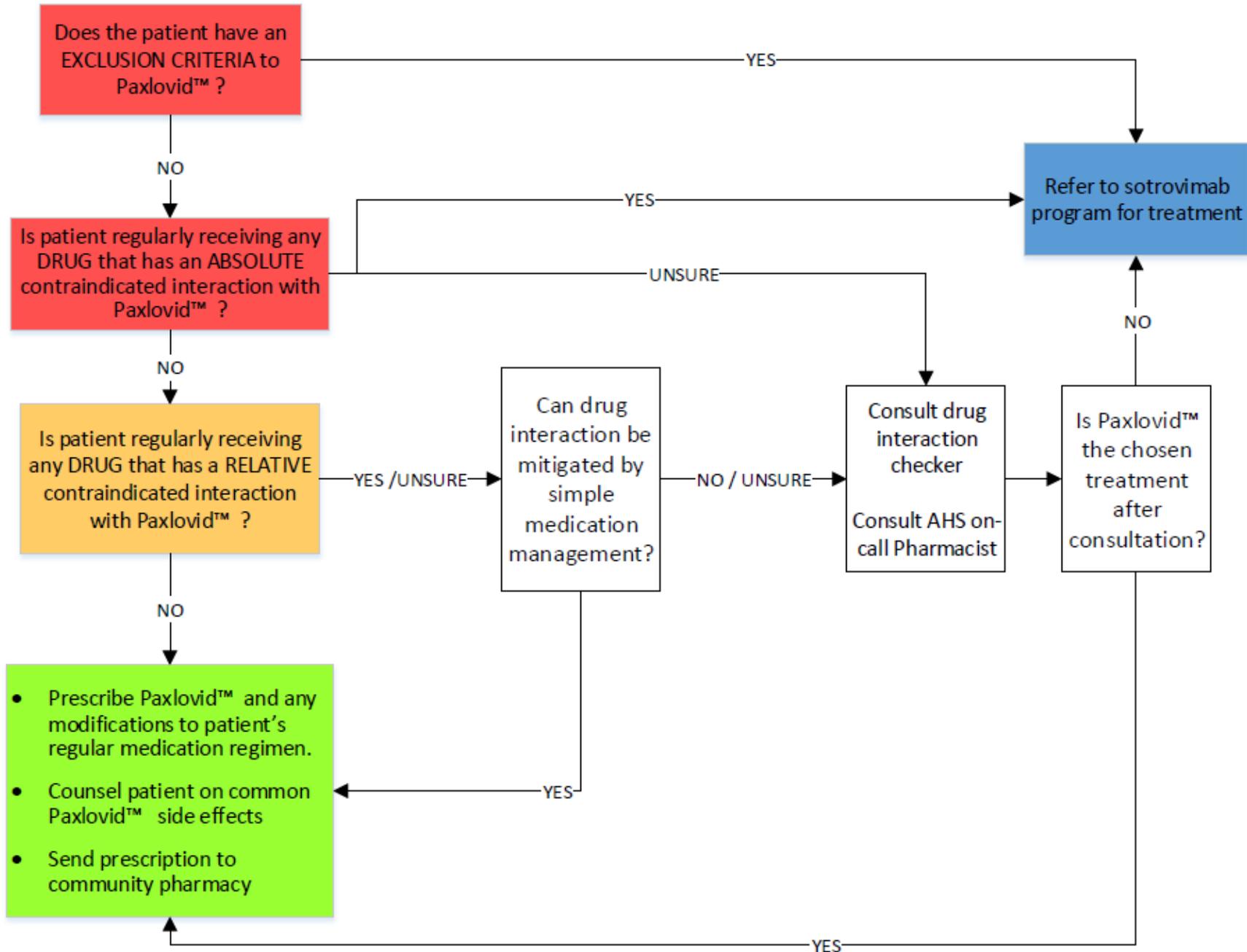
- Immunocompromised, due to one of the following reasons (vaccinated or unvaccinated):
 - have received a transplant*
 - is an oncology patients who has received a dose of any IV or oral chemotherapy or other immunosuppressive treatment since December 2020
 - has an inflammatory condition (e.g. rheumatoid arthritis, lupus, inflammatory bowel disease) receiving a dose of any systemic immunosuppressive treatment since December 2020.
- *most will preferentially receive sotrovimab
 - Bone Marrow(donor) transplant if beyond their 3 months post allogenic transplant AND no other absolute drug contraindications

Paxlovid™ vs Sotrovimab

- Paxlovid™ offered preferentially unless absolute contraindication or exclusion
 - Where absolute contraindication or exclusion, sotrovimab is offered preferentially
- Where the patient has a relative drug contraindication to Paxlovid™ concurrent drug(s) should be assessed to determine risk : benefit of receiving Paxlovid™
- Availability will determine agent chosen if stocks limited

Paxlovid™ prescribing process

- Screening done by Healthlink
- Patients eligible for Paxlovid™ will be asked to obtain Best Possible Medication History to include:
 - Prescription medications
 - Non-Prescription medications
 - Herbal medications / natural products



Paxlovid™ prescribing algorithm for MAPP

- Prescribe Paxlovid™ and any modifications to patient's regular medication regimen.
- Counsel patient on common Paxlovid™ side effects
- Send prescription to community pharmacy

Paxlovid™ Exclusions

- To simplify prescribing approach
- Excluded medical conditions where common medications cannot be easily managed during Paxlovid™ therapy (e.g. cyclosporine)
 - Transplant*, Tuberculosis, Pulmonary Hypertension or eGFR <30 mL/min/1.73m² in past 6 months
 - *except BMT patients 3months post allogenic donor transplant

Paxlovid™ Contraindications

- Ritonavir is potent CYP 3A4 inhibitor, affecting metabolism of concurrent drugs in liver
- Ritonavir & nirmatrelvir are CYP substrates, affected by concurrent medications → treatment failure, viral resistance
- AHS Paxlovid™ Drug Interactions chart
 - Adapted from: [Statement on Paxlovid™ Drug-Drug Interactions | COVID-19 Treatment Guidelines \(nih.gov\)](#) , [DDI Booklet 2019_English.pdf \(hivclinic.ca\)](#) and [FACT SHEET FOR HEALTHCARE PROVIDERS: EMERGENCY USE AUTHORIZATION FOR PAXLOVID \(fda.gov\)](#) and LexiComp® Drug Interaction database
 - Differences from other references/resources to simplify prescribing and anticipate frequently asked questions
 - Not exhaustive

AHS Paxlovid™ Drug Interactions chart

ABSOLUTE contraindication (must use sotrovimab)			RELATIVE Contraindication (may use Paxlovid™, consult pharmacist or interaction checker)	Indicated (may use Paxlovid™™ with simple medication management)	Medication management		
Acalabrutinib Amiodarone Apalutamide Bosentan Bosutinib Carbamazepine Clozapine Colchicine in renal and/or hepatic impairment Dasatinib Digoxin Doxorubicin Dronedarone Eplerenone Ergot derivatives Flecainide Flibanserin Glecaprevir/pibrentasvir Hydroxychloroquine & high risk QT prolongation Ibrutinib Ivabradine Lurasidone Mexiletine Midostaurin Nilotinib Phenobarbital Phenytoin	Pimozide Ponatinib Propafenone Quinidine Ranolazine Rifampin Rifapentine Ruxolitinib Vincristine Venetoclax Vorapaxar Zanubritinib	Calcineurin inhibitors (Cyclosporine, Tacrolimus)	Amlodipine Alprazolam Clonazepam Codeine in high dose for chronic therapy Diazepam Fentanyl Hydrocodone Meperidine Midazolam (oral) Oxycodone Tramadol Triazolam	HMG-CoA reductase inhibitors (Atorvastatin, Rosuvastatin, Simvastatin, Lovastatin) Lomitapide	Hold 7 days		
		mTOR kinase inhibitors (Sirolimus, Everolimus)		PD5 inhibitors for Erectile Dysfunction (Tadalafil, Sildenafil, Vardenafil)		Suvorexant	
		PDE5 inhibitors for pulmonary hypertension (Sildenafil, Tadalafil, Vardenafil)		Salmeterol		Decrease dose or switch to alternative (formoterol)	
		Anticoagulation, antiplatelet (Apixaban, Clopidogrel, Rivaroxaban, Ticagrelor, Warfarin)		Piroxicam Oral contraceptive Alfuzosin Silodosin		Switch to alternative	
		St. John's wort		Buprenorphine/naloxone Codeine PRN Hydroxychloroquine & low risk QT prolongation Methadone Tamsulosin		Continue current dose and monitor	
		Un-identifiable trial or compassionate medications		Herbal products		Methotrexate	
		Monoclonal antibodies inhibiting IL-6 (sarilumab, tocilizumab)		Identifiable trial or compassionate medications		Monoclonal antibodies not inhibiting IL-6 (infliximab, certolizumab, golimumab, etanercept, abatacept, rituximab, ixikizumab, secukinumab, rizankizumab, ustekinumab, anakinra)	No interaction

**Nirmatrelvir/ritonavir (Paxlovid™)
Practitioner Order Set and Prescription
(Outpatient Treatment in COVID-19 Patients)**

Give this prescription and completed order set to patient to fill at Community Pharmacy.
Once completed and signed by prescriber, this is a Legal Prescription.

Name <i>(first, last)</i>			
Personal Health Number		Date of Birth <i>(dd-Mon-yyyy)</i>	
Medication			
<input type="checkbox"/> nirmatrelvir/ritonavir 300/100mg (Paxlovid™) orally BID x 5 days <i>(eGFR greater than or equal to 60 mL/min)</i>			
<input type="checkbox"/> nirmatrelvir/ritonavir 150/100mg (Paxlovid™) orally BID x 5 days <i>(eGFR 30-59 mL/min)</i>			
<input type="checkbox"/> This prescription was reviewed by an AHS Clinical Pharmacist. For questions, contact: Name of Pharmacist _____ Phone _____			
Changes to other patient medications while on nirmatrelvir/ritonavir (Paxlovid™)			
Prescriber Name	Prescriber Signature	Date <i>(dd-Mon-yyyy)</i>	Time <i>(hh:mm)</i>
CPSA License number			
No repeats Retain copy on chart			
Name of Community Pharmacy dispensing Paxlovid™		Community Pharmacy Fax	

Proof 3

Paxlovid™ prescriptions from AHS

- One of:
 - Nirmatrelvir/ritonavir 300/100mg (Paxlovid) orally BID x 5 days (eGFR ≥60mL/min/1.73m²) or
 - Nirmatrelvir/ritonavir 150/100mg (Paxlovid) orally BID x 5 days (eGFR 30-59mL/min/1.73m²)
- Communication if patient's prescription, non-prescription and/or herbal medications have been assessed for drug interactions by an AHS pharmacist with contact information
- Instructions/prescription for an interacting concurrent medication if needed

Community pharmacists responsibilities for Paxlovid™ prescriptions

- Review prescription for appropriateness
 - If **concurrent** drug not on chart or if questions or concerns with Paxlovid™ therapy can consult:
 - Liverpool COVID-19 interaction checker
 - AHS on-call clinical pharmacist (number will be on prescription)
- Re-inforce side effect counselling and any required management of concomitant drug therapy
- Support patient monitoring and reporting of serious or unexpected drug side effects AND signs/symptoms of worsening/severe illness

Commonly asked questions

- When are patients and family physicians being contacted after Paxlovid™ or sotrovimab is

Commonly asked questions

- What instructions are given to (unattached) patients who do not have a primary care provider?

Commonly asked questions

- For LTC and DSL patients, can a physician or health care provider call on behalf of the patient?

Commonly asked questions

- Can you confirm the access for pregnancy?

Commonly asked questions

- What has been the experience to date with the treatments?

Commonly asked questions

- How quickly can patients get access to COVID-19 testing?

Thank you

Questions? Please type your question in and indicate if you would like a specific panelist to respond to your question.