

Last updated: April 20, 2022

PROVIDING OUT-PATIENT THERAPY FOR MILD TO MODERATE COVID-19 PATIENTS PRESENTING TO THE EMERGENCY DEPARTMENT

Out-patient treatments for mild to moderate COVID symptoms are now available on a limited basis. Paxlovid is an oral antiviral medication delivered over 5 days. Remdesivir is an IV antiviral given over 30-minutes on 3 consecutive days. It is now recommended as the alternative therapy for the highest-risk patients who cannot take Paxlovid. Sotrovimab is a monoclonal antibody given in a single 1-hour infusion. It is not fully effective against the Omicron BA.2 variant, currently the predominant variant in BC and is reserved as a last-line treatment.

Patients will come to the Emergency Department with COVID symptoms and Emergency Practitioners will have to make important decisions regarding their eligibility and then potentially implementing therapies.

This document consolidates information from the BC CDC and the Health Authorities to provide helpful guidance for emergency practitioners making decisions about providing out-patient therapies. Maximizing treatment for high-risk patients will reduce unnecessary hospital admissions, potentially easing emergency crowding.

In the next few weeks some of the details will change.

STEP 1 > Who do I test?

Must be symptomatic for ≤ 7 days **AND** one of...

CEV 1 or 2:

Organ and bone marrow transplants	Immunosuppressive therapy
Active Rx for hematologic malignancy	Ongoing steroids
Anti-cancer therapies	Advanced HIV/AIDS
Primary immunodeficiencies	Dialysis or end stage CRF

CEV 3:

Severe respiratory disorders
Rare blood disorders
Rare metabolic disorders
Splenectomy
Insulin dependent diabetic
Developmental disorders
Pregnant plus heart disease
Neuromuscular disorders requiring respiratory support

Age ≥ 50 years and not fully vaccinated

Unvaccinated individuals

Indigenous patients

What tests do I get?

Rapid Antigen Test (**RAT**)

Make treatment decisions initially on the results of the RAT

AND/OR

Polymerase Chain Reaction test (**PCR**)

> Links to all BC CDC COVID resources can be found on the BC EM Network site at:
<https://www.bcemergencynetwork.ca/covid-19/>

> Overall guidance is also available at:
<http://www.bccdc.ca/health-professionals/clinical-resources/covid-19-care/treatments>

More Details

> Clinically Extremely Vulnerable (CEV) definitions:
http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-treatment/PracticeTool2_CEVCriteria.pdf

> Information about assessment:
http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-treatment/PracticeTool1_AssessmentGuideforClinicians.pdf



STEP 2 > Which Patients are Eligible for Treatment?

Age ≥ 18 years and positive **RAT** or **PCR**
Symptoms ≤ 5 days (**Paxlovid**)
Symptoms ≤ 7 days (**Remdesivir**)

AND in one of the following categories:

CEV 1 or 2 or 3 (regardless of vaccination status)

Age ≥ 70 years with three or more chronic conditions/
co-morbidities (e.g. obesity, diabetes, heart failure, stroke, neurological
conditions), regardless of vaccine status or previous infection

Age ≥ 70 years with $<$ full vaccination **AND**
1 or more chronic conditions (e.g. obesity, diabetes, CHF, stroke,
other neurologic conditions)

Age ≥ 50 years with $<$ full vaccination **AND**
3 or more chronic conditions

Unvaccinated individuals without previous infection who are **EITHER**:

Age ≥ 50 years **OR**
Any age with 3 or more chronic conditions

Indigenous individuals (if not captured above) who are **EITHER**:

Unvaccinated without previous infection **OR**
Age ≥ 50 years with 1-2 vaccine doses or with previous infection alone **OR**
Age ≥ 70 years regardless of vaccine status or previous infection

Note:

Full Vaccination =

3 vaccinations

OR

J&J plus 1 mRNA vaccination

OR

Natural infection + one vaccination

OR

2 vaccinations in pregnancy.

Pregnancy and Breastfeeding: Currently available therapies have not been evaluated in pregnancy or breastfeeding. Prescribers may consult Reproductive Infectious Disease physician on call at BC Women's Hospital if prescribing COVID-19 therapy, especially **nirmatrelvir/ritonavir**.

Patients are encouraged to use protection while taking these medications. In addition, those on oral contraceptives should use a back-up method when taking **nirmatrelvir/ritonavir** due to drug interactions leading to lower plasma levels of estrogen.

Pediatrics: **nirmatrelvir/ritonavir (Paxlovid)** is not currently available for children under 18 yrs. All cases in which **Remdesivir** or **sotrovimab** is being considered should be discussed with, and approved by the Pediatric Infectious Diseases physician on call at BC Children's Hospital. Neither agent has RCT-level data in pediatrics and limitations concerning off-label use or evidence extrapolated from adults needs to be weighed against the potential benefits.

STEP 3 > Which Treatment Should I Choose?

Paxlovid (Nirmatrelvir/ritonavir) is first choice for patients eligible for out-patient treatment and no contraindications. **Remdesivir** can be used as an alternative (see below).

Disease Contraindications:

End Stage liver disease
CKD or Renal Failure (eGFR < 30 ml/min)
Hypersensitivity to Ritonavir / Protease Inhibitors

Drug Contraindications:

Antiarrhythmics (Amiodarone, Disopyramidine, flecanide, propafenone, quinidine)

Apixaban and rivaroxaban

Some antipsychotics (e.g. quetiapine, clozapine, Pimozide)

Mood disorder treatments (e.g. Lurasidone, oxcarbazine, St John's Wort)

Midazolam or triazolam

Anti-epileptics (e.g Carbamazepine, phenobarbital, phenytoin, Primidone)

Some Anti-Cancer agents

Fentanyl
Methamphetamine

Hep C treatments (e.g. elbasvir)

Rifampin
Rifapentine
Erectile dysfunction treatments

Medication cannot be crushed so not accessible for those with swallowing difficulties

REFER TO THE DRUG-DRUG INTERACTION PRACTICE TOOL #3 FOR MORE DETAILS ON CONTRAINDICATIONS

More Details

> [BC CDC Clinical Practice Guide for therapeutics for mild to moderate COVID-19:](http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-treatment/ClinicalPracticeGuide_Therapeutics_MildModerateCOVID.pdf)
http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-treatment/ClinicalPracticeGuide_Therapeutics_MildModerateCOVID.pdf

> [Drug-drug interactions and contraindications for Paxlovid:](http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-treatment/PracticeTool3_DrugInteractionsContraindications.pdf)
http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-treatment/PracticeTool3_DrugInteractionsContraindications.pdf

How Do I Decide if Paxlovid is Appropriate?

If the patient is on any medications, **refer to practice tool #3 to check for Drug-Drug interactions.**

Inform the patient of potential adverse effects and the **balance of risk vs benefit.**

NNT: On average **17-18** to prevent death or hospitalization.

Main Side Effects:

Altered or impaired sense of taste

Diarrhea

Increased blood pressure

Myalgias

Liver damage in patients with pre-existing liver disease

Other currently unknown side effects could occur

If in Doubt or Need Advice Call:

Your Hospital Pharmacy Supports (on-site or on-call)

OR

Provincial Pharmacy Support Line

1-866-604-5924 | Monday to Friday 8:30am-4:30pm

Leave your name, phone number, city, and patient details:

Name, DoB, PHN, relevant medical info

A pharmacist will respond as soon as possible

OR

Your Hospital or Regional Infectious Disease team

OR

BC Women's Hospital Infectious Disease on call if pregnant or breast-feeding. Main switchboard: **604-875-2424**

OR

Download the University of Liverpool's Drug-Drug Interaction app at: <https://www.covid19-druginteractions.org/>

OR

Rural and remote EDs only, if the above supports do not work, call RUDi as you normally would in order to access **CATe** (COVID Antiviral Therapeutics team)

Zoom contact: <https://rccbc.ca/rtvs/rtvs-pathways/rudi/>

CONTACT YOUR HA CONTACTS TO CONFIRM ELIGIBILITY, AVAILABILITY, AND DISTRIBUTION TO THE PATIENT

More Details

➤ [Practice Tool #3: Drug-drug interactions and contraindications for Paxlovid:](#)

http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-treatment/PracticeTool3_DrugInteractionsContraindications.pdf

HA Contact Numbers:

As of April 20, 2022

➤ **FHA:** Connect through RACE www.raceapp.ca Infectious Disease - COVID-19 Clinical, or the Infectious disease consultant on call through the hospital switchboard. Requests will be returned by phone.

VCH/PHC: COVID therapeutics physician (9:00am-5:00pm S-S): **604-875-4111 (ext. 0)** or the RACE Line, Infectious Diseases. For remdesivir referrals, please email covid.therapy@vch.ca with referral form accessible here: www.vhpharmsci.com/covid-19-resources

LGH COVID Physician at:

778-984-4075

Interior: IH COVID-19 Therapeutics Virtual Clinic **250-258-7369**. This number will be answered 8:30am – 4:30pm, 7 days a week, or email COVIDtherapeutics@interiorhealth.ca. For remdesivir referrals, MD/NP complete the IH Referral Form; <https://ruralcoordinationbc.sharepoint.com/:f:/s/RTVSCATe/EmFgom9BQC5Eh-SCEKyBXSgB1AL2V9Cq3TDcdnsDwZxxiA?e=uFRS5A> (on MS Teams site; internal link)

VIHA: COVID-19 therapeutics clinic:

250-737-2030 (ext 44685)

OR RJH ID on call

Northern Health:

250-961-4936

This number will be answered 10:00am-10:00pm, 7 days a week

How Do I Prescribe Paxlovid?

To send a prescription, access the electronic prescription form and fill it out (note: you may need to refresh your browser by pressing ctrl+shift+delete or cmd+shift+R to see the updated prescription form) <https://www2.gov.bc.ca/assets/gov/health/forms/2368fil.pdf>

Nirmatrelvir/ritonavir 300/100mg PO BID x 5 days

As of March 14, 2022, prescriptions can be faxed to community pharmacies. For a list of pharmacies that dispense Paxlovid, please see <https://www.bcpharmacy.ca/paxlovid>

NOTE: The electronic prescription form has a list of intake numbers and dispensing pharmacies

Document your actions on the patient care record.

Contact the patient's GP for follow-up.

Find A Pharmacy Dispensing Paxlovid Near You

<https://www.bcpharmacy.ca/paxlovid>

Paxlovid electronic prescription form (note: you may need to refresh your browser by pressing ctrl+shift+delete or cmd+shift+R to see the updated prescription form)
<https://www2.gov.bc.ca/assets/gov/health/forms/2368fil.pdf>

Remdesivir

For adult patients who cannot take Paxlovid, you may organize treatment with Remdesivir. It must be given only if symptoms are 7 days or less. Remdesivir is a direct acting anti-viral. It requires daily IV administration for 3 days.

Not all patients eligible for treatment who cannot take Paxlovid will be offered remdesivir. Patients at highest risk for hospitalization ($\geq 5\%$) are currently prioritized for treatment. The Health Authority administering the remdesivir will verify eligibility once the patient is referred.

There are minimal drug/drug interactions. It should not be given to patients with an ALT 5X ULN. It is not approved for those with renal disease, however it has been safely used in this population and can be given.

Other side effects are minimal.

Dose: 200mg IV on day 1 and 100 mg IV on days 2 and 3. Renal dosing has been agreed upon by BC experts for those with eGFR < 30 m/min or dialysis: 200mg IV on day 1 and 100mg 48-hours later. Patients on hemodialysis can received it during dialysis on dialysis days.

Administration requires a medical facility.

Each Health Authority has contact numbers for consultation with instructions for accessing and sites to deliver Remdesivir. The Health Authority will determine if the patient qualifies for Remdesivir on the basis of their risk of hospitalization. (Determining risk can be done by consulting the point system or thermal maps in the Clinical Practice Guide). (See numbers in details box).

Document your actions on the patient care record.

Contact the patients GP for follow-up.

More Details

➤ [BC CDC Clinical Practice Guide for therapeutics for mild to moderate COVID-19:](#)

http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-treatment/ClinicalPracticeGuide_Therapeutics_MildModerateCOVID.pdf

HA Contact Numbers:

As of April 20, 2022

➤ **FHA:** Connect through RACE www.raceapp.ca Infectious Disease - COVID-19 Clinical, or the Infectious disease consultant on call through the hospital switchboard. Requests will be returned by phone.

VCH/PHC: COVID therapeutics physician (9:00am-5:00pm S-S): ☎ [604-875-4111 \(ext. 0\)](tel:604-875-4111) or the RACE Line, Infectious Diseases
For remdesivir referrals, please email covid.therapy@vch.ca with referral form accessible here: www.vhpharmsci.com/covid-19-resources

LGH COVID Physician at:

☎ [778-984-4075](tel:778-984-4075)

Interior: IH COVID-19 Therapeutics Virtual Clinic ☎ [250-258-7369](tel:250-258-7369). This number will be answered 8:30am – 4:30pm, 7 days a week, or email COVIDTherapeutics@interiorhealth.ca
For remdesivir referrals, MD/NP complete the IH Referral Form; <https://ruralcoordinationbc.sharepoint.com/:f:/s/RTVSCATE/EmFgom9BQC5Eh-SCEKyBXSgB1AL2V9Cq3TDcdnsDwZx xiA?e=uFRS5A> (on MS Teams site; internal link)

VIHA: COVID-19 therapeutics clinic:

☎ [250-737-2030 \(ext 44685\)](tel:250-737-2030)
OR RJH ID on call

Northern Health:

☎ [250-961-4936](tel:250-961-4936)

This number will be answered 10:00am-10:00pm, 7 days a week

