

Prescribing Therapies for Mild-Moderate COVID-19

Information update – April 11, 2022

This update is for health authority staff

The British Columbia COVID-19 Therapeutics Committee (CTC) provides guidance on the most current research on the use of therapies in the management of COVID-19 <http://www.bccdc.ca/health-professionals/clinical-resources/covid-19-care/treatments>

What evidence has changed for sotrovimab?

On March 25, 2022, the US Food and Drug Administration (FDA) [revoked the Emergency Use Authorization](#) for sotrovimab (Xevudy) in regions where the prevalence of the Omicron variant BA.2 exceeds 50%. The proportion of BA.2 in BC has continued to increase in an exponential way. In the surveillance period ending March 14th, 2022, [whole genome sequencing](#) showed a 75% prevalence in all Health Authorities except Interior Health (~55%). BCCDC predict that in April, BA.2 prevalence will exceed 90%.

As the totality of evidence that supports the use of remdesivir is stronger, the **CTC and CTRAWG recommend that remdesivir be used as the first-line alternative IV treatment if nirmatrelvir/ritonavir (Paxlovid®) cannot be prescribed**. If sotrovimab is used as a last line agent where potential of benefit outweighs the risk, disclosure to patients of risks and benefits in consideration of individual circumstances (clinical status, patient values, logistics) is necessary. Sotrovimab should not be chosen solely for convenience reasons.

What is remdesivir and when should I offer it to patients?

CTC and CTRAWG recommend that remdesivir be used as the first-line alternative IV treatment if nirmatrelvir/ritonavir (Paxlovid®) cannot be prescribed.

Remdesivir a direct-acting antiviral. Like sotrovimab, remdesivir is well tolerated and poses little drug-drug interactions and can be used in situations where nirmatrelvir/ritonavir are contraindicated. The main operational downside of remdesivir is the need of IV administration over a 3-day period.

Given the three-day treatment regimen there may be situations where operational resources are unable to meet demand. Based on the *Ethical Framework for Allocating Scarce Drug Therapies During Covid-19* (http://www.bccdc.ca/Health-Professionals-Site/Documents/Drug_Scarcity_Framework.pdf) **patients at highest risk of progression to severe disease (≥5% as per the BCCDC analysis in CTC Clinical Practice Guide) should be prioritized**. This includes:

- Severely immunocompromised individuals (*i.e., CEV 1*), **regardless of vaccine status** or previous infection
- Moderately immunocompromised individuals (*i.e., CEV 2*) and those with certain high-risk conditions (e.g., cystic fibrosis, insulin-dependent diabetes, severe asthma or COPD, intellectual disabilities, *i.e., CEV 3*) **who are EITHER:**
 - **≥ 50 years regardless of vaccine status** or previous infection OR
 - **<50 years with 0-2 vaccine doses** or previous infection alone
- **Individuals who have a combination of age, under-vaccination, and risk factors** such as co-morbidities or Indigenous status who are shown to **have a risk of ≥ 5% on the thermal map**, or **who score 5 points or more** in the scoring system (see [Practice Tool 1 – Step-by-Step Assessments](#)).

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Who is COVID treatments recommended for?

The CTC has worked with BCCDC to obtain data on the absolute risk for hospitalization from Omicron (excluding those who are incidentally diagnosed) in patients in BC, and how age, vaccine status and co-morbidities impact this risk. Treatment is recommended in patients who have a 5% chance or greater of being hospitalized from COVID-19. Such patients are eligible to be referred for remdesivir if nirmatrelvir/ritonavir cannot be prescribed due to contraindications or drug-drug interactions. Additionally, treatment is suggested in those who have a slightly increased hospitalization risk (3-4%). Such patients are also eligible for nirmatrelvir/ritonavir but currently patients with a risk of $\geq 5\%$ are being prioritized for IV therapy with alternatives. Taken together, the expanded patient eligibility criteria for nirmatrelvir/ritonavir are:

- Individuals who are immunocompromised or have high-risk conditions identified as Clinically Extremely Vulnerable (CEV) regardless of vaccine status or previous infection
 - Not all children ages 12-17 who are CEV will benefit from treatment. Paxlovid is not recommended below the age of 18 at this time. Those with multiple co-morbidities would have the highest potential benefit and are eligible only for sotrovimab
- Unvaccinated individuals without previous infection who are EITHER:
 - ≥ 50 years OR
 - have three or more chronic conditions/co-morbidities
- Individuals ≥ 50 years with 1-2 vaccine doses or previous infection alone, with three or more chronic conditions/co-morbidities
- Individuals aged ≥ 70 years with 1-2 vaccine doses or previous infection alone, with one or more chronic condition/co-morbidity
- Individuals ≥ 70 years with three or more chronic conditions/co-morbidities regardless of vaccine status or previous infection
- Indigenous individuals (if not captured above) who are EITHER:
 - unvaccinated without previous infection OR
 - ≥ 50 years with 1-2 vaccine doses or with previous infection alone OR
 - ≥ 70 years regardless of vaccine status or previous infection

To determine an individual's risk for hospitalization, see [Clinical Practice Guide for the Use of Therapeutics in Mild-Moderate COVID-19](#).

Pregnancy and Breastfeeding: Currently available therapies have not been evaluated in pregnancy or breastfeeding. Prescribers may consult Reproductive Infectious Disease 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 approved for children under 18 years. All cases in which an IV treatment including 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-

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level data in pediatrics and limitations concerning off-label use or evidence extrapolated from adults needs to be weighted against the potential benefits.

What are the steps to prescribing?

1. Confirm patient is COVID positive (by either PCR or RAT) and within first 5-7 days of illness. The patient must meet criteria for mild to moderate disease: they must be symptomatic but not require oxygen support. If met, evaluate if patient is eligible for nirmatrelvir/ritonavir (Paxlovid) or remdesivir using [Practice Tool 1 – Assessment Steps](#)
2. If patient meets criteria for treatment, assess for appropriateness of nirmatrelvir/ritonavir (Paxlovid) therapy. Physicians need to perform a medication history to assess for serious drug interactions.
3. If pharmacist support or resources are needed, please use [Practice Tool #3: Drug-Drug Interactions and Contraindications](#), or phone the provincial pharmacist support line: Mon-Fri 0830-1630; 1-866-604-5924 (see more details below).
4. If patient is a nirmatrelvir/ritonavir (Paxlovid) candidate, any physician can write the [prescription](#). Download the prescription and fill it out. It can be given to patient/family member or faxed. The BC Pharmacy Association has a '[locator](#)' with pharmacies known to stock Paxlovid.
5. If the patient is not a candidate for nirmatrelvir/ritonavir (Paxlovid) but falls in the highest risk category for hospitalization ($\geq 5\%$), refer them to the [Health Authority](#) for evaluation and potential treatment with remdesivir (or in extenuating circumstances, sotrovimab) at an infusion clinic. Note: the treatment window for nirmatrelvir/ritonavir (Paxlovid) can be extended to 7 days in the rare circumstance that the patient would be referred for remdesivir solely on the basis of its longer treatment window.
6. If the patient falls in the 3-4% risk category where treatment with nirmatrelvir/ritonavir is suggested, but the patient cannot receive the treatment due to contraindications or drug interactions, reassure the patient that their risk of hospitalization is low and that the benefit of any therapy is unlikely to outweigh its risk.

Who can I call for help?

Call COVID Antivirals Support Line for Clinicians and Pharmacists if you have questions about drug interactions with nirmatrelvir/ritonavir (Paxlovid).

A provincial pharmacy line has been established to support the arrival of the new COVID-19 anti-viral medications in BC, nirmatrelvir/ritonavir (Paxlovid), remdesivir and sotrovimab. There are a few requirements that doctors need to know when it comes to prescribing, including the treatment window, how they contradict or interact with other medications, etc. In addition, a prescriber and/or a pharmacist must assess each prescription against drug interactions and medical contraindications. This provincial pharmacy line will support prescribing and pharmacists to dispense these novel medications.

For expert pharmacist advice, please call **1-866-604-5924 (Monday – Friday, 8:30am – 4:30pm)**. A clerk will answer your call (or leave a voicemail) and arrange a pharmacist to call you back. Calls will be responded to as soon as possible during office hours.

Be ready to provide:

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- Clinician/pharmacist details: Name, phone number, city where you practice, and when is a good time to call you back.
- Patient details: Name, date of birth (DoB), personal health number (PHN), and any relevant medical info

Consult with your local Health Authority Infectious Disease physician for complex patients. Use the [contact sheet](#) to access these physicians or to refer your patient for remdesivir infusions.

What tools are available to support accessing these outpatient COVID therapies?

BC has launched an [online assessment tool](#) for people to see if they would benefit from one of two therapeutic treatments available in B.C. The treatments have been approved for confirmed COVID patients who are at high risk but not in hospital.

What other virtual tools are available to support citizens?

BC has launched a number of virtual tools for citizens to assess when to get tested for COVID-19, how to receive test results, and what to do if you test positive.

- When to get a COVID-19 test: Use the [Self-Assessment Tool](#) on the Thrive app
- For PCR tests: get your COVID-19 PCR test results online, by text, or by phone by registering through one of these [services](#).
- For RAT tests: Reporting COVID-19 test results through the online COVID Positive Test Result Reporting Form is no longer required.

Where do I find patient handouts?

Patient handouts and information are located on the BCCDC website: <http://www.bccdc.ca/health-professionals/clinical-resources/covid-19-care/patient-handouts>

- [Patient Information about nirmatrelvir/ritonavir \(Paxlovid\)](#)
- [Patient Information about remdesivir](#)
- [Patient Information about sotrovimab](#)

In addition, there is a [self-screening tool](#) posted publicly that allows patients to find out if they might benefit from COVID-19 antiviral therapies.

Other materials for providers:

- [Clinical Practice Guide for the Use of Therapeutics in Mild-Moderate COVID-19](#)
- [Provider Summary](#)
- [Practice Tool 1 – Assessment Steps](#)
- [Practice Tool 2 – CEV Definitions](#)
- [Practice Tool 3- Drug Interactions and Contraindications](#)



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What do I need to know about monitoring and evaluation?

Patients should call you back if they have any concerns. With the newness of this drug, BC has taken the proactive approach of contacting all patients who receive Paxlovid over the next three months to follow-up with each patient: identifying whether there were adverse drug events, compliance with the 5-day treatment course, and patient outcomes. This evaluation will provide us with useful information as we learn more about Paxlovid and future COVID therapies.