COVID-19 Public Health Webinar Therapeutics

Dr. Jennifer Grant, Co-chair, BC COVID Therapeutics Committee

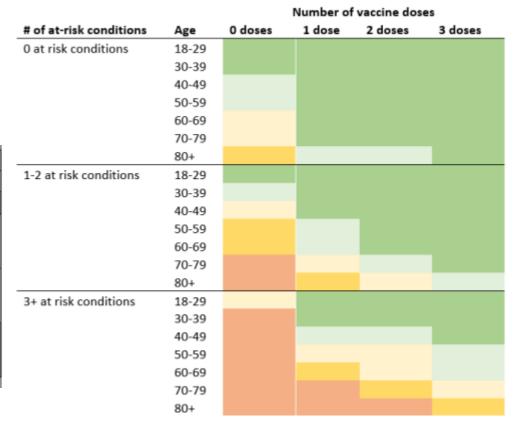
Dr. Jolanta Piszczek, Co-chair, BC COVID Therapeutics Committee

Who do we treat in British Columbia

- CTC recommends Rx if hospitalization is ≥ 5% and
- Suggests treatment if it is 3-4%
- EPIC-SR showed no difference in hospitalization when risk was 2.4%;
- Study from Israel showed no impact with a <1% risk
- A 3% risk threshold may be the "sweet spot" where benefit is seen
- Level of risk may change with time VoC, recent vaccine/infection

Who do we treat in BC

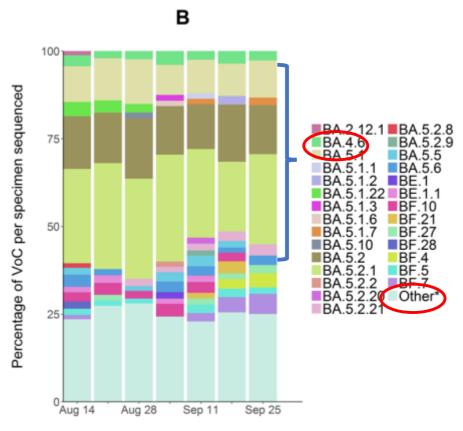
Λσο.	Number of Vaccine Doses/Previous Infection				
Age	0, AND No previous infection	1 to 2, OR Previous infection alone	3 OR Previous infection + any vaccination		
Any adult	Individuals identified as clinically extremely vulnerable (CEV) Group 1, Group 2 and Group 3 (See Toolkit #2 – CEV Definitions)				
18-49	≥ 3 chronic conditions/co-morbidities, OR Indigenous Not at increased risk otherwise	Not at increased risk	Not at increased risk		
50-69	Any individual	≥ 3 chronic conditions/co-morbidities, OR Indigenous Not at increased risk otherwise	Not at increased risk		
70+	Any individual	≥ 1 chronic conditions/co-morbidities, OR Indigenous Not at increased risk otherwise	≥ 3 chronic conditions/co-morbidities, OR Indigenous Not at increased risk otherwise		



- Symptoms and trajectory are the most important \rightarrow clinical assessment required
- 1/3 of patients cannot get Paxlovid due to Drug-drug interactions

Other therapeutic options

- Remdesivir infusion x 3 days is the most reliable IV therapy – no resistance observed yet
- Sotrovimab has 25-30-fold reduction in binding; may still be effective . . .
- Tixagavimab/cilgavimab showed lower efficacy with reduced binding to BA. 5
- Pan-resistant variants (e.g., BA. 4.6), which are present in BC and are quickly on the rise. . . ?selection



Epidemiological Week (based on collection date)

Lineages with less than 10 samples sequenced a week are binned into `Other'

Other impacts on risk and treatment

- <u>Bi-valent vaccine</u> looks promising but so far there are no clinical data on protection from hospitalization
 - Landmark trial used serology in their primary outcome
 - There were only 11 Omicron infections and no hospitalizations in ~600 pts
- Waning has been better characterized at 6 months the protection against hospitalization declines from high 80% to mid-70%; however, that does not change the bottom-line risk significantly enough to change eligibility criteria
- Boosting has been evaluated in elderly patients and it has shown to very briefly reduce the risk of hospitalization with a second booster at the 6–12-week mark; however, the protection decreases back to baseline thereafter
- <u>Hybrid immunity</u> has been shown to have superior protection from re-infection with Omicron, irrespective of the strain of the original infection, however its impact on hospitalization once the patient is infected has not been characterized
- As such, we recommend no changes of eligibility for treatment on the basis of the bivalent vaccine, waning, boosting and hybrid immunity.

Test-to-Treat Update

- PCR testing is no longer routinely offered for diagnostic purposes and testing centres have closed
- Rapid Antigen Testing (RAT) is how most patients in BC access therapy
- RATs have lower sensitivity than PCR tests on asymptomatic patients or those very early in their infection course
- Sensitivity of RATs increases significantly with repeat testing, particularly around 3-4 days from symptom onset
- The ideal strategy is to self-administer a RAT as soon as symptoms appear and test daily if negative and symptoms persists until day 5 (the treatment window for antivirals is 5-7 days)
- This strategy is recommended by the FDA and has a sensitivity of 92-93%

New Resources

COVID-19 Action Plan

symptoms worsen or remain persistent, then a If positive, use the Step-by-Step

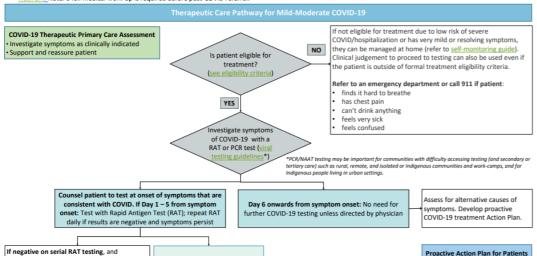
- Pathway
- Both available at the BCCDC COVID Therapeutics website



A pathway for mild-moderate COVID-19 treatment was developed for BC. Patients at high risk of severe disease are eligible for testing and treatment. Nirmatrelvir/ritonavir (Paxlovid) is available for people who tested positive for COVID-19 and who are at higher risk of hospitalization; alternatives are available if Paxlovid cannot be used due to drug interactions or contraindications. Variations from the pathway will occur as individual discrizion discretion is exercised to meet the needs of the individual patient.

The COVID-19 Therapeutics Pathway is available for clinicians to help their patients appropriately navigate through the current available resources so as to receive appropriate, effective and timely care. Key messages include:

- . The pathway is grounded in the latest evidence and clinical experience provided by BC's COVID Therapeutics Committee (CTC).
- Not all eligible patients should be prescribed COVID-19 therapeutics. These decisions will be made between the patient and clinician.
- Persons whose symptoms have not resolved within 12 weeks should be re-assessed and considered for <u>referral to the Post-COVID-19 Interdisciplinary Clinical Care Network</u>. Note: a full medical work-up is required before post-COVID referral.



COVID-19 ACTION PLAN

Name:	Date:	manage illness from COVID-19	
Prescriber: PHN #:			GREEN means Go Zone! Use standard measures to protect
Prescriber Contact Information:			yourself against COVID-19 YELLOW means Caution Zone!
Pharmacy:			Follow these steps when feeling sick
Prescriber Signature:			RED means Danger Zone! Seek urgent medical attention

The colors on the traffic light will help you

Instructions: Patient: Please retain a copy of this action plan and the accompanying Paxlovid prescription for your records.

Doctor: There is a new temporary fee code for physicians. This fee is payable for patient care related to COVID-19 treatment.

GO	Follow these measures to protect yourself against COVID-19		
You have:	☐ You are eligible for your next COVID-19 Vaccine on: or ☐ N/A		
No signs and symptoms of COVID-19	☐ Obtain 5 rapid antigen tests from your local pharmacy. Do not test if you do not have symptoms of COVID-19.		
Had contact with a sick person but are not sick yourself Traveled or are traveling but have no symptoms of COVID-19 Stable health otherwise	Your COVID-19 Prescription is: Nirmatrelvir/ritonavir ((Paxlovid) (Special prescription form covered under Plan Z): 300/100 mg (eGFR greater than or equal to 60 mL/min) medication is taken by mouth twice daily X 5 days 150/100 mg (eGFR 30-59 mL/min) medication is taken by mouth twice daily X 5 days Remdesivir (call your doctor or nurse practitioner for referral when you test positive). Lab requisition required for serum creatinine if not available > 2 yrs (a blood test to test your		
	kidney function).		