

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 $\geq 5\%$ 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

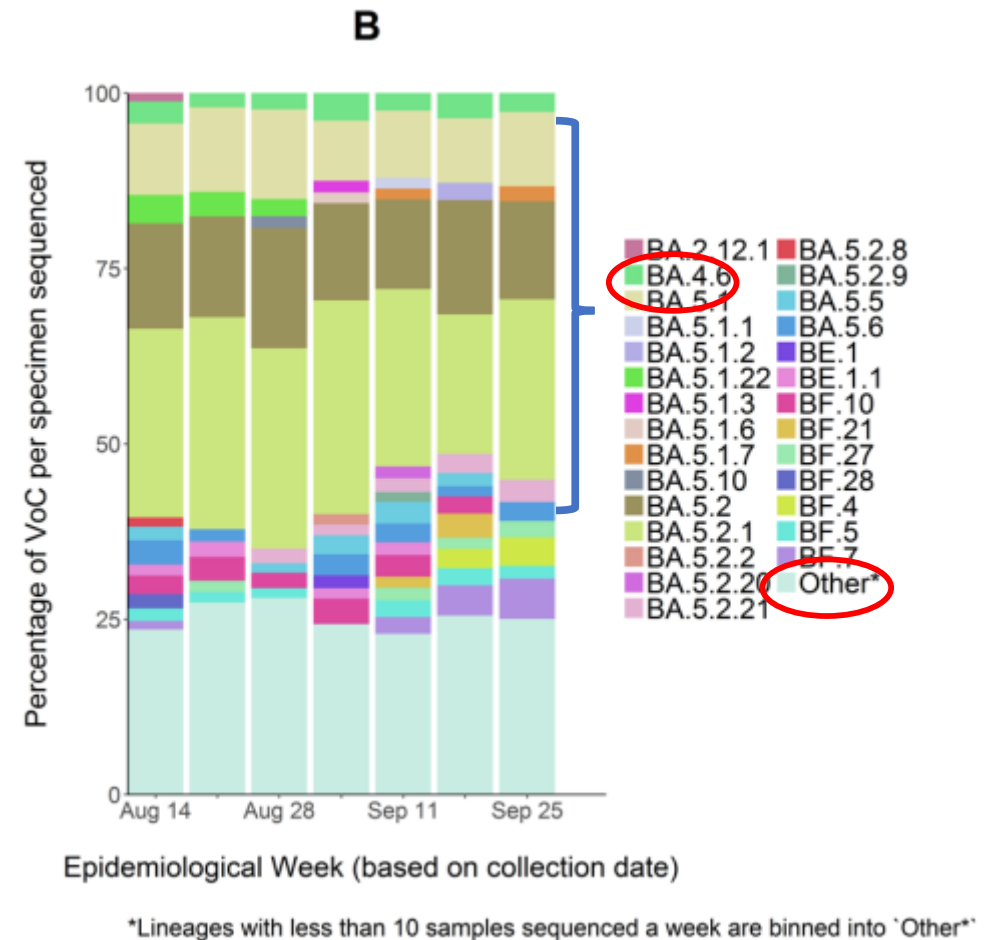
Age	Number of Vaccine Doses/Previous Infection		
	0, AND No previous infection	1 to 2, OR Previous infection alone	3 OR Previous infection + any vaccination
Any adult	<input type="checkbox"/> Individuals identified as clinically extremely vulnerable (CEV) Group 1, Group 2 and Group 3 (See Toolkit #2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



- Symptoms and trajectory are the most important → 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



Other impacts on risk and treatment

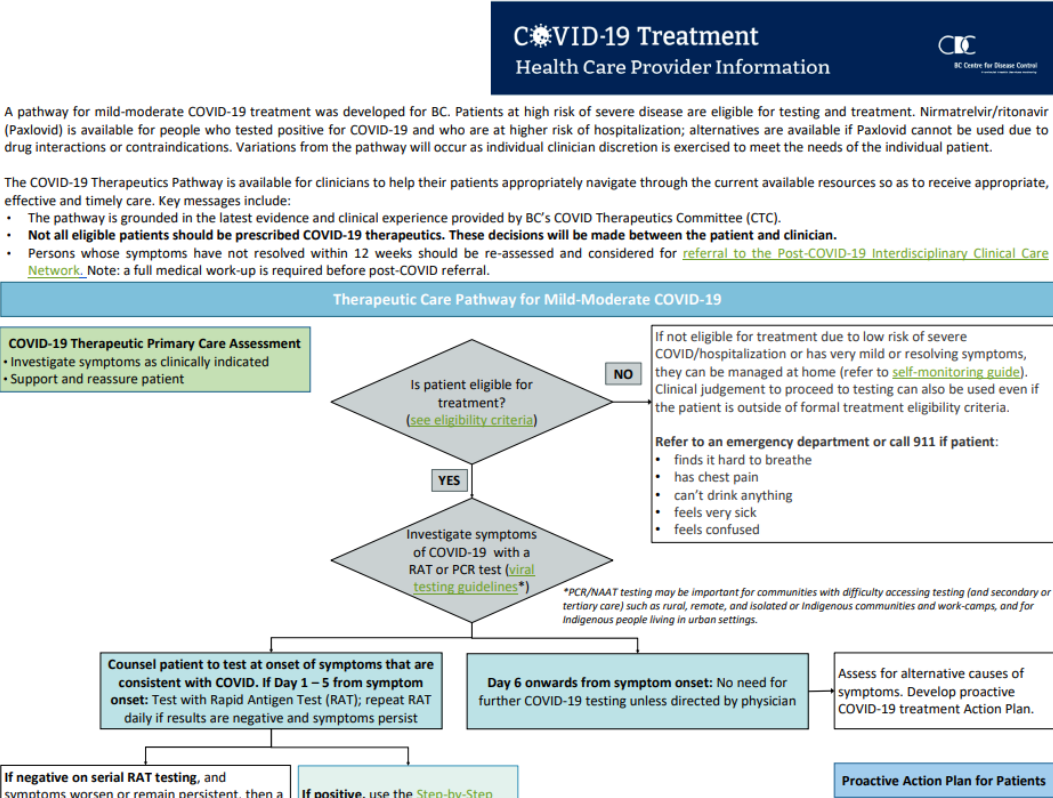
- Bi-valent vaccine looks promising but so far there are no clinical data on protection from hospitalization
 - Landmark trial used serology in their primary outcome
 - There were only 11 Omicron infections and no hospitalizations in ~600 pts
- Waning has been better characterized – at 6 months the protection 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
- Hybrid immunity 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 bi-valent 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
- Pathway
- Both available at the BCCDC COVID Therapeutics website



COVID-19 ACTION PLAN

The colors on the traffic light will help you manage illness from COVID-19

Name:	Date:
Prescriber:	PHN #:
Prescriber Contact Information:	
Pharmacy:	
Prescriber Signature:	

GREEN means Go Zone!
Use standard measures to protect yourself against COVID-19

YELLOW means Caution Zone!
Follow these steps when feeling sick

RED means Danger Zone!
Seek urgent medical attention

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: <ul style="list-style-type: none"> • No signs and 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 	<input type="checkbox"/> You are eligible for your next COVID-19 Vaccine on: _____ or <input type="checkbox"/> N/A
	<input type="checkbox"/> Obtain 5 rapid antigen tests from your local pharmacy. Do not test if you do not have symptoms of COVID-19.
	Your COVID-19 Prescription is: <ul style="list-style-type: none"> <input type="checkbox"/> Nirmatrelvir/ritonavir ((Paxlovid) (Special prescription form covered under Plan Z): <ul style="list-style-type: none"> <input type="checkbox"/> 300/100 mg (eGFR greater than or equal to 60 mL/min) medication is taken by mouth twice daily X 5 days <input type="checkbox"/> 150/100 mg (eGFR 30-59 mL/min) medication is taken by mouth twice daily X 5 days <input type="checkbox"/> Remdesivir (call your doctor or nurse practitioner for referral when you test positive). <input type="checkbox"/> Lab requisition required for serum creatinine if not available > 2 yrs (a blood test to test your kidney function).