## DR. RITA MCCRACKEN



The British Columbia COVID-19 Therapeutics Committee provides guidance on the most current research on the use of therapies in the management of COVID-19.

















- Does this person have COVID?
  - o How sick are they?
  - Should they get treated?
- What treatments are available?
  - What benefit could a person expect from these treatments?
  - What are the contraindications to treatment?
- How do I actually prescribe?











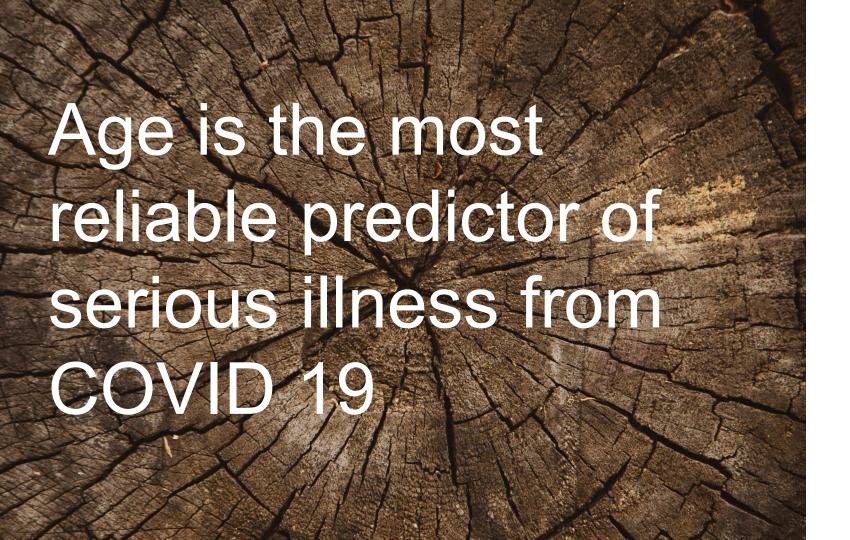
Sick people with unstable vitals – send to hospital

Asymptomatic people – reassure & follow as needed





as for who might benefit from treating mild/moderate symptoms...









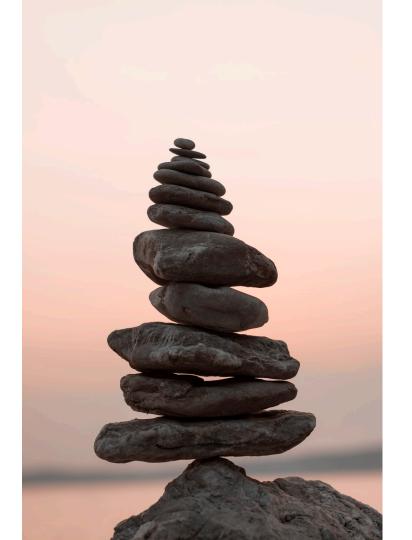
Vaccination Status is also an important predictor of serious illness





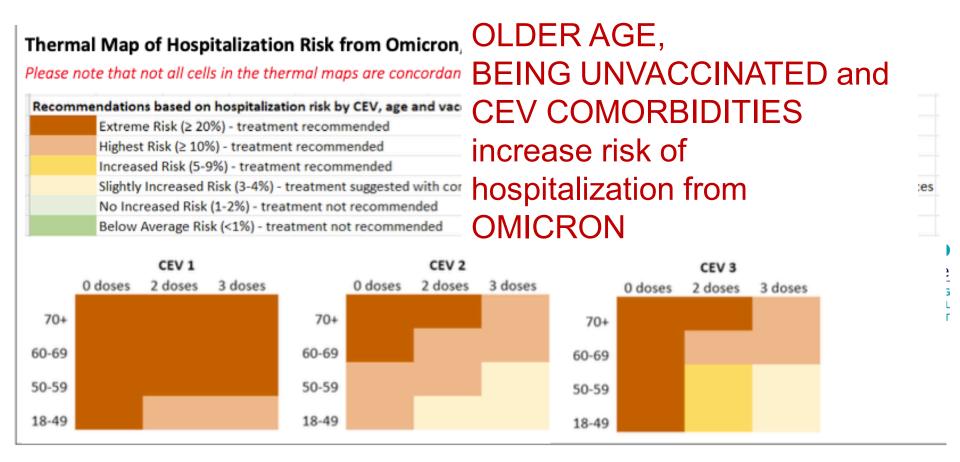
# co-morbidities may be a significant predictor of serious illness

\*CEV= clinically extremely vulnerable









Reference: http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-treatment/PracticeTool1\_AssessmentGuideforClinicians.pdf

## How do I calculate the risk for my patient?

Age (select ONE)	<b>Point Value</b>
70+	2
50-69	1
<50	0
Vaccine Status (select ONE)	
Unvaccinated AND no previous infection	3
Vaccinated with 1 or 2 doses OR previous infection alone	1
Vaccinated with booster (3 doses) OR previous infection + any vaccination	0
At-Risk Conditions (select ONE with the	
<u>highest value)</u>	
CEV 1 (Severe Immunocompromise)	6
CEV 2 or CEV 3	4
Indigenous	2
3+ chronic conditions/comorbidities	2
1-2 chronic conditions/comorbidities	1
no chronic conditions	0
Add the points from the three sections	

Point Scoring to Estimate Hospitalization Risk

### **Legend: Estimated Hospitalization Risk**

**3 points or less**: No increased risk; treatment is not recommended

4 points: Slightly increased risk (3-4%);

treatment is suggested

**5 points**: Increased risk (5-9%); treatment is recommended

**6 points or more**: Highest risk (≥ 10%); treatment is recommended

- \*Chronic conditions include e.g.,: obesity, smoking, diabetes, heart failure, heart disease, stroke

  1. CEV 1: severe immunocompromise due to, e.g., solid organ
- transplant, bone marrow or stem cell transplant, treatment for hematological malignancy, receiving anti-CD20 or B-cell depleting therapies

  2. CEV 2: moderate immunocompromise due to e.g., receiving
- immunosuppressive agents, moderate-severe primary immunodeficiency, treatment for solid tumors, advanced HIV 3. CEV 3: e.g., cystic fibrosis, severe asthma or COPD, diabetes requiring insulin, intellectual and developmental disabilities, rare blood disorders, dialysis, neurological conditions requiring Bi-PAP/chronic ventilation, cancer not captured above

## reference: page 3 http://www.bccdc

.ca/HealthProfessionals-

Site/Documents/

treatment/Clinic alPracticeGuide

\_Therapeutics\_ MildModerateCO VID.pdf

## nirmatrelvir/ritonavir (Paxlovid)

oral anti-viral

can be prescribed in primary care\*\* to the right patients and\*\* with consideration given todrug-drug interactions





treatments approved based on RCT results drugs compared to placebo during delta wave on UNVACCINATED adults >=55 yo or >=1 health complication





reference:

EPIC-HR February 16, 2022 DOI: 10.1056/NEJMoa2118542

COMET ICE, November 18, 2021 - N Engl J Med 2021; 385:1941-1950 DOI: 10.1056/NEJMoa2107934

RCT's designed to test effect of drug on PREVENTING HOSPITALISATIONS (for COVID) or DEATH wi 28d (from any cause)





<sup>\*</sup>not symptoms, not length of illness \*\*combined end point

## nirmatrelvir/ritonavir study (EPIC-HR)

<=5 days after onset symptoms, first day of symptoms = day 0

### **Treatment**

Risk of hospitalization or death = 0.8% (79/1046)





## **Placebo**

Risk of hospitalization or death = 6.3% (8/1039)

<sup>\*</sup>compared two treatment windows, 3 days and 5 days

<sup>\*</sup>recall the cautions, this was Delta Wave, in unvaccinated adults







## if patient has:

- -estimated >3% benefit (use the risk calc tool!)
- -is symptomatic, with a positive test (in BC, RAT ok)
- -been sick <=5days





then can consider for nirmatrelvir/ritonavir

### BUT

there are significant drug-drug interactions

statins rivaroxaban & apixaban antiepileptics calcium channel blockers certain antipsychotics fentanyl amiodarone tacrolimus & cyclosporine.























## START HERE:

**BC COVID** THERAPEUTICS COMMITTEE (CTC) Practice Tool #1 -**Assessment Guide for** Clinicians

http://www.bccdc.ca/Health-Professionals-Site/Documents/COVIDtreatment/PracticeTool1 AssessmentGuideforClinicians.pdf

#### BC COVID THERAPEUTICS COMMITTEE (CTC)

#### Practice Tool #1 - Assessment Guide for Clinicians

#### GENERAL INFORMATION

#### How to Use this Guide

This guide is a step-by-step clinical assessment tool for clinicians such as physicians, pharmacists and nurse practitioners who are directly involved in assessment and management of patients with mild-moderate COVID-19. Additional materials have been developed to accompany this tool, and include:

- The Clinical Practice Guide, a comprehensive guide with recommendations and supporting evidence
- □ Practice Tool #2 Definitions of Clinically Extremely Vulnerable criteria
- □ Practice Tool #3 Drug-drug Interaction and Contraindication management tool

#### In this Tool you will find:

- 1. Who can prescribe and centralized prescribing through HealthLink BC (811)
- 2. Expanded eligibility criteria including the patient self-screener
- 3. How to determine risk of hospitalization
- 4. Recommendations for treatment based on risk and, if treatment is being pursued:
- 5. Confirming COVID-19 Testing
- 6. Assessing vaccine or previous infection status
- 7. Establishing symptoms and progression
- 8. Calculating treatment window
- Assessing contraindications
- 10. Assessing and managing drug-drug interactions (including how to access the pharmacy support line)
- 11. Peer-peer physician support including for pregnant women, pediatrics and ID.
- 12. PAXLOVID Prescription link and pharmacies that carry PAXLOVID
- 13. Referring for sotrovimab to the Health Authorities
- 14. Patient counselling and resources

This guide is intended to be practical and was developed clinicians who routinely care for patients with COVID-19. It should not replace clinical judgement.

#### Step-by-step ASSESSMENT

#### 1. Who Can Prescribe and Centralized Prescribing

At this time, anyone with a license to prescribe can prescribe nirmatrelvir/ritonavir.

Providers' comfort level with this therapy may vary; the provider may not be comfortable to prescribe this medication at this time. In addition, patients who have a primary care provider may not be able to get an appointment quickly enough to meet the 5-day treatment window. Furthermore, patients may not have a primary care provider.





## sotrovimab study (COMET ICE)

IV anti-spike protein monoclonal antibody (mAB)

\*\* under revision currently as it appears to NOT be effective for newer variants



Risk of hospitalization = 7%



## **Placebo**

Risk of hospitalization = 1%

<sup>\*</sup>recall the cautions, this was Delta Wave, in unvaccinated adults

## remdesivir study (PINE TREE)

Remdesivir is a direct-acting nucleotide prodrug inhibitor of the SARS-CoV-2 RNA-dependent RNA polymerase *given within 7 days of symptom onset* 

intravenous remdesivir - 200 mg on day 1 and 100 mg on days 2 and 3



### **Treatment**

Risk of hospitalization or death = 0.7% (15/283)



### **Placebo**

Risk of hospitalization or death = 5.3% (2/279)

same cautions, this was Delta Wave, in unvaccinated adults

# SCREENSHOT THIS PAGE FOR ALL THE LINKS I REFERRED TO:

### ALL THE CDCBC Links are here:

http://www.bccdc.ca/health-professionals/clinical-resources/covid-19-care/treatments

### including:

http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-treatment/ClinicalPracticeGuide Therapeutics MildModerateCOVID.pdf

http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-treatment/PracticeTool1 **AssessmentGuideforClinicians**.pdf

nirmatrelvir trial - EPIC-HR Feb 16, 2022 <a href="https://www.nejm.org/doi/full/10.1056/NEJMoa2118542">https://www.nejm.org/doi/full/10.1056/NEJMoa2118542</a>

remdesivir trial - PINE TREE January 27, 2022, N Engl J Med 2022; 386:305-315, DOI: 10.1056/NEJMoa2116846

sotrovimab trial - COMET ICE, November 18, 2021 - N Engl J Med 2021; 385:1941-1950 https://www.nejm.org/doi/full/10.1056/NEJMoa2107934



