Date: **November 1, 2021**
Memo To: All Island Health Staff and Physicians
From: Richard Jones, Director, Pharmacy Services
Infection Management Advisory Committee (IMAC)

RE: **baricitinib oral tablets for COVID-19: Use and Access**

Situation: The supply of tocilizumab injection and sarilumab injection is unstable due to increased global demand. If tocilizumab or sarilumab are not available for the treatment of severe COVID-19, baricitinib oral is recommended as an alternative.

Background: The BC COVID-19 Therapeutics Committee (CTC) recommends tocilizumab injection and sarilumab injection for the treatment of severe COVID-19. Baricitinib (OLUMIANT) is listed as an alternative immunomodulatory agent. Baricitinib oral is non-Formulary for BC hospitals. The Health Canada approved indication is for the treatment of rheumatoid arthritis. Baricitinib is an inhibitor of Janus kinase (JAK) enzymes.

Guidance: If tocilizumab and sarilumab are not available, baricitinib is recommended for patients requiring life support due to suspected or confirmed COVID-19. Life support indications include:

- high-flow oxygen (e.g. Optiflow) if flow rate greater than 30 L/min and FiO2 greater than 0.4
- OR invasive or non-invasive ventilation
- OR vasopressor or inotropic support

Baricitinib oral should be administered within 24 hours of initiating life support measures. Baricitinib should only be used when life support is required for COVID-19, rather than other causes (such as bacterial infection, pulmonary embolism, etc). Tablets may be dispersed in water for administration via feeding tube.

Dose: baricitinib dose is dependent on eGFR; duration is up to 14 days or until hospital discharge.

Estimated eGFR	**Treatment Regimen**
60 mL/min or greater	4 mg PO daily x 14 days or until discharge (whichever comes first)
30 to 59 mL/min	2 mg PO daily x 14 days or until discharge (whichever comes first)
15 to 29 mL/min	2 mg PO every other day x 14 days or until discharge (whichever comes first)
Less than 15 mL/min	Not recommended

Use of baricitinib for the treatment of severe COVID-19 is restricted to prescribing or approval by Intensivists or Infectious Disease physicians.

To contact an Infectious Disease physician to review baricitinib outside of the ICU, refer to the on-call schedule system: https://medicalaffairs.viha.ca/oncall/BrowseSchedules/. Under Infectious Diseases, select ID physician on call for either NRGH, RJH, or VGH Infectious Diseases. If there is no doctor listed for NRGH, please call the RJH contact covering.

References:

1. National Institutes of Health. Coronavirus Disease 2019 (COVID-19) Treatment Guidelines. Available from: https://covid19treatmentguidelines.nih.gov/
2. Fact Sheet for Healthcare Providers: Emergency Use Authorization (EUA) of Baricitinib. U.S. Food and Drug Administration. July 28, 2021. Available from: https://www.fda.gov/media/143823/download
3. Vancouver Coastal Health Pre-printed Order. Baricitinib (Janus Kinase 1 and 2 Inhibitor) Orders (COVID-19 Patients).
4. BC COVID-19 Therapeutics Committee (CTC) and COVID-19 Therapeutics Review and Advisory Working Group (CTRAWG) Clinical Practice Guideline for Antimicrobial and Immunomodulatory Therapy in Adult Patients with COVID-19. October 15, 2021 Update.
5. Use of Tocilizumab, Sarilumab, and Baricitinib in Treatment of Hospitalized COVID + Patients When Supply of These Drugs is Limited. COVID-19 Therapeutics Review and Advisory Working Group (CTRAWG). October 8, 2021.