**Current Studies**

**CATCO Trial**

**PI:** Dr. Nelson Lee (Infectious Disease)  
**Co-I:** Dr. Wendy Sligl

The overall objective of the study is to evaluate the clinical efficacy and safety of lopinavir/ritonavir, relative to the control arm, in patients hospitalized with COVID-19.

We plan to enroll up to **50 patients** at the University of Alberta Hospital's Critical Care Unit.

**Study Intervention:** Subject to change with Health Canada Approvals

- **Experimental Arm:** Standard-of-care plus Lopinavir/ritonavir will be administered orally for a 14-day course, or until discharge from hospital; subjects who can swallow will be given 2 tablets (200 mg/50mg) twice daily; for those who cannot swallow, 5 mL oral suspension (400 mg.100 mg/5 mL) will be given twice daily.

- **Control Arm:** Standard-of-Care

- Subjects will be assessed daily while hospitalized, including oropharyngeal (OP) swabbing at baseline and on days post enrolment 3, 5, 8, 11, 15 and 29 (if still hospitalized).

(Supplied by the CATCO Research Coordinator).

**Inclusion Criteria:**

- Laboratory-confirmed SARS-CoV-2 infection as determined by PCR, or other commercial or public health assay in any specimen prior to randomization and is admitted to hospital at a participating centre.

**Exclusion Criteria:**

- Anticipated transfer to another hospital, within 72 hours, which is not a study site.
- Known allergy to study medication or its components (non-medicinal ingredients).
- Known HIV infection.
- Currently taking any of the following medications: alfuzosin (e.g., Xatral®), amiodarone (eg Cordarone™), apalutamide (e.g. Erleada™), astemizole*, terfenadine*, cisapride*, colchicine, when used in patients with renal and/or hepatic impairment, dronedarone (e.g., Multaq®), disulfiram (for those who may need to take the oral solution), elbasvir/grazoprevir (e.g., Zepatier™) - used to treat hepatitis C virus (HCV), ergotamine*, dihydroergotamine, ergonovine, methylergonovine* (used after labour and delivery), such as Cafergot®, Migranal®, D.H.E. 45®, fusidic acid (e.g., Fucidin®), systemic lurasidone (e.g., Latuda®), pimozone (e.g., Orap®*) metronidazole (for those who may need to take the oral solution), neratinib (e.g., Nerlynx®) - used for breast cancer, sildenafil (e.g., Revatio®), triazolam, oral midazolam, rifampin, also known as Rimactane®*, Rifadin®, Rifater®, or Rifamate®, St. John's Wort, Venetoclax, lovastatin (e.g., Mevacor®*), lomitapide (e.g., JuxtapidTM) or simvastatin (e.g., Zocor®), PDE5 inhibitors vardenafil (e.g., Levitra® or Revatio), salmeterol, also known as Advair® and Serevent®.

**SPRINT-SARI**

**PI:** Dr. Oleksa Rewa

The primary aim of this study is to establish a research response capability for future epidemics / pandemics through a global SARI observational study. The secondary aim of this study is to describe the clinical epidemiology and microbiology profiles of patients with SARI. The tertiary aim of this study is to assess the Ethics, Administrative, Regulatory and Logistic (EARL) barriers to conducting pandemic research on a global level.

**Study Intervention:** Prospective and Retrospective Observational Study

**Inclusion Criteria:**

- All patients admitted at participating ICUs, presenting with lab confirmed SARS-CoV2 infection.

**Exclusion Criteria:**

- None

The Critical Care Research office is enrolling patients into SPRINT-SARI from all ICUs in the Edmonton Zone, Queen Elizabeth II ICU in Grande Prairie, Northern Lights ICU in Fort McMurray, and Red Deer Regional Hospital.

**Other COVID-19 Research**

**Co-I:** Dr. Wendy Sligl

**Laboratory markers in COVID-19**

**Objective:** Characterize the severity of the HLH markers in patients with COVID-19. Determine if these markers can be used for following disease activity and response to immunomodulation by correlating them with patient clinical courses.

**Immune response to COVID-19**

**Objective:** The goal of this project is to characterize immune responses in individuals with mild versus the severe forms of the disease.

- Both Studies Require Blood Collection as per Dr. Sligl’s request

For more information about our research contact Dr. Oleksa Rewa, Director of Research at 780-248-1256,  
Nadia Baig, Research Manager at 780-492-3817, or visit our website at [www.ualberta.ca/critical-care/research](http://www.ualberta.ca/critical-care/research)