

## UPCOMING STUDIES

### SAVE-ICU

PI: Dr. Michael Jacka

ClinicalTrials.gov: NCT04415060

This is a multicentre open-label, pragmatic, randomized controlled trial and a parallel prospective (non-randomized) cohort study to determine if the use of inhaled volatile anesthetic-based sedation regimen improve participant outcomes as compared to standard intravenous sedation regimen.

**Interventions:** Sedation will be administered according to current standard sedation practice and guidelines for both the Inhaled Volatile Anesthetic sedation arm and Intravenous sedation arms of the study. Stratification will be done by: a) Age  $\geq 65$  years b) participating centre c) PaO<sub>2</sub>/FiO<sub>2</sub> ratio of 150.

#### **Inclusion criteria:**

- Age  $\geq 18$  years
- Mechanically ventilated for  $\leq 48$  hours
- Proven or suspected COVID-19 or hypoxic respiratory failure (PaO<sub>2</sub>/FiO<sub>2</sub> ratio  $\leq 200$ )

#### **Exclusion criteria:**

- Contraindications to sedatives, such as propofol infusion syndrome or malignant hyperthermia;
- Known allergy to any of the ingredients or components of the investigational products; isoflurane;
- Suspect or evidence of high intracranial pressure;
- One-lung ventilation or pneumonectomy;
- Ideal estimated tidal volume too low for delivery of inhaled agents. Target (6ml/kg)  $< 200$ ml;
- Use of inhaled prostacyclin which is contraindicated in the presence of a miniature vaporizer (i.e., Anesthesia Conserving Device). This agent has a high viscosity that leads to poor vaporization of the volatile agent. Other inhaled pulmonary vasodilators such as nitric oxide can be safely administered in the presence of miniature vaporizers. Use of prostacyclin is permissible with an anesthesia machine and MADM;
- Patient is known to be pregnant

**Anticipated To Start Recruitment in January 2021**

## COVID SHUNT Study

PI: Dr. Vincent Lau

**Methods:** Perform a single-center, pilot feasibility, prospective observational cohort study looking at a step-wise protocol with TTE/TCD/TEE bubble studies to assess for:

- The presence or absence of shunts in patients with bilateral pneumonia (with and without COVID-19) who are on life support (e.g. mechanical ventilation).

**Inclusion criteria:** all adult intubated, mechanically ventilated ICU patients (with or without COVID)

**Exclusion criteria:** contraindication to receiving a TEE bubble study

**Actively enrolling**



## PUBLICATIONS

**DecubICUs was recently published in Intensive Care Med.**

<https://pubmed.ncbi.nlm.nih.gov/33034686/>

**A total of 13 254 patients were enrolled from 1117 ICUs world-wide.**

**68 ICU patients from the Edmonton Zone were enrolled.**

**A total of 25 GSICU, 24 RAH ICU, 4 SGH ICU, 8 MIS ICU, and 7 GNH ICU patients were enrolled in the study on May 15, 2018.**