

Advancing Brain Outcomes in Pediatric Critically Ill Patients Sedated With Volatile Anesthetic Agents

NCT05867472

Status	RECRUITING
Phase	Phase 3
Sponsor	Sunnybrook Health Sciences Centre
Enrollment	60 participants

Key Eligibility Criteria

Inclusion (2)

- Pediatric patients age from 1 month to less than 18 years who need sedation to tolerate mechanical ventilation and will remain ventilated for e 24 hours
- Receiving IV sedation by infusion or bolus for d72h to aid mechanical ventilation (but will be recruited as early as possible)

Exclusion (9)

- Current use of inhaled prostacyclin (high viscosity of prostacyclin impairs vaporizer device) or continuous salbutamol nebulization (impairs gas analyzer function)
- Family history or personal history of malignant hyperthermia (MH)
- Allergy to isoflurane, sevoflurane or other volatile inhaled anesthetic gas
- Metabolic, mitochondrial or myopathy disease e.g., Duchenne muscular dystrophy (volatiles may trigger malignant hyperthermia like reaction)
- Moribund with expected survival < 24h

... and 4 more (see full listing online)

Locations (3 total)

McMaster Children's Hospital, Hamilton, Ontario, Canada
Children's Hospital - London Health Sciences Centre, London, Ontario, Canada
The Hospital for Sick Children (SickKids), Toronto, Ontario, Canada