

Comparison of Transcutaneous and Blood CO₂ Measurement in Critically Ill Children

NCT07468006

Status RECRUITING
Sponsor Brno University Hospital
Enrollment 20 participants

Key Eligibility Criteria

Inclusion (4)

- Age 1-18 years
- Diagnosis of respiratory insufficiency or impaired peripheral perfusion
- Expected need for more than one arterialized capillary or arterial blood gas sample
- Admission to PICU

Exclusion (5)

- Repeated failure of sensor adhesion
- Hypothermia $< 35^{\circ}\text{C}$
- Time difference $> \pm 5$ minutes between tPCO₂ and blood sampling
- Large tPCO₂ variability ($> \pm 1$ kPa) in 15 minutes preceding blood sampling
- Non-physiological tPCO₂, values incompatible with life

Locations (1 total)

University Hospital Brno, Brno, Czechia