

Supplementary Table S1. "SPOKE" CENTER ECMO CHECKLIST

- **Order blood** for ECMO circuit priming and for emergency (2 adults packed RBCs) O
- **Provide a scrub nurse** O
- **Investigations to be made:**
 - Cranial ultrasound O
 - Echocardiogram O
 - Chest x-ray O
- **Recent lab tests:**
 - Hb, WBC, Platelets, CRP, PCT, Alb, ionized Ca, Cr, Urea, Bilirubine O
 - Lactate, APTT, prothrombin complex, Fibrinogen, D-dimer, Antithrombin O
 - Arterial blood gas O
 - Cardiac enzymes O
- **Patient preparation:**
 - CVC (leave neck access free, available for ECMO implant) O
 - Arterial -line O
 - Securely fixed endotracheal tube O
 - Indwelling catheter O
 - Space to set up the ECMO system and sterile instrument back table O
 - Height adjustable incubator with no mattress O

Metal utility cart ☐

IV pole on casters ☐

External defibrillator (neonatal) ☐

• Alert in advance the radiology technician to be available for x-ray after implant ☐

• Relatives/parents should be available to obtain full informed consent ☐

Supplementary Table S2. Pre-HandS demographic data form (for physisican)

- Hub Center_____ Spoke Center_____
- Pt demographic
- Name_____ DOB_____
- Gender_____ Contact _____
- Weight_____ Gestational Age_____
- Reason for HandS Transfer
- Prematurity
- Respiratory failure
- RDS
- MAS
- PNX
- CDH
- Apnea
- Bronchioltis
- Other_____
- Cardiac Failure
- Neurological disorder
- Surgical
- Other cause
- Level of severity of clinical conditions:
- Mild
- Moderate
- Severe

Supplementary Table S3. Pediatric HandS ECMO transfer form (for Pediatric ICU nurse)

Parameter	At 1 st call	At SPOKE	During transfer	At HUB
Cyanosis				
Icterus				
Paleness				
RDS				
Shock				
epilepsy				
Hypo/hyperactivity				
Urine output?				
Body Temperature (degrees C)				
HR				
RR				
Transcutaneous SatO2				
PA				
Htc %				
pH				
pO2				
pCO2				
HCO3				
ABE				
FiO2				
Mechanical ventilation				
CPAP				
Intubation AMBU vent				
Intubation mech Vent.				
PI/PEEP				
RR (if mechanical vent)				
Tidal				
CXR				

Echocardiography				
Cerebral US				
Lines <div>Vein</div> <div>Umbelical artery</div> <div>NG tube</div>				
Chest tube				
Medication list				
PGE1				
Surfactant done?				
CPR ?				

Supplementary Table S4. Pediatric HandS ECMO data form (for the pefusionist)

- Hub Center_____ Spoke Center_____

- Pt demographic
- First and Last Name_____
- DOB_____ Gestational Age_____
- Gender_____ BSA _____
- Weight_____ Height _____

- Reason for HandS Transfer: Diagnosis_____
- Prematurity
- Respiratory failure
- RDS
- MAS
- PNx
- CDH
- Apnea
- Bronchiolitis
- Other_____
- Cardiac Failure
- Neurological disorder
- Surgical
- Other cause

- ECMO details
- Pump type_____
- ECMO circuit type _____
- Oxygenator type _____

- Site of arterial cannulation _____
- Type of arterial cannula (size) _____
- Site of venous cannulation _____
- Type of venous cannula (size) _____
- Type of Priming _____
- Flow (l/min) _____
- Cannulation time(min) _____
- TAT (min) _____ EIT (min) _____

- Wean off? y/n _____ ECMO duration (days) _____
- Date of end ECMO _____
- Outcome: alive/dead
- Complications:
 - None
 - Hemorrhage/thrombosis
 - Cannula dislocation
 - Stroke
 - Infection
 - Change of ECMO: y/n
 - Other