attach patient label

Physician Orders

LEB ECMO Plan

PEDIATRIC

Height: _____**cm** **Weight:** _____**kg**

Allergies: [ ] No known allergies

	Vital Signs	
[ ]	Vital Signs w/Neuro Checks	T;N, q1h(std)
	Food/Nutrition	
[ ]	NPO	Start at: T;N
	Patient Care	
[ ]	Consent Signed For	T;N, Procedure: ECMO, Verify that consent form is complete and on chart.
[ ]	Isolation Precautions	T;N, Isolation Type: _____
[ ]	Strict I/O	T;N, Routine, q1h(std)
[ ]	Fluid Allowance	T;N, Total Fluids to equal (_____mL per kg per day) = _____mL per hour
[ ]	Radiant Warmer Apply	T;N
[ ]	Hepwell Insert/Site Care LEB	T;N, Routine, q2h(std)
[ ]	Replogle (NGT)	T;N, Suction Strength: To Gravity
[ ]	Replogle (NGT)	T;N, PRN, Irrigate, with normal saline
[ ]	Replogle (OGT)	T;N, To gravity drainage
[ ]	Oral Gastric Tube Insert (Replogle (OGT))	T;N, PRN, Irrigate with normal saline
[ ]	Suction Patient	T;N, q2h(std), Endotracheal Tube
[ ]	Suction Patient	T;N, PRN, Endotracheal Tube
[ ]	Chest Percussion Therapy Nsg	T;N, q4h(std)
[ ]	Cardiopulmonary Monitor	T;N Routine, Monitor Type: CP Monitor
[ ]	O2 Sat Monitoring NSG	T;N, maintain O2 sat ___% to ____%
[ ]	ECMO Communication	T;N, Each shift verify that 1 unit PRBCs is available in the blood bank.
[ ]	ECMO Communication	T;N, Complete ECMO Checklist q shift.
[ ]	ECMO Communication	T;N, STAT, Draw ACT POC (RT Collect) from patient for baseline, then draw q1h and PRN (for changes in patient status) from ECMO circuit.
[ ]	ECMO Communication	T;N, draw ISTAT CG8 tests from ECMO Circuit after blood primed and PRN for changes in patient's status, draw from ECMO Circuit
[ ]	ECMO Communication	T;N, T;N Obtain ISTAT CG8 tests q6h and PRN for changes in patient status, draw from patient
[ ]	ECMO Circuit Parameters	T;N, Adjust ECMO Blood Flow: Adjust (VA ECMO) to maintain patient PO2 _____mmHg to _____ mmHg, ECMO Sweep Gas: Adjust ECMO sweep gas to maintain patient PCO2 _____mmHg to _____ mmHg
[ ]	ECMO Transfusion Parameters	T;N, Transfuse Platelets: If platelet count is less than _____, place order to Transfuse Platelets _____mL (_____mL/kg) and administer over 1 hour.
[ ]	ECMO Transfusion Parameters	T;N, Transfuse PRBCs: If HCT is less than _____, place order to Transfuse PRBCs Less Than 4 Months _____mL (_____mL/kg) and administer over 1 hour.
[ ]	ECMO Transfusion Parameters	T;N, Transfuse PRBCs: If HCT is less than _____, place order to Transfuse PRBC _____mL (_____mL/kg) and administer over 1 hour.

attach patient label

Physician Orders

LEB ECMO Plan

PEDIATRIC

Respiratory Care		
[ ]	ECMO Resting Ventilator Settings	T; N, Rate_____, PIP_____, PEEP _____, FiO2 ____, Nitric Oxide _____ppm
[ ]	ECMO Emergency Ventilator Setting	T; N, Rate_____, PIP_____, PEEP _____, FiO2 ____, Nitric Oxide _____ppm
Continuous Infusions		
[ ]	1/4 NS (Pediatric)	1 ml/hr, Injection, IV, Routine, T;N, for Pressure Lines, No heparin added to line fluids
[ ]	1/4 NS (Pediatric)	_____ mL, Injection, IV, For medication flushes, Routine, T;N,for Pressure Lines, No heparin added to line fluids
[ ]	Heparin drip (Pediatric)	25 units/kg/hr, Injection, IV, Routine, T;N, Titrate heparin per protocol to maintain an ACT of _____ seconds or an APTT of _____ seconds
[ ]	D5 1/2 NS	1,000mL,IV,Routine,T:N, at____mL/hr
[ ]	D5 1/4 NS	1,000mL,IV,Routine,T:N, at____mL/hr
[ ]	D5 1/2 NS KCl 20 mEq/L	1,000mL,IV,Routine,T:N, at____mL/hr
[ ]	D5 1/4 NS KCl 20 mEq/L	1,000mL,IV,Routine,T:N, at____mL/hr
Medications		
[ ]	thrombin topical 20,000 units kit	20,000 units, Topical Soln,TOP, PRN, PRN,Routine, T;N for bleeding at ECMO cannula site(s).
[ ]	aluminum-magnesium hydroxide	5 mL, Oral Susp, NG, q4h, PRN, Routine, T;N, May also be given via OG, for gastric pH less than 4 and/or occult blood +.
[ ]	vecuronium	_____ mg, (0.1 mg/kg), Injection, IV, once, Routine, T;N, For cannulation
[ ]	fentaNYL	_____mcg, (1 mcg/kg), Injection, IV, once, Routine, T;N, For cannulation
***Note: Please Order Ranitidine If Patient Is NPO**		
[ ]	famotidine	0.25 mg/kg, Injection, IV, q12h, Routine, T;N, Max dose = 40 mg/day
***Note: Order Medications Below For 1/4" ECMO Circuit Prime**		
[ ]	tromethamine	50 mL, Injection, Device, once, STAT, T;N
[ ]	calcium chloride	600 mg, Injection, Device, once, STAT, T;N
[ ]	albumin 25%	50 grams, Injection, Device, once, STAT, T;N
***Note: Order Medications Below For 3/8" ECMO Circuit Prime**		
[ ]	tromethamine	75 mL, Injection, Device, once, STAT, T;N
[ ]	calcium chloride	900 mg, Injection, Device, once, STAT, T;N
[ ]	heparin	300 units, Injection, Device, once, STAT, T;N
[ ]	albumin 25%	75 grams, Injection, Device, once, STAT, T;N
***Note: Please Order between 25 and 50 units per kg heparin bolus**		
[ ]	heparin	____ units/kg, Injection, Device, PRN, PRN Other Specify in Comment, STAT, T;N, For cannulation, Concentration: 100 units/mL
Laboratory		
[ ]	**LEB ECMO Daily Lab and Diagnostic Plan**	
[ ]	TEG-LeBonhuer (Thrombelastograms LeBonhuer)	STAT, T;N, M, TH, Type: Blood, Nurse Collect, Comment: During Duration of ECMO
[ ]	CBC	STAT, T;N, once, Type: Blood, Nurse Collect, Comment: Prior to initiation of ECMO
[ ]	Prothrombin Time (PT)	STAT, T;N, once, Type: Blood, Nurse Collect, Comment: Prior to initiation of ECMO
[ ]	Partial Thromboplastin Time (PTT)	STAT, T;N, once, Type: Blood, Nurse Collect, Comment: Prior to initiation of ECMO

attach patient label

Physician Orders

LEB ECMO Plan

PEDIATRIC

Laboratory continued		
[ ]	Fibrinogen Level	STAT, T;N, once, Type: Blood, Nurse Collect, Comment: Prior to initiation of ECMO
[ ]	CMP	STAT, T;N, once, Type: Blood, Nurse Collect, Comment: Prior to initiation of ECMO
[ ]	Magnesium Level	STAT, T:N, once, Type: Blood, Nurse Collect, Comment: Prior to initiation of ECMO
[ ]	Direct Bilirubin	STAT, T;N, once, Type: Blood, Nurse Collect, Comment: Prior to initiation of ECMO
[ ]	Phosphorus Level	STAT, T;N, once, Type: Blood, Nurse Collect, Comment: Prior to initiation of ECMO
[ ]	HIV Antibody Screen	STAT, T;N, once, Type: Blood, Nurse Collect, Comment: Prior to initiation of ECMO
[ ]	Hepatitis B Surf Antigen	STAT, T;N, once, Type: Blood, Nurse Collect, Comment: Prior to initiation of ECMO
[ ]	Hepatitis C Virus Abs	STAT, T;N, once, Type: Blood, Comment: Prior to initiation of ECMO
Transfusion Orders		
[ ]	Transfuse FFP-Pediatric	STAT, T;N
[ ]	Transfuse Platelets-Pediatric	STAT, T;N, Leukoreduced and Irradiated
[ ]	Transfuse Cryoprecipitate-Pediatric	Routine, T;N, Leukoreduced
NOTE: If patient 4 months of age or greater order from the following:		
[ ]	Type and Screen <4 months(DAT included)	Routine, T;N, Type: Blood
[ ]	Transfuse PRBC <4 Months	STAT, T;N, Volume: 3 units, Special Needs: Irradiated, send to bedside in cooler for ECMO prime
[ ]	Hold PRBC <4 Months	Routine, T;N, Status: to Hold, Special Needs: Irradiated, on hold while patient on ECMO
If patient 4 months of age or greater order from the following:		
[ ]	Type and Screen Pediatric	Routine, T;N, Type: Blood
[ ]	Type and Crossmatch Pediatric >4 months	Routine, T;N, Special Needs: Leukoreduced and Irradiated, Type: Blood
[ ]	Transfuse PRBC >4 months	STAT, T;N, 3 units, Special Needs: Irradiated, Type: Blood, Comment: send to bedside in cooler for ECMO prime
[ ]	Hold PRBC >4 months	Routine, T;N, Reason: hold, Special Needs: Leukoreduced and Irradiated, Comment: On Hold while patient on ECMO
Diagnostic Tests		
[ ]	Chest 1VW Frontal (CXR Portable)	T;N,STAT,Reason:_____, Transport:Portable, prior to initiation of ECMO
[ ]	Chest 1VW Frontal (CXR Portable)	T;N, Reason for Exam: Other, Enter in Comments, Routine, Portable, Reason: verification of ECMO cannula placement
[ ]	US Head Neonatal/Echoencephalogram	T;N,STAT,Reason:_____, Transport:Portable, prior to initiation of ECMO
[ ]	Echocardiogram Pediatric (0-18 yrs)	T;N, STAT, Reason:_____, Transport: portable, prior to initiation of ECMO

attach patient label

Physician Orders

LEB ECMO Plan

PEDIATRIC

	Consults/Notifications	
[ ]	Notify Physician-Continuing	T;N, For: mean arterial pressure greater than _____ or less than _____, Who:_____
[ ]	Notify Physician-Continuing	T;N, For:_____, Who:_____
[ ]	Notify Physician-Once	T;N, For:_____, Who:_____
[ ]	Nutritional Support Team Consult	Start at: T;N, Stat, Reason: Total Parenteral Nutrition
[ ]	Consult Clinical Pharmacist	Start at: T;N, Reason: Concentrate all drips, Special Instructions: ECMO patient
[ ]	Consult Clinical Dietitian	T;N, Reason:_____
[ ]	Lactation Consult	T;N, Reason:_____
[ ]	Consult Medical Social Work	T;N, Reason: Other, specify, Family needs
[ ]	Consult Child Life	T;N

Date	Time	Physician's Signature	MD Number
_____	_____	_____	_____