

Supplemental Table 1: ELSO collected variables new study variables and time aligned variables

ELSO Variables		New Variables	
	Time Aligned Variables		
admit weight			admit height
admission diagnosis			altered neurologic status
date of PICU admission			primary immunodeficiency
discharge date			cancer
date on ECMO			comorbid conditions 1-5
date of birth			secondary diagnoses 1-5
date of intubation			date of initial presentation
ECMO cannula			number of transfers
cate off ECMO			placed on ECMO at outside hospital
discharged Alive			indication for respiratory ECMO
Gender			creatinine within 24 hours of admission
Variables Collected within 6 hours prior to ECMO			
	Blood Gas and	Blood Gas and Ventilator Settings	
	arterial pH*	venous or capillary pH (if no arterial)*	lactate
	arterial PCO ₂ *	venous or capillary PCO ₂ (if no arterial)*	inhaled nitric oxide (iNO)
	arterial PO ₂ *	venous or capillary PO ₂ (if no arterial)*	
	arterial SO ₂ *	venous or capillary SO ₂ (if no arterial)*	
	ventilator mode*	time of blood gas	
	set respiratory rate*	blood gas type (arterial, venous, capillary)*	
	set PIP or amplitude*	peripheral SO ₂ *	
	set PEEP*	inspiratory time*	
	mean airway pressure	expired end tidal CO ₂ *	
	FiO ₂ *	Hemodynamics	
	Hemodynamics	dopamine infusion rate [†]	
	systolic blood pressure [†]	dobutamine infusion rate [†]	
	mean arterial pressure [†]	epinephrine infusion rate [†]	
		norepinephrine infusion rate [†]	
		vasopressin infusion rate [†]	
		milrinone infusion rate [†]	
Variables collected within 24 hours prior to ECMO			
			abnormal pupil response
			Laboratory Values
			creatinine
			alanine aminotransferase (ALT)
			international normalized ratio (INR)
			white blood cell count (WBC)
			hemoglobin
			platelet count
			Severity of illness and Organ dysfunction scores
			pediatric risk of mortality (PRISM) III
			pediatric index of mortality (PIM) II
			pediatric logistic organ dysfunction (PELOD)

All variables with * were collected at the same. All variables with [†] were collected at the same time ECMO, extracorporeal membrane oxygenation; PIP, peak inspiratory pressure; PEEP, positive end expiratory pressure; PCO₂, partial pressure of carbon dioxide, partial pressure of oxygen, fraction of inspired oxygen, oxyhemoglobin saturation.