

## Check List for ECMO Transport Timeout

Date of Transfer: \_\_\_\_\_

Time of Transfer: \_\_\_\_\_

**Patient's Label**

### 1. Intra-Hospital Transport of Patient on ECMO

☐ NICU to CICU    ☐ CICU to Angiography Suite    ☐ CICU & Radiology Dept    ☐ CICU to Operating Theatre

### 2. Inter-Hospital Transport of Patient on ECMO via CHETS

☐ Local Hospital to KKH (NICU/CICU)

### 3. Transport Team Personnel

Personnel	Roles
ICU Consultant/Fellow	Team Leader
Perfusionist	In charge of ECMO Circuit
ECMO Nurse Specialist	Assist the perfusionist with the ECMO Circuit
ICU Nurse	In-charge of the patient
Respiratory Therapist/Code Nurse or Second Nurse in Charge	In-charge of the Airway and Ventilation
Security Officer	To clear the route from ICU to destination and vice versa

### ICU CONSULTANT TO INSTRUCT ICU MO TO CONTACT THE FOLLOWING PERSONNEL:

- Receiving party re: estimated time of arrival
- Cardiothoracic surgeon to be on standby in hospital during transport
- Security to clear the route and hold the lift

### OVERSIGHT THAT ALL EQUIPMENT ARE PREPARED

Respiratory therapist	Yes	No	ECMO Specialist Nurse	Yes	No
Transport Ventilator	<input type="checkbox"/>	<input type="checkbox"/>	ECMO Machine	<input type="checkbox"/>	<input type="checkbox"/>
Resuscitation Bag	<input type="checkbox"/>	<input type="checkbox"/>	Spectrum M3 Monitor	<input type="checkbox"/>	<input type="checkbox"/>
Oxygen/Air supply	<input type="checkbox"/>	<input type="checkbox"/>	Oxygen/Air Supply for ECMO Machine	<input type="checkbox"/>	<input type="checkbox"/>
Stethoscope	<input type="checkbox"/>	<input type="checkbox"/>	Y-Twin Gas Connector for Oxygen	<input type="checkbox"/>	<input type="checkbox"/>
<b>Nurse in charge</b>			Y-Twin Gas Connector for Air	<input type="checkbox"/>	<input type="checkbox"/>
Infusion pumps	<input type="checkbox"/>	<input type="checkbox"/>			
Resuscitation drugs	<input type="checkbox"/>	<input type="checkbox"/>			

### CHECK PATIENT'S STABILITY FOR TRANSFER

Respiratory status	Tick if ok	Haemodynamic	Tick if ok
Blood gas	<input type="checkbox"/>	HR, BP, SvO <sub>2</sub> , lactate	<input type="checkbox"/>
Ventilatory settings	<input type="checkbox"/>	ECMO flow	<input type="checkbox"/>
CXR (latest)	<input type="checkbox"/>	<b>Arterial Line</b>	
Clinical examination	<input type="checkbox"/>	Femoral/ UAC/ Radial/ Dorsalis pedis/	<input type="checkbox"/>
<b>Venous access</b>		Posterior tibial	
Central line	<input type="checkbox"/>	<b>Other Tubes</b>	
Peripheral line	<input type="checkbox"/>	NG tube/ Urinary catheter/ Chest drain (s)	<input type="checkbox"/>
		Others	<input type="checkbox"/>

### BEFORE DEPARTURE Procedures

	Tick
Check patient's parameters	<input type="checkbox"/>
Ensure receiving party is ready	<input type="checkbox"/>
Security is on site	<input type="checkbox"/>
Cardiothoracic surgeon is on standby	<input type="checkbox"/>

### DURING TRANSPORT Procedures

	Tick
Overall coordinator of transport process, including transfer of patient in the radiology department	<input type="checkbox"/>
Check patient's parameters	<input type="checkbox"/>
Troubleshoot and give team members directions on interventions	<input type="checkbox"/>

**ECMO Specialist/ Perfusionist**

<b>EQUIPMENT</b>			
<u>ECMO Machine</u>	<input type="checkbox"/>	<b>Delta-stream</b>	<input type="checkbox"/>
		Pump head	<input type="checkbox"/>
		Oxygenator	<input type="checkbox"/>
		Batteries x2 (fully charged)	<input type="checkbox"/>
<u>Monitors</u>	<input type="checkbox"/>	M3 Spectrum (fully charged)	<input type="checkbox"/>
<u>Clamps</u>	<input type="checkbox"/>	Sterile clamps x2	<input type="checkbox"/>
		Non-sterile clamps x2	<input type="checkbox"/>
		2 tanks of oxygen (full pressure)	<input type="checkbox"/>
<u>Gas Supply</u>	<input type="checkbox"/>	1 tank oxygen, 1 tank air	<input type="checkbox"/>
		(for infants <5kg)	<input type="checkbox"/>
		<b>Rotaflow</b>	<input type="checkbox"/>
		Console with pump head and oxygenator	<input type="checkbox"/>
		Rotaflow Handcrank	<input type="checkbox"/>
		Data Master for Rotaflow	<input type="checkbox"/>
<b>PROCEDURE</b>			
<b>GETTING READY</b>		<b>AT DEPARTURE</b>	<b>DURING TRANSPORT</b>
Check pump flow	<input type="checkbox"/>	For delta-stream	<input type="checkbox"/>
Check access and return pressures	<input type="checkbox"/>	Check pump flow	<input type="checkbox"/>
Check ECMO cannula site	<input type="checkbox"/>	Connect battery pack to portable pump head	<input type="checkbox"/>
Check patient's parameters	<input type="checkbox"/>	Stop pump flow	<input type="checkbox"/>
Check SvO <sub>2</sub> reading	<input type="checkbox"/>	Change from console pump head to portable pump head	<input type="checkbox"/>
		Dial the flow on the portable pump head to desired flow	<input type="checkbox"/>
		Check patient's parameters	<input type="checkbox"/>
		Check ECMO cannula	<input type="checkbox"/>
		Check and position ECMO tubings	<input type="checkbox"/>
		Ensure security of ECMO cannulae	<input type="checkbox"/>
		Ensure integrity of entire ECMO circuit	<input type="checkbox"/>
		Check ECMO flow	<input type="checkbox"/>
		Check battery life of ECMO machine	<input type="checkbox"/>

**Respiratory Therapist/ Code Nurse**

<b>EQUIPMENT</b>		<b>AT DEPARTURE</b>	
Transport ventilator	<input type="checkbox"/>	Check gas tank supply	<input type="checkbox"/>
Oxygen tank (full pressure) x 2	<input type="checkbox"/>	Connect transport ventilator to gas tanks	<input type="checkbox"/>
Oxygen tank x 1, Air tank x 1 for infants < 5kg	<input type="checkbox"/>	Check patient's ETT position	<input type="checkbox"/>
Resuscitation bag and Mask	<input type="checkbox"/>	Check chest rise and auscultate	<input type="checkbox"/>
Stethoscope	<input type="checkbox"/>	Check patient's parameters	<input type="checkbox"/>
<b>PROCEDURES : GETTING READY</b>		<b>DURING TRANSPORT</b>	
Check patient's ETT tube position	<input type="checkbox"/>	Ensure ETT tube is secure	<input type="checkbox"/>
Check patient's parameters	<input type="checkbox"/>	Check patient's chest rise	<input type="checkbox"/>
Check ventilator settings	<input type="checkbox"/>	Check SpO <sub>2</sub>	<input type="checkbox"/>
Set ventilator settings on transport ventilator	<input type="checkbox"/>	Check integrity of ventilator circuit	<input type="checkbox"/>
Connect patient to transport ventilator	<input type="checkbox"/>	Troubleshoot ventilator alarms	<input type="checkbox"/>
Check chest rise and auscultate	<input type="checkbox"/>		
Check patient's parameters	<input type="checkbox"/>		
Check patient's latest blood gas	<input type="checkbox"/>		

**Nurse in charge**

<b>EQUIPMENT</b>		<b>PROCEDURES : GETTING READY</b>		<b>AT DEPARTURE</b>	
<u>Monitors</u>	<input type="checkbox"/>	Check patient's parameters	<input type="checkbox"/>	Check patient's parameters	<input type="checkbox"/>
<u>Infusions and drugs</u>		Check patient's medication infusions and rates		Disconnect infusions from wall source	
Transport monitor (fully charged)		Ensure infusions are sufficient to last estimated transport duration		Connect to transport monitor	
Infusion pumps (fully charged)		Check access - venous			
Emergency drugs kit		Connect an extension with 3-way stopcock to a good venous access for emergency drugs during transport		<b>DURING TRANSPORT</b>	<input type="checkbox"/>
		Check access - arterial		Transport infusion pumps with patient	
		Check all tubes - NG, urinary catheter, etc		Troubleshoot infusion pumps	
		Check transport medications		Draw medications en route if instructed by ICU consultant	
		- adrenaline 1:10000 x 2 vials			
		- calcium chloride 10% x 1 vial			
		- Sodium bicarbonate 8.4% x 1 vial			
		- 0.9% NaCl x 2 bottles (500ml)			
		- 5% Albumin x 1 bottle (if available)			