

ECLS Cardiac Addendum Form

Extracorporeal Life Support Organization (ELSO)

Cardiac Addendum ID: _____

Run Number: _____

(Note: Unique ID is self-generated by the Registry. This is for your reference only to match forms)

Please refer to the [ELSO Registry Cardiac Addenda Data Definitions](#) (link to definition) for specific details regarding the fields collected.

Cardiac Pre-ECLS Assessment

Cardiac Symptoms Pre-ECMO

- ____ *NYHA or Ross Category (at hospital admission) (If ≥ 18 yrs then NYHA; If < 18 yrs then Ross)
- ____ *SCAI Category (at hospital admission) Or Unknown
- ____ *SCAI Category (immediately pre-ECMO) Or Unknown
- ____ Vasoactive Inotrope Score (4hrs prior to ECMO Cannulation)

*Pre-ECLS Cardiac Catheterization

Did the patient have a cardiac catheterization prior to ECMO: Yes No Unknown

Date: ____/____/____

Time: ____:____

Indication for Cath: Diagnostic Only Diagnostic and Interventional Interventional Only

Purpose Diagnostic Cath (check all that apply):

- Left Heart Cath Right Heart Cath Coronary Arteries Dilation or stent

*Coronary Intervention - artery balloon dilation or stent: (Mandatory only for adult congenital patients)

- Left Main Coronary Artery (LMCA)
- Left Anterior Descending (LAD)
- Right Coronary Artery (RCA)
- Circumflex Artery
- Diagonal Artery
- Posterior Descending Artery (PDA)

Interventions Performed (check all that apply):

- Aortic Arch Balloon
- Aortic Arch Stent
- Aortic Valvuloplasty
- ASD Device Closure
- Atrial Septostomy/ Septoplasty/ Stent
- Creation of Potts Shunt
- Creation of Fontan Fenestration

- Endomyocardial Biopsy
- EP Arrhythmia Ablation
- Mitral Clip
- Occlusion of Aortopulmonary Collateral
- Occlusion of Venous Collateral
- PDA Device Closure
- Percutaneous/Transcatheter Aortic Valve Implantation (TAVI)
- Percutaneous Mitral Valve Clip
- Percutaneous Mitral Valve Implantation
- Percutaneous Pulmonic Valve Implantation
- Placement for a right sided Impella device
- Placement for a transaortic Impella device
- Percutaneous of a Tandem Heart
- Placement of EKOS catheter or other direct thrombolytic catheters for Thrombus in Pulmonary Artery
- Placement of IVC or SVC Stent
- Placement of LA Cannula
- Placement of MBTS Stent
- Placement of PDA Stent
- Placement of RV-PA Stent (incl sano)
- Placement of Venous Stent (vertical vein, azygous, hemi-azygous)
- Pulmonary Artery Balloon
- Pulmonary Artery Stent
- Pulmonary Valvuloplasty
- Removal/aspiration of Thrombus in Pulmonary Artery
- Removal/ Aspiration of Thrombus in Systemic Vein (including Glenn and Fontan)
- SVC Balloon Dilatation
- Trans Myocardial Revascularization (TMR)
- Transcatheter Mitral Valve Implantation
- Transcatheter Pulmonic Valve Implantation
- Transcatheter Tricuspid Valve Implantation
- VSD Device Closure
- Other: _____

Cardiac ECLS Indications

*Circumstances of ECMO Cannulation (select all that apply):

- Planned for patient deterioration (Prophylactic)
- Failure to Wean from CPB
- Emergent (ECPR or Fail to Salvage)
- Progression of Critical Illness Despite Established VAD/ Temporary Mechanical Circulatory Support / IABP

Type of temporary or durable device: _____

Date of implantation prior to ECMO: ____/____/____

***Precipitating Event (check predominant problem only ONE):**

- Low Cardiac Output: Left Ventricular Failure
- Low Cardiac Output: Right or Biventricular Failure
- Low Cardiac Output: Not Specified
- Combined Cardiac and Respiratory Failure
- Cardiac Arrest: ECPR
- Unknown

***Contributing Diagnoses within 4 hours prior to the precipitating event (check at least one):**

- Acute Pulmonary Edema
- Pulmonary Arterial Hypertension (mean PA pressure > 20 mmHg in the setting of normal LA pressure)
- Secondary Pulmonary Hypertension (mean PA pressure > 20 mmHg)
- Pulmonary Embolism (confirmed by imaging)
- Hypoxemia (persistent SpO₂ < 60% leading to cannulation)
- Tamponade
- Low Cardiac Output – Left, Right or Biventricular Failure
- Post-Cardiotomy
- Arrhythmias
- Acute Myocardial Infarction (or Acute Coronary Syndrome)
 - Time from Onset of Chest Pain to Hospital Presentation: _____ minutes
 - Time from Presentation to Hospital to ECMO: _____ minutes
- Post Heart Transplant Graft Failure (if checked, select one below)
 - Early graft failure < 24 hours or ECMO within 48 hours
If early graft failure, list ischemic time: _____ hours
 - Late Graft Failure
 - Unknown transplant date
- Ischemic Cardiomyopathy

Chronic Heart failure (acute on chronic)

- Non-Ischemic Cardiomyopathy (if checked, select type below that best represents)
 - Dilated cardiomyopathy
 - Hypertrophic Cardiomyopathy
 - Restrictive Cardiomyopathy
 - Stress Induced Cardiomyopathy (Takotsubo)
 - Post-Partum Cardiomyopathy
 - Other
- Endocarditis
- Myocarditis (proven or suspected)
- None Identified
- Unknown

Cannulation Details

***Cannulation Location (choose one of the following):**

- Emergency Department (ED)
- General inpatient Ward
- High Dependency Unit (HDU)/ Step Down Unit/ Intermediate Care Unit
- Intensive Care Setting (Check one below):
 - Adult Medicine ICU
 - Adult Surgical ICU
 - Mixed ICU
 - Adult Cardiac or Cardiothoracic Unit (CICU/CVICU/CTICU)
 - Adult Coronary Care Unit (CCU)
 - Pediatric Intensive Care Unit (PICU)
 - Pediatric Cardiac Intensive Care Unit (CICU)
 - Neonatal Intensive Care Unit (NICU)
- Cardiac Catheterization Lab
- Diagnostic or Intervention Suite (other than Cardiac Cath Lab)
- Operating Room
- Post-Anesthesia Recovery Unit (PACU)
- Delivery Room
- Other Inpatient Setting

LV Decompression Procedures (select all that apply) and add date of procedure, if known:

- Atrial Septostomy
- LA Vent
- LV Vent
- PA Vent
- Intra-Aortic Balloon Pump
- Transaortic Valve impella
- L-VAD
- R-VAD
- Other

Rationale for Decompression on ECLS (select one):

- Institutional Routine
- Progressive Pulmonary Edema on CXR
- Lack of Native Ejection
- Decreased Pulse Pressure on Arterial Waveform
- Evidence of Ischemia
- Other

Cardiac Surgical Procedures

***Was there a cardiac procedure during the admission:** Yes No

Type (Check all that apply):

- Surgical Procedure at Bedside
- Surgical Procedure in OR
- Cardiac Catheterization Procedure
- None
- Other: _____

***Did the patient have a surgical intervention during this admission:** Yes No

If yes, please include the following for INDEX procedure. See ELSO cardiac procedure list in supporting documents):

ELSO Cardiac Procedure Code: _____

Date: ___/___/___ **Time:** ___:___

Cardiac surgery on CPB: Yes No

CPB Runs Total: _____ runs

Cross clamp time: _____ minutes

CPB time: _____ minutes

Returned to ICU with open sternum: Yes No

Duplicate this page as required for multiple changes

Cardiac Catheterization

Did the patient have a cardiac catheterization during, or after ECMO de-cannulation? Yes No

#1 During ECLS: or After ECMO de-cannulation:

Date ___/___/___, **Time** ___:___ **Type of procedure:** Diagnostic Diagnostic/Interventional Interventional Only

Purpose: Left Heart Cath Right Heart Cath Coronary Arteries

#2 During ECLS: or After ECMO de-cannulation:

Date ___/___/___, **Time** ___:___ **Type of procedure:** Diagnostic Diagnostic/Interventional Interventional Only

Purpose: Left Heart Cath Right Heart Cath Coronary Arteries

#3 During ECLS: or After ECMO de-cannulation:

Date ___/___/___, **Time** ___:___ **Type of procedure:** Diagnostic Diagnostic/Interventional Interventional Only

Purpose: Left Heart Cath Right Heart Cath Coronary Arteries

Purpose for Interventional (check all that apply):

- Atrial Septostomy/ Septoplasty/ Stent
- Placement of LA Cannula
- Placement of MBTS Stent

- Placement of RV-PA Stent (incl sano)
- Placement of PDA Stent
- Aortic Valvuloplasty
- Pulmonary Valvuloplasty
- Aortic Arch Balloon
- Aortic Arch Stent
- Pulmonary Artery Balloon
- Pulmonary Artery Stent
- Transcatheter Aortic Valve Implantation (TAVI)
- Percutaneous Mitral Valve Clip
- Percutaneous Mitral Valve Implantation
- Occlusion of Aortopulmonary Collateral
- Occlusion of Venous Collateral
- Removal/ Aspiration of Thrombus in Systemic Vein (including Glenn)
- SVC Balloon Dilation
- Trans Myocardial Revascularization (TMR)
- Transcatheter Mitral Clip
- Transcatheter Mitral Valve Implantation
- Transcatheter Pulmonic Valve Implantation
- Transcatheter Tricuspid Valve Implantation
- Placement of IVC or SVC Stent
- Placement of Venous Stent (vertical vein, azygous, hemi-azygous)
- Endomyocardial Biopsy
- ASD Device Closure
- VSD Device Closure
- PDA Device Closure
- Creation of Potts Shunt
- EP Arrhythmia Ablation
- Other _____

***Coronary Intervention - artery balloon dilation or stent:** (Mandatory only for adult congenital patients)

- Left main
- Left Anterior Descending (LAD)
- Right Coronary Artery
- Circumflex
- Diagonal
- Posterior Descending Artery (PDA)

***Mandatory fields if "Coronary Arteries" selected for Diagnostic/Interventional or Interventional**

Duplicate this page as required for multiple changes