

# ECLS ECPR Addendum Form

## Extracorporeal Life Support Organization (ELSO)

Unique ID: \_\_\_\_\_

Run Number: \_\_\_\_\_

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

### Definition

ECPR is the application of rapid-deployment VA ECMO to provide circulatory support in patients in whom conventional cardiopulmonary resuscitation (CPR) is unsuccessful in achieving sustained return of spontaneous circulation (ROSC). Sustained ROSC is deemed to have occurred when chest compressions are not required for 20 consecutive minutes and signs of circulation persist.

**Please refer to the ELSO Registry ECPR Addenda Data Definitions for specific details regarding the fields collected.**

### Pre-Cardiopulmonary Arrest Precipitating Event

Cardiac       Non-Cardiac       Unknown

### Antecedent Event (Present up to 4 hours before Arrest)

Cardiac:  Ventricular Dysfunction    Vasoplegia    Cardiac Tamponade    Obstructive Shock    Arrhythmia

Non Cardiac:  Hypoxemia    Hypercarbia/Respiratory Acidosis    Pulmonary Hemorrhage    Pneumothorax

Neurological:  Impending Herniation Syndrome

Toxic/Metabolic:  Metabolic Acidosis

None       Unknown

### Co-Morbid Conditions (Present up to 24 hours before Arrest)

Cardiac:  ACS    CHD-Acyanotic    CHD-Cyanotic    CHF    CV Shock    Tamponade    Arrhythmia    PHN    PE

Pulmonary:  Critical Airway Emergency    Mediastinal Mass    Obstructive Airways Disease    Lung Disease

Neurological:  CNS-Non Stoke    Ischemic Stroke    Hemorrhagic Stroke    Spinal Cord Injury

Toxic/Metabolic:  Chronic Renal Failure    Intoxication/Ingestion    Vitamin/Electrolyte Abnormality

Infectious:  Distributive Shock    Septic Shock

Other:  Hemorrhage or Hypovolemic Shock    Major Trauma    Pregnancy/Delivery

None       Unknown

### Cardiopulmonary Arrest Event

Location of Arrest: Out of Hospital  (Select Site)

Home       Public Place       Ambulatory Medical Care

Ambulance Transport    Other

EMS On-Site?    Bystander CPR?    Bystander AED Use?

Location of Arrest: In Hospital  (Select Site)

Ambulatory/Outpatient       ED       Inpatient Ward

HDU/Stepdown       ICU (specify) \_\_\_\_\_

Cath Lab    Interventional Radiology    OR    PACU

Delivery Room    Other

Witnessed Arrest?:  Yes       No       Unknown

Date/Time: \_\_\_\_\_

## Management of Cardiopulmonary Arrest

Date/Time CPR Commenced: \_\_\_\_\_ Total CPR Time Prior to ECLS: \_\_\_\_\_ minutes

Multiple Arrests during prior 24 hours?  Yes  No

ROSC at any time after CPR and prior to ECLS?  Yes  No

Did the patient have a pulse at the time of cannulation?  Yes  No

Compression Method Used and Time:

- Standard for \_\_\_\_\_ minutes
- Automatic Compressor for \_\_\_\_\_ minutes
- Open Chest CPR for \_\_\_\_\_ minutes
- Unknown

Initial Pulseless Rhythm:  Asystole  Pulseless Electrical Activity  Ventricular Fibrillation

- Ventricular Tachycardia - no pulse
- Unknown – Shockable
- Unknown – Non Shockable
- Unknown

DC Cardioversion or Defibrillation:  No  Yes: Number of Shocks: \_\_\_\_\_  Unknown

Rhythm at Time of Cannulation:  Asystole  Pulseless Electrical Activity  High Degree AV Block  Sinus Rhythm

- Sinus Bradycardia
- Sinus Tachycardia
- SVT
- Ventricular Fibrillation
- Ventricular Tachycardia - no pulse
- Unknown

Medications During Arrest:  Epinephrine – Number of Doses \_\_\_\_\_  Vasopressin – Number of Doses \_\_\_\_\_

- Adenosine
- Amiodarone
- Atropine
- Calcium Chloride/Gluconate
- Dobutamine
- Dopamine
- Flumazenil
- Glucagon
- Glucose
- Lidocaine
- Magnesium
- Milrinone
- Naloxone
- Norepinephrine
- Procainamide
- Phenylephrine
- Sodium Bicarbonate
- No Medications

Cardiac Pacing During CPA:  Temporary Cardiac Pacing  No Attempt at Pacing  Unknown

- Transcutaneous
- Transvenous
- Epicardial
- PPM In Situ

## Circulation: Quality of CPR

End tidal CO2 Monitoring  Yes  No ETCO2 closest to ECLS Flow Start: \_\_\_\_\_

Invasive Arterial Access  Yes  No DPB closest to ECLS Flow Start: \_\_\_\_\_

Cerebral NIRS  Yes  No NIRS closest to ECLS Flow Start: \_\_\_\_\_

CPR Feedback Device  Yes  No Rate of compressions Delivered: \_\_\_\_\_

Signs of Life prior to ECLS  Yes  No If No, was neuromuscular blockade in use:  Yes  No

## Cannulation and Circuit Details

Location of Cannulation: Out of Hospital  (Select Site)

- Home
- Public Place
- Ambulatory Medical Care
- Ambulance/Transport
- Other

Location of Arrest: In Hospital  (Select Site)

- Ambulatory/Outpatient
- ED
- Inpatient Ward
- HDU/Stepdown
- ICU (specify) \_\_\_\_\_
- Cath Lab
- Interventional Radiology
- OR
- PACU
- Delivery Room
- Other

ECPR System: Pre-primed pump  Yes  No  Unknown

If yes:  Blood Prime  Clear Prime  Unknown

### Early Post ECPR Management (Within 24 hours of cannulation)

Neurology:  EEG Monitoring:  standard  continuous  
 Intracranial Imaging:  Cranial US  CT  
 No neurologic investigations post-ECPR

Temp Management:  Targeted 32-34°C  Targeted normothermia 36-37.5°C  Targeted 32-36°C  
 No Target  Unknown

Highest Temp in first 24 hours

< 32 °C  32-<34°C  34-<35°C  35-<36°C  
 36-37.5°C  37.6-38.5°C  >38.5°C  Unknown

Lowest Temp in first 24 hours:

< 30 °C  30-<32 °C  32-<34°C  34-<35°C  
 35-<36°C  36-37.5°C  37.6-38.5°C  >38.5°C  
 Unknown

### First Blood Gas Post ECPR (Closest to initiation or < 6 hours post initiation)

Patient Arterial Blood Gas Post ECPR:  Yes  No

Date/Time: \_\_\_\_\_

pH: \_\_\_\_\_ pCO<sub>2</sub>: \_\_\_\_\_ pO<sub>2</sub>: \_\_\_\_\_ HCO<sub>3</sub>: \_\_\_\_\_ SaO<sub>2</sub>: \_\_\_\_\_ Lactate \_\_\_\_\_  
 Lactate Unknown

Venous Blood Gas (please select box if only VBG available)

### Post ECPR Review

Was a debrief held by the inter-disciplinary team Post ECPR:  No  Yes

If yes, in what timeframe?  within 24 hours

If > 24 hours was it within 1 month?

If > 1 month was it within 3 months?

### Neurological Assessment at Discharge

Did the patient have a functional performance assessment by Cerebral Performance Category (CPC) for patients >18yo; or by Pediatric Cerebral Performance Category for patients < 18 yo?

No  Yes: Result: Adult CPC Score = \_\_\_\_\_ Pediatric PCPC Score = \_\_\_\_\_