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: ☐ Asytole ☐ 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: ☐ Asytole ☐ 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 Choride/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 ☐ 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 intiation or < 6 hours post initiation)

Patient Arterial Blood Gas Post ECPR: ☐ Yes ☐ No

Date/Time: _____

pH: _____ pCO_2: _____ pO_2: _____ HCO_3: _____ SaO_2: _____ 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 = _____