**Inclusion Criteria:**

* **Term neonate following bypass surgery** 
  + ***Duration 24 hours after extubation, max 7 days***
* **Single ventricle infant pre-stage I palliation, post interventional catheterization or non-bypass surgery (PA band, BT shunt, PDA stent)**
  + ***Duration 24 hours after extubation, max 7 days***
* **Medical patient requiring intubation in first 4 hours following CICU admission (duration 72 hours)**
* **Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (duration 72 hours)**

Patient Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Patient Weight: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_kg Bundle Start Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Bundle | Date & Time | Date & Time | Date & Time | Date & Time | Date & Time | Date & Time | Date & Time |
| Expected Reason(s) for Decompensation | | | | | | | |
|  | **AM** **PM**   * Low cardiac □ output syndrome * Qp:Qs □ Imbalance * Arrhythmia □ * Pulmonary □ Hypertension Crisis * Hypotension □ * Preload □ dependency * Hemorrhage □ * Airway loss/ □ obstruction * Respiratory □ arrest * Tamponade □ physiology * Other □ | **AM** **PM**   * Low cardiac □ output syndrome * Qp:Qs □ Imbalance * Arrhythmia □ * Pulmonary □ Hypertension Crisis * Hypotension □ * Preload □ dependency * Hemorrhage □ * Airway loss/ □ obstruction * Respiratory □ arrest * Tamponade □ physiology * Other □ | **AM** **PM**   * Low cardiac □ output syndrome * Qp:Qs □ Imbalance * Arrhythmia □ * Pulmonary □ Hypertension Crisis * Hypotension □ * Preload □ dependency * Hemorrhage □ * Airway loss/ □ obstruction * Respiratory □ arrest * Tamponade □ physiology * Other □ | **AM** **PM**   * Low cardiac □ output syndrome * Qp:Qs □ Imbalance * Arrhythmia □ * Pulmonary □ Hypertension Crisis * Hypotension □ * Preload □ dependency * Hemorrhage □ * Airway loss/ □ obstruction * Respiratory □ arrest * Tamponade □ physiology * Other □ | **AM** **PM**   * Low cardiac □ output syndrome * Qp:Qs □ Imbalance * Arrhythmia □ * Pulmonary □ Hypertension Crisis * Hypotension □ * Preload □ dependency * Hemorrhage □ * Airway loss/ □ obstruction * Respiratory □ arrest * Tamponade □ physiology * Other □ | **AM** **PM**   * Low cardiac □ output syndrome * Qp:Qs □ Imbalance * Arrhythmia □ * Pulmonary □ Hypertension Crisis * Hypotension □ * Preload □ dependency * Hemorrhage □ * Airway loss/ □ obstruction * Respiratory □ arrest * Tamponade □ physiology * Other □ | **AM** **PM**   * Low cardiac □ output syndrome * Qp:Qs □ Imbalance * Arrhythmia □ * Pulmonary □ Hypertension Crisis * Hypotension □ * Preload □ dependency * Hemorrhage □ * Airway loss/ □ obstruction * Respiratory □ arrest * Tamponade □ physiology * Other □ |
| Other red flags for decompensation | | | | | | | |
|  | **Date & Time** | **Date & Time** | **Date & Time** | **Date & Time** | **Date & Time** | **Date & Time** | **Date & Time** |
| Vital Sign Goals | | | | | | | |
| HR |  |  |  |  |  |  |  |
| SBP ART/ NBP |  |  |  |  |  |  |  |
| MAP |  |  |  |  |  |  |  |
| O2 Sat |  |  |  |  |  |  |  |
| CVP/ RA |  |  |  |  |  |  |  |
| NIRS (C/R) |  |  |  |  |  |  |  |
| ETCO2 |  |  |  |  |  |  |  |
| Temp |  |  |  |  |  |  |  |
| Other: |  |  |  |  |  |  |  |
| Patient Trajectory: Improving=Imp, Unchanged=Unch, Worsening=Wor | | | | | | | |
| Day |  |  |  |  |  |  |  |
| Night |  |  |  |  |  |  |  |
| Access | | | | | | | |
| Arterial |  |  |  |  |  |  |  |
| Venous |  |  |  |  |  |  |  |
| Preventative Measures | | | | | | | |
|  | **AM** **PM**   * Prostaglandin □ checks q2 hours * Pre-sedate w/ □ all noxious stim * No bath □ * CHG bath only □ * No weighing □ * Bed scale only □ * 2 person □ suctioning * DO NOT break □ circuit – inline suction only * High risk drip □ change * Other □ | **AM** **PM**   * Prostaglandin □ checks q2 hours * Pre-sedate w/ □ all noxious stim * No bath □ * CHG bath only □ * No weighing □ * Bed scale only □ * 2 person □ suctioning * DO NOT break □ circuit – inline suction only * High risk drip □ change * Other □ | **AM** **PM**   * Prostaglandin □ checks q2 hours * Pre-sedate w/ □ all noxious stim * No bath □ * CHG bath only □ * No weighing □ * Bed scale only □ * 2 person □ suctioning * DO NOT break □ circuit – inline suction only * High risk drip □ change * Other □ | **AM** **PM**   * Prostaglandin □ checks q2 hours * Pre-sedate w/ □ all noxious stim * No bath □ * CHG bath only □ * No weighing □ * Bed scale only □ * 2 person □ suctioning * DO NOT break □ circuit – inline suction only * High risk drip □ change * Other □ | **AM** **PM**   * Prostaglandin □ checks q2 hours * Pre-sedate w/ □ all noxious stim * No bath □ * CHG bath only □ * No weighing □ * Bed scale only □ * 2 person □ suctioning * DO NOT break □ circuit – inline suction only * High risk drip □ change * Other □ | **AM** **PM**   * Prostaglandin □ checks q2 hours * Pre-sedate w/ □ all noxious stim * No bath □ * CHG bath only □ * No weighing □ * Bed scale only □ * 2 person □ suctioning * DO NOT break □ circuit – inline suction only * High risk drip □ change * Other □ | **AM** **PM**   * Prostaglandin □ checks q2 hours * Pre-sedate w/ □ all noxious stim * No bath □ * CHG bath only □ * No weighing □ * Bed scale only □ * 2 person □ suctioning * DO NOT break □ circuit – inline suction only * High risk drip □ change * Other □ |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Date & Time | Date & Time | Date & Time | Date & Time | Date & Time | Date & Time | Date & Time |
| Rescue Measures | | | | | | | |
|  | **AM PM**   * **Be aware of □ location of crash cart** * Epi Spritzer □ (10:1 in NS)/ Code dose Epi * Calcium □ Chloride (20 mg/kg) * Sodium □ Bicarbonate (2 mEq/kg) * Albumin □ (10 mL/kg) * Normal saline □ (10 ml/kg) * Narcotic/ □   Neuromuscular blockade   * External □ pacemaker on Crash Cart, or if wires, at bedside * Zoll pads on □ Crash Cart * Defibrillator □ \_\_\_\_\_\_\_\_joules (2/kg) | **AM PM**   * **Be aware of □ location of crash cart** * Epi Spritzer □ (10:1 in NS)/ Code dose Epi * Calcium □ Chloride (20 mg/kg) * Sodium □ Bicarbonate (2 mEq/kg) * Albumin □ (10 mL/kg) * Normal saline □ (10 ml/kg) * Narcotic/ □   Neuromuscular blockade   * External □ pacemaker on Crash Cart, or if wires, at bedside * Zoll pads on □ Crash Cart * Defibrillator □ \_\_\_\_\_\_\_\_joules (2/kg) | **AM PM**   * **Be aware of □ location of crash cart** * Epi Spritzer □ (10:1 in NS)/ Code dose Epi * Calcium □ Chloride (20 mg/kg) * Sodium □ Bicarbonate (2 mEq/kg) * Albumin □ (10 mL/kg) * Normal saline □ (10 ml/kg) * Narcotic/ □   Neuromuscular blockade   * External □ pacemaker on Crash Cart, or if wires, at bedside * Zoll pads on □ Crash Cart * Defibrillator □ \_\_\_\_\_\_\_\_joules (2/kg) | **AM PM**   * **Be aware of □ location of crash cart** * Epi Spritzer □ (10:1 in NS)/ Code dose Epi * Calcium □ Chloride (20 mg/kg) * Sodium □ Bicarbonate (2 mEq/kg) * Albumin □ (10 mL/kg) * Normal saline □ (10 ml/kg) * Narcotic/ □   Neuromuscular blockade   * External □ pacemaker on Crash Cart, or if wires, at bedside * Zoll pads on □ Crash Cart * Defibrillator □ \_\_\_\_\_\_\_\_joules (2/kg) | **AM PM**   * **Be aware of □ location of crash cart** * Epi Spritzer □ (10:1 in NS)/ Code dose Epi * Calcium □ Chloride (20 mg/kg) * Sodium □ Bicarbonate (2 mEq/kg) * Albumin □ (10 mL/kg) * Normal saline □ (10 ml/kg) * Narcotic/ □   Neuromuscular blockade   * External □ pacemaker on Crash Cart, or if wires, at bedside * Zoll pads on □ Crash Cart * Defibrillator □ \_\_\_\_\_\_\_\_joules (2/kg) | **AM PM**   * **Be aware of □ location of crash cart** * Epi Spritzer □ (10:1 in NS)/ Code dose Epi * Calcium □ Chloride (20 mg/kg) * Sodium □ Bicarbonate (2 mEq/kg) * Albumin □ (10 mL/kg) * Normal saline □ (10 ml/kg) * Narcotic/ □   Neuromuscular blockade   * External □ pacemaker on Crash Cart, or if wires, at bedside * Zoll pads on □ Crash Cart * Defibrillator □ \_\_\_\_\_\_\_\_joules (2/kg) | **AM PM**   * **Be aware of □ location of crash cart** * Epi Spritzer □ (10:1 in NS)/ Code dose Epi * Calcium □ Chloride (20 mg/kg) * Sodium □ Bicarbonate (2 mEq/kg) * Albumin □ (10 mL/kg) * Normal saline □ (10 ml/kg) * Narcotic/ □   Neuromuscular blockade   * External □ pacemaker on Crash Cart, or if wires, at bedside * Zoll pads on □ Crash Cart * Defibrillator □ \_\_\_\_\_\_\_\_joules (2/kg) |
| ECMO Plan | | | | | | | |
|  | * NOT ECMO candidate * YES Activate ECMO | * NOT ECMO candidate * YES Activate ECMO | * NOT ECMO candidate * YES Activate ECMO | * NOT ECMO candidate * YES Activate ECMO | * NOT ECMO candidate * YES Activate ECMO | * NOT ECMO candidate * YES Activate ECMO | * NOT ECMO candidate * YES Activate ECMO |
|  | * Venous   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr * Arterial   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr | * Venous   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr * Arterial   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr | * Venous   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr * Arterial   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr | * Venous   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr * Arterial   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr | * Venous   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr * Arterial   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr | * Venous   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr * Arterial   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr | * Venous   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr * Arterial   \_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_Fr |

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| **Other possible inclusion criteria:** |
| * **Patients with Open chest** |
| * **High inotropic / vasopressor support:**   **≥ 3 infusions, including milrinone only if ≥ 1 mcg/kg/min)**  **Epinephrine > 0.05 mcg/kg/min**  **Vasopressin > 0.04 units/kg/hr** |
| * **History of prior arrest during current hospitalization** |
| * **New onset cardiomyopathy / myocarditis on epinephrine and/or dopamine infusion** |
| * **Arrhythmia requiring anti-arrhythmic infusion and/or ≥ 2 anti-arrhythmic medications** |
| * **Known difficult airway and/or upper airway obstruction** |
| * **ECMO patients and up to 48 hours post-decannulation** |
| * **Pulmonary hypertension** |
| * **Severe lung disease:**   **PEEP ≥ 10 and/or**  **100% Fi02 and iNO** |

**ECMO Plan**

* **NOT** ECMO Candidate
* **YES** Activate ECMO

Arterial: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ Fr cannula

Venous: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ Fr cannula

**ECMO Plan**

* **NOT** ECMO Candidate
* **YES** Activate ECMO

Arterial: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ Fr cannula

Venous: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ Fr cannula

**ECMO Plan**

* **NOT** ECMO Candidate
* **YES** Activate ECMO

Arterial: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ Fr cannula

Venous: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ Fr cannula