### **Heart Rescue**

### Cardiogenic SHOCK



#### Recognition

- Hypotension (SBP< 90) > 30min or use of vasopressors/inotropes
- Hypoperfusion
  - Altered mental status
  - Decreased urine output (< 30mL/hr)</li>
  - Cool, clammy skin and/or cold or mottled extremities

- Respiratory Distress SOB, dyspnea or tachypnea
- Abnormal Heart Rate Tachycardia or Arrythmias
- Lactate > 2mmol/L

#### **Upon recognition**

Call Centennial Heart and Lung Rescue Line 833.TN.SHOCK (833.867.4625)

- Obtain RHC if possible (do not delay calling for this)
  - Cardiac Index <1.8 (or 2.2L/min/m2 with vasopressors/inotropes)
  - Cardiac Power Output (CPO) < 0.6
  - PAPi < 1.0
  - PCWP > 15
- 12 Lead ECG
- · Labs including Lactate, CBC, CMP, Troponin, BNP
- Maintain 2 large bore PIVs (consider central line if possible)

- Maintain MAP>60 with minimal use of vasopressors/inotropes
- Prefer Norepinephrine as first line vasopressor support
- Prefer Amiodarone for VT or AFib
- Avoid negative inotropes
  (Beta-blockers or Calcium channel blockers)
- Consider intubation for airway protection

# Common diagnoses associated with SHOCK and need for Mechanical Circulatory Support (MCS)

- · Acute MI with hemodynamic instability
- Acute or Decompensated Heart Failure
- · Acute Right Ventricle Failure
- Massive Pulmonary Embolism
- Unstable Post Cardiac Arrest
- Recurrent Unstable Arrythmia
- Severe Valvular or Structural Disease
- Overdose or Hypothermia with Cardiac collapse

#### ECMO Evaluation

For patients needing an evaluation or those currently on ECMO support

Call TriStar Centennial Heart and Lung rescue shock line 833.TN.SHOCK (833.867.4625)

Activates the ECMO Team to quickly initiate transfer

## Lung Rescue

ECMO Evaluation



### Acute respiratory failure with any of the following:

- PaO2:FiO2 ratio < 100 with FiO2 > 80%
- pH < 7.25 and/or pCO2 > 60mmHg
- Plateau Pressure > 30cmH2O or Driving Pressure > 20cmH2O
- Continuous neuromuscular blockade, proning, or inhaled vasodilators
- Severe Barotrauma

### In preparation for transport:

- Attempt to move/reposition patient to assess for potential decompensation with transport
- · At least 2 working large bore PIVs
- Current chest X-ray
- ABG
- · Place arterial line if possible

### **Heart Rescue**

### **FCMO** Evaluation

- Hypotension (SBP< 90) > 30min or use of vasopressors/inotropes
- Hypoperfusion
  - Altered mental status
  - Decreased urine output (< 30mL/hr)</li>
  - Cool, clammy skin and/or cold or mottled extremities
- Respiratory Distress SOB, dyspnea, or tachypnea
- · Abnormal Heart Rate Tachycardia or Arrythmias
- Lactate > 2mmol/L

### Not necessary but if you have hemodynamics

- Cardiac Index <1.8 (or 2.2L/min/m2 with vasopressors/inotropes)
- Cardiac Power Output (CPO) < 0.6
- PAPi < 1.0</li>
- PCWP > 15

### In preparation for transport:

- 12 Lead ECG and Labs including Lactate, CBC, CMP, Troponin, BNP
- Maintain 2 large bore PIVs (consider central line if possible)
- Maintain MAP>60 with minimal use of vasopressors/inotropes
- Prefer Norepinephrine as first line vasopressor support
- Prefer Amiodarone for VT or AFib
- Avoid negative inotropes (Beta-blockers or Calcium channel blockers)
- Consider intubation for airway protection