

## Early Goal Directed Therapy (Severe Sepsis & Septic Shock)

### Definitions

**SIRS:** 2 or more of the following

- WBC > 12, < 4, or bands > 10%
- HR > 90
- Temp (oral) > 38C (100.9F) or < 36C (96.8F)
- RR > 20 or PaCO<sub>2</sub> < 32 mmHg

**Sepsis:** infection + SIRS

**Severe sepsis:** sepsis + 1 or more organ dysfunction

**Septic shock:** severe sepsis requiring hemodynamic support or lactate ≥ 4 mmol/L

### Treatment

#### Antibiotics & source control

- Give within 1h of recognition of sepsis for inpatients or within 3h of presentation to ED
- Broad spectrum, appropriate for suspected infectious source
- Draw blood cultures before antibiotics
- Control infectious source if possible

**Fluid resuscitation** (first 6 hours, see chart)

**Vasopressors** to maintain MAP ≥ 65 mmHg

- 1<sup>st</sup> line: norepinephrine or dopamine\*\*\*
- May add vasopressin if 1<sup>st</sup> pressor inadequate
- Epinephrine if poorly responsive to 1<sup>st</sup> line agent

**Inotropic therapy**

- Dobutamine if ScvO<sub>2</sub> < 70% & HCT > 30%

**Steroids**

- Start if hypotension poorly responsive to vasopressors and fluids, hydrocortisone 1<sup>st</sup> line

**Drotrecogin alpha (Xigris)**

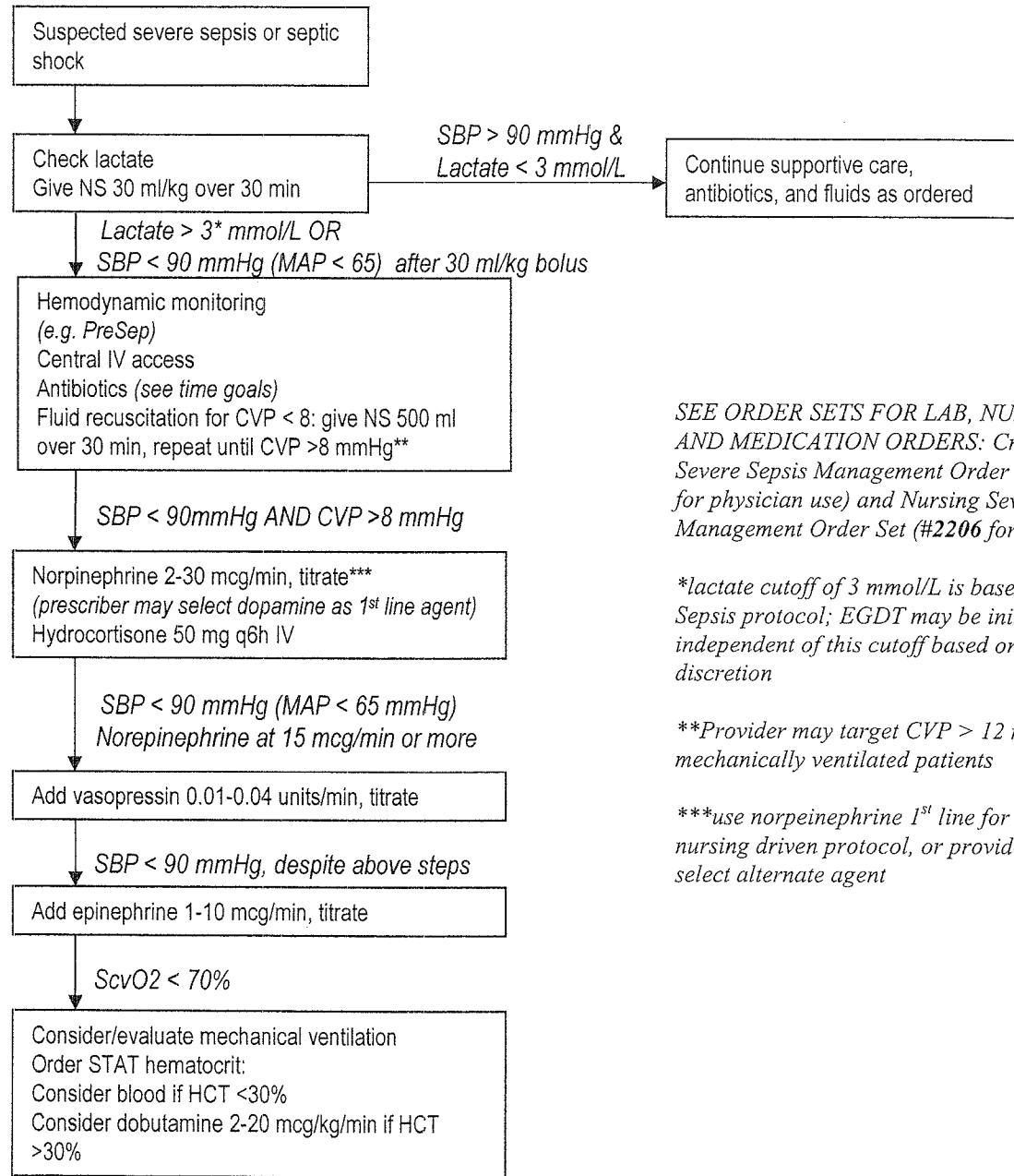
- Consider if APACHE II ≥ 19 or SOFA ≥ 7 (consult pharmacist)

**Blood products**

- Consider blood if HCT < 30% and ScvO<sub>2</sub> < 70%

**Glucose control**

- Maintain blood glucose < 180 mg/dL



SEE ORDER SETS FOR LAB, NURSING, AND MEDICATION ORDERS: Critical Care Severe Sepsis Management Order Set (#2203 for physician use) and Nursing Severe Sepsis Management Order Set (#2206 for nurse use)

\*lactate cutoff of 3 mmol/L is based on MHS Sepsis protocol; EGDT may be initiated independent of this cutoff based on provider discretion

\*\*Provider may target CVP > 12 mmHg for mechanically ventilated patients

\*\*\*use norpinephrine 1<sup>st</sup> line for MHS Sepsis nursing driven protocol, or provider may select alternate agent

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