# WHEN TO CONSIDER NEW INOTROPES AND VASOACTIVE AGENT IN PEDIATRIC SEPTIC SHOCK

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# Case

- 10 year old boy, known acute leukemia
- Septic shock

- Lethargic, airway maintainable
- BP 85/40, HR 120/min, RR 24/min
  After total 60 ml/kg bolus
- Warm extremity with bounding pulse
- Urine 0.2 ml/kg in 30 min

- Stabilization: Beyond the first hour
  - Cardiovascular support

- New inotropes and vasoactive agent
  - Non-catecholamines group
    - Milrinone
    - Levosimendan
    - Vasopressin/Terlipressin

# Goal of treatment

- The first hour of resuscitation
  - Capillary refill of < 2 sec
  - Normal pulses with no differential between peripheral and central pulses, warm extremities
  - Urine output > 1 ml/kg/hr
  - Normal mental status
- Stabilization: Beyond the first hour
  - Superior vena cava oxygen saturation ($ScvO_2$) $\geq$ 70%
  - Cardiac index (CI) 3.3-6.0 $l/min/m^2$

# WHY USE MIXED VENOUS $SPO_2$ OR CENTRAL VENOUS $SPO_2$ TO DETERMINE CARDIAC OUTPUT (CO) ?