



## ***Systemic Hypothermia in Neonates With Hypoxemic-Ischemic Encephalopathy (HIE)***

**1. Patients with a presumptive diagnosis of hypoxic-ischemic encephalopathy who meet ALL of the following five criteria are eligible for this order set. Check off each positive finding:**

1. Gestational Age greater than or equal to 35 weeks gestation
2. Birth weight greater than or equal to 1.8 kg
3. less than or equal to 6 hours since insult occurred
4. **Seizures or 3 of 6 of the following:**

Clinical criteria	Signs of Encephalopathy	
	Moderate Encephalopathy	Severe Encephalopathy
1. Level of consciousness	Lethargic	Stupor/coma
2. Spontaneous activity	Decreased activity	No activity
3. Posture	Distal flexion, complete extension	Decerebrate
4. Tone	Hypotonia (focal or general)	Flaccid
5. Primitive reflexes		
Suck	Weak	Absent
Moro	Incomplete	Absent
6. Autonomic system		
Pupils	Constricted	Deviated/dilated/non-reactive to light
Heart rate	Bradycardia	Variable
Respiration	Periodic	Apnea

5. **ONE OR MORE** of the following predictors of severe HIE:

pH less than or equal to 7.0 with base deficit of greater than or equal to 16 on arterial blood gas determination (base excess more negative than -16)

pH 7.01--7.15 , base deficit 10-15.9 or no blood gas available and acute perinatal event (cord prolapse, heart rate decelerations, uterine rupture) and either

APGAR less than or equal to 5 at 10 min Assisted ventilation at birth required for greater than or equal to 10 min

### **Exclusion Criteria**

- Presence of lethal chromosomal abnormalities
- Severe IUGR
- Significant intracranial hemorrhage with a large intracranial hemorrhage (Grade III or intraparenchymal echodensity (Grade IV))