**Therapeutic Hypothermia with Neonatal ECLS**

Infants with HIE may require cooling while on ECLS. Currently there is no evidence that supports aborting therapeutic hypothermia to prevent progression to ECLS. It is our policy to continue cooling if an infant needs ECLS and to proceed with temperature maintenance via the circuit heater/cooler.

**PRIOR TO CANNULATION**

1. Goal temperature of 33.5 should be maintained via standard cooling procedure using the cooling blanket.
2. Ensure all tubes and lines placed prior to heparinization. This includes central access, gastric tube, foley, and **rectal temperature probe.**
3. Correct coagulopathy prior to heparinization. **Heparinize per normal protocol.**
4. Place CXR plate under patient AND **under cooling blanket**, or in bed tray if possible.
5. Set **ECLS heater to 34 Celsius.**

**DURING CANNULATION**

1. Continue cooling during cannulation procedure via standard cooling procedure using the cooling blanket.
2. Once on ECLS, temperature will be maintained by circuit heater/cooler
   1. Change rectal temp probe cable to display on monitor.
   2. Adjust as needed to maintain goal temperature.
3. AFTER cannulation, when ready to obtain CXR for cannula position verification, **let all water out of cooling blanket.** This will improve the quality of the Xray.
4. Once cannula is secure and sterile field has been removed, **cooling blanket can be removed.**

**REWARMING ON ECLS**

1. Circuit heater/cooler is extremely efficient so rewarming should be paced
2. Raise set temp on heater/cooler by **0.2 degrees every 30 minutes** until goal temperature is reached.