

## Protocol for Whole-Body Hypothermia and Re-Warming

Last Updated 12/29/2008

### I. Selection Process

#### **Inclusion Criteria:**

- Infants will be evaluated using two steps
    - A. Biochemical criteria (Step 1A), Clinical (Step 1B),
    - B. Neurological (Step 2)
  - Infants must meet **BOTH** Steps (1 and 2) and not meet any exclusion criteria to be eligible for therapeutic hypothermia
- A. Clinical and Biochemical criteria
1. History of an acute perinatal event
  2. Apgar score  $\leq 5$  at 10 minutes of life
  3. Cord pH or any postnatal blood gas pH of  $\leq 7.0$  at  $\leq 1$  hour
  4. Base deficit on cord gas or any postnatal blood gas of  $\geq 16$  mEq/L at  $\leq 1$  hour
  5. Continued need for ventilation initiated at birth and continued for at least 10 minutes

#### **STEP 1A: IF BLOOD GAS IS AVAILABLE**

1. Cord pH or first postnatal blood gas within 1 hour with pH  $\leq 7.0$   
**OR**
  2. Base deficit on cord gas or first postnatal blood gas within 1 hour at  $\geq 16$  mEq/L
- If infant meets **ONE** of the above criteria, proceed to Step 2 (Neurological examination) otherwise continue on to Step 1B

#### **STEP 1B: IF BLOOD GAS IS NOT AVAILABLE (Or pH 7.01-7.15 or Base Deficit 10-1 mEq/L)**

1. Acute perinatal event (i.e. abruption placenta, cord prolapse, severe fetal heart rate abnormalities such as variable or late decelerations)
- AND**
- A. Apgar score  $\leq 5$  at 10 minutes of life  
**OR**
  - B. Continued need for ventilation initiated at birth and continued for at least 10 minutes
- If the infant meets criteria 1 above **AND** either criteria A or B, proceed to Step 2: Neurological Examination