

## PEDIATRIC INTENSIVE GLYCEMIC CONTROL PROCESS

For use in pediatric critical care areas, excluding NICU

Not for use in Type 1 or Type 2 diabetic patients

Not for use in patient less than 15 kg unless verified by Physician

### 1 Initiation

- A. Regular insulin drip as ordered in Cerner **\*(Must infuse using Smart Pump with Mangum set)\***
- B. Infuse insulin drip only in an inotrope-free port
- C. Check point-of-care (POC) blood glucose every hour and as needed
- D. For POC blood glucose reading < 70 mg/dL or > 500 mg/dL, draw STAT serum glucose

### 2 Titration

Adjust insulin rate hourly using the POC blood glucose (BG) result to achieve target blood glucose range of 100 - 175 mg/dL according to the following chart:

<b>Ped Intensive Glycemic Control Titration Chart</b>			
BG has <b>DROPPED</b> by less than 50 mg/dL over the previous hour		BG has <b>DROPPED</b> 50 mg/dL <b>OR MORE</b> over the previous hour	
Less than 70	STOP Infusion; Initiate Hypoglycemia Treatment Plan	Less than 70	STOP Infusion; Initiate Hypoglycemia Treatment Plan
71 - 100	STOP Infusion	71 - 100	STOP Infusion
101 - 175	Continue current therapy	101 - 175	DECREASE by 0.04 units/kg/hr *
176 - 215	Continue current therapy	176 - 215	Continue current therapy
216 - 250	INCREASE by 0.01 units/kg/hr	216 - 250	INCREASE by 0.01 units/kg/hr
greater than 250**	INCREASE by 0.02 units/kg/hr (MAX 0.1 units/kg/hr)	greater than 250**	INCREASE by 0.02 units/kg/hr (MAX 0.1 units/kg/hr)

**\* Hold infusion if rate is less than or equal to 0.04 units/kg/hr. Continue checking BG q1hr.**  
**\*\*Notify MD if BG greater than 250 mg/dL for 3 consecutive readings.**

### 3 Hypoglycemia Treatment Plan (BG less than 70 mg/dL)

- A. Give 10% Dextrose IV push STAT as order in Cerner (2mL/kg).
- B. Notify physician of event.
- C. Retest BG 15 minutes after dextrose bolus as above.
- D. If BG is below 70 mg/dL, repeat dextrose bolus as above
- E. Repeat steps C and D until BG is greater than 70 mg/dL.
- F. Once BG is greater than 70 mg/dL, notify physician for further orders

### 4 Nutrition

- A. Stop insulin when parenteral and/or continuous enteral nutrition is interrupted for over 15 minutes (e.g. tracheotomy, CT scan etc).
- B. Before restarting insulin drip, check BG.
- C. If BG is over 100 mg/dL, restart insulin at last previous dose immediately after parenteral and/or enteral nutrition is restarted.

### 5 Notify Physician:

- A. If BG is < 100 mg/dL for 2 consecutive readings
- B. If BG **INCREASES** 50 mg/dL or greater in one hour
- C. If BG **DROPS** more than 150 mg/dL in one hour

**NOTE: Upon transfer out of critical care area, this Powerplan must be discontinued.**