## **APPENDIX 1**

## **Neonatal Amino Acids 2.5% Solution**

**Indication:** A stock solution mixed in D10W for use in the first 24 hours of life. This solution is useful as a source of initial protein for infant's less than 35 weeks. This fluid is for use in UAC, UVC or PIV lines. Additives include heparin at a concentration of 0.5 units per mL of fluid.

**Goal:** Early protein administration. Goal is 3 gm/kg/day of protein *in the first 24 hours* of life. The purpose of this solution is to limit early protein catabolism.

<b>WEIGHT</b> (kilograms)	<b>TOTAL FLUIDS</b> (mL/kg/day)	<b>PROTEIN</b> (gm/kg/day)	TOTAL PROTEIN with IAA (gm/kg/day)	GIR D10AA only (mg/kg/min)
0.5	80	2	2.4	5.5
	100	2.5	2.9	6.9
	120	3	3.4	8.3
0.75	80	2	2.3	5.5
	100	2.5	2.8	6.9
	120	3	3.3	8.3
1	80	2	2.2	5.5
	100	2.5	2.7	6.9
	120	3	3.2	8.3
1.25	80	2	2.2	5.5
	100	2.5	2.7	6.9
	120	3	3.2	8.3
1.5	80	2	2.1	5.5
	100	2.5	2.6	6.9
	120	3	3.1	8.3

## **APPENDIX 2**

## Neonatal Amino Acids 3.6% Isotonic Solution (IAA)

**Indication:** A stock isotonic solution mixed in water for use in UAC lines and PAL lines when no sodium or dextrose is desired in an arterial line. This solution is mixed with 1 unit of heparin per mL of fluid.

**Special Considerations:** This solution should only be used in addition to a central line or a peripheral intravenous line providing *a separate dextrose solution*. The preferred rate to run this solution is at 0.8 mL/hour. This solution can be used for several days if dextrose or sodium concentrations are a concern in any neonate.

<b>WEIGHT</b> (kilograms)	AMOUNT OF PROTEIN PROVIDED (gm/kg/day)			
	RATE OF 0.8 ML/HR	RATE OF 1 ML/HR		
0.5	1.38	1.73		
0.75	0.92	1.15		
1	0.69	0.86		
1.25	0.55	0.69		
1.5	0.46	0.58		