

		Standard Concentration					High Concentration (as directed by Consultant)				
Drug	Weight Band	SCI	Conc/mL	Rate calc (mL/hr) (when delivering default start dose)	Diluent	Default Start Dose	Usual Dose Range	SCI (High Strength)	Conc/mL (High Strength)	Rate calc (mL/hr) (when delivering default start dose)	
Adrenaline	All	1mg/50mL	20micrograms/mL	0.15 X Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v Glucose 10%w/v	0.05microgram/kg/min New max dose on pump: 0.9mcg/kg/min	0-0.3microgram/kg/min	3mg/50mL	60micrograms/mL	0.05 x Wt (kg)	
High Adrenaline (NICUs Only)	All	5mg/50mL	100micrograms/mL	0.03 x Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v Glucose 10%w/v	0.05microgram/kg/min New max dose on pump: 0.9mcg/kg/min	0-0.3microgram/kg/min	n/a	n/a	n/a	
Dinoprostone (Prostaglandin E2)	All	50micrograms/50mL	1micrograms/mL	0.3 x Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v	5nanograms/kg/min	5-10nanograms/kg/min	n/a	n/a	n/a	
Dobutamine	≤2.5kg > 2.5kg	75mg/50mL 150mg/50mL	1,500micrograms/mL 3,000micrograms/mL	0.2 x Wt (kg) 0.1 x Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v Glucose 10%	5micrograms/kg/min	2-20micrograms/kg/min	150mg/50mL 250mg/50mL CVC only	3,000micrograms/mL 5,000micrograms/mL	0.1 x Wt (kg) 0.06 x Wt (kg)	
Dopamine	≤2.5kg > 2.5kg	75mg/50mL 150mg/50mL	1,500micrograms/mL 3,000micrograms/mL	0.2 x Wt (kg) 0.1 x Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v Glucose 10%	5micrograms/kg/min	2-20micrograms/kg/min	150mg/50mL 250mg/50mL CVC only	3,000micrograms/mL 5,000micrograms/mL	0.1 x Wt (kg) 0.06 x Wt (kg)	
Fentanyl	All	250micrograms/50mL	5 micrograms/mL	0.2 x Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v	1microgram/kg/hr	0-6micrograms/kg/hr	500micrograms/50mL	10micrograms/mL	0.1 x Wt (kg)	
Heparin	All	50units/50mL	1 unit/mL	n/a	Glucose 5%w/v NaCl 0.9%w/v	0.5ml/hr	0.5-2mls/hr	n/a	n/a	n/a	
Insulin	All	5units/50mL	0.1unit/mL	0.1 X Wt (kg)	NaCl 0.9%w/v	0.01unit/kg/hr	0-0.1unit/kg/hr	10units/50mL	0.2unit/mL	0.05 x Wt (kg)	
Midazolam	≤2.5kg > 2.5kg	10mg/50mL 25mg/50mL	200micrograms/mL 500micrograms/mL	0.3 x Wt (kg) 0.12 x Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v Glucose 10%w/v	1microgram/kg/min	0-4micrograms/kg/min	25mg/50mL 50mg/50mL	500micrograms/mL 1000micrograms/mL	0.12 x Wt (kg) 0.06 x Wt (kg)	
Milrinone Continuous	All	5mg/50mL	0.1mg/mL	0.3 x Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v	0.5microgram/kg/min	0.25-0.75 microgram/kg/min	10mg/50mL	0.2mg/mL	0.15 x Wt (kg)	
Milrinone Loading	All	5mg/50mL	0.1mg/mL	VTBI (mL) = 0.5 x Wt	Glucose 5%w/v NaCl 0.9%w/v	50micrograms/kg over 30mins	50-75micrograms/kg over 30-60mins	10mg/50mL	0.2mg/mL	VTBI(mL) = 0.25 x Wt	
Morphine	≤2.5kg > 2.5kg	2.5mg/50mL 5mg/50mL	50micrograms/mL 100micrograms/mL	0.4 x Wt (kg) 0.2 x Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v Glucose 10%w/v	20micrograms/kg/hr	0-20micrograms/kg/hr	5mg/50mL 10mg/50mL	100micrograms/mL 200micrograms/mL	0.2 x Wt (kg) 0.1 x Wt (kg)	
Noradrenaline	All	1mg/50mL	20micrograms/mL	0.15 X Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v	0.05microgram/kg/min New max dose on pump: 0.9mcg/kg/min	0-0.3microgram/kg/min	3mg/50mL	60micrograms/mL	0.05 x Wt (kg)	
Paracetamol (Non-PDA)	All	10mg/mL	n/a	n/a	n/a	7.5mg/kg/15min	n/a	n/a	n/a	n/a	
Paracetamol (PDA closure)	All	10mg/mL	n/a	n/a	n/a	15mg/kg/15min	n/a	n/a	n/a	n/a	
Sildenafil Maintenance	All	10mg/50mL	0.2mg/mL	0.15 x Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v	0.03mg/kg/hr	0.03-0.07mg/kg/hr	8mg/10mL (neat) (Caution: Syringe size)	0.8mg/mL	0.0375 x Wt (kg)	
Sildenafil Loading	All	10mg/50mL	0.2mg/mL	n/a	Glucose 5%w/v NaCl 0.9%w/v	0.1mg/kg over 30 min	n/a	8mg/10mL (neat) (Caution: Syringe size)	0.8mg/mL	n/a	
Vasopressin	All	5units/50mL	0.1unit/mL	0.3 x Wt (kg)	Glucose 5%w/v NaCl 0.9%w/v	0.5milliUnit/kg/min Note: 1mUnit = 0.001unit	0.3-2milliUnits/kg/min Note: 1mUnit = 0.001unit	20units/50mL	0.4unit/mL	0.075 x Wt (kg)	
NEW: PN 1. Aqueous 2. Lipid	All	PN lipid and aqueous phases now available on the NN-SCI drug library. Select appropriate line and enter rate (mL/hr) as per prescription.									

Example of Rate Calculations

Example: Morphine 5mg/50mL	Prescribed Dose = 15microgram/kg/hour	Patient Weight = 3.2kg
<p>1. Rate calculation when administering default dose: Calculate rate (mL/hour) for the default dose (20 microgram/kg/hour) as per the rate calculation column on SCI Table: $0.2 \times \text{Wt (kg)** (value taken from table)} = 0.2 \times 3.2\text{kg (patient's weight)} = 0.64\text{mL/hr}$</p>		<p>** Note: Value of 0.2 from example shown derived as follows: Morphine 5mg/50mL = 5000mcg/50mL = 100microgram/mL 100microgram = 1mL → 20 microgram = 0.2mL (20 ÷ 100) 20microgram/kg/hour = 0.2mL/kg/hour</p>
<p>2. Rate calculation when administering a dose other than the default dose: Use this formula to calculate the actual rate (mL/hour) for the dose prescribed (15microgram/kg/hour):</p> $\frac{\text{Prescribed dose (Actual Dose)}}{\text{Default Start Dose}} \times \text{Default Rate (mL/hour)} = \frac{15 \times 0.64}{20} = 0.48\text{mL/hour}$		

Disclaimer: Every effort has been made to ensure the information is accurate and up to date and the authors cannot accept any legal responsibility for any errors or omissions. Differences in available drug preparations, and the manner in which concentrations are expressed, can produce minor discrepancies in final concentrations and calculated flow rates. In recognition of the need to stabilise children, other settings/hospitals may refer to this table but are solely responsible for all acts or omissions carried out in connection with, or in reliance on, the material provided.