PICU AND THEATRE, CHILDREN'S HEALTH IRELAND CONTINUOUS INFUSIONS AND LOADING DOSES					Flow rate (mL/hour)	$\underline{\text{Prescribed Dose x Default Rate (mL/hour)}}$ Default Start Dose	
Drug	**Weight Band**	**SCI (Normal)**	**Default Dose and Rate Calculator** *All Weights in kg - rounding can occur*			**High Strength SCI**	**High Strength Default Rate (mL/hr)**
			Default Start Dose	**Default Rate (mL/hr)**			
Adenosine	All ≤5kg	3mg/mL (Neat)	25 microgram/kg/min	0.5 x Wt		n/a	n/a
Adrenaline	All ≤5kg >5 - ≤10kg All >10kg	1mg/50mL 3mg/50mL 6mg/50mL	0.05 microgram/kg/min	0.15 x Wt 0.05 x Wt 0.025 x Wt		3mg/50mL 6mg/50mL 12mg/50mL	0.05 x Wt 0.025 x Wt 0.0125 x Wt
Adrenaline Peripheral *For emergency use pending central access*	All ≤10kg All >10kg	1mg/50mL 3mg/50mL	0.05 microgram/kg/min	0.15 x Wt 0.05 x Wt		n/a	n/a
Alteplase Loading Dose Weight-based >20kg also offered non weight-based option below *Variable volume; use the same solution for load and continuous infusion*	≤2.5kg >2.5 - ≤5kg >5 - ≤10kg All >10kg	0.2mg/mL 0.5mg/mL 1mg/mL 2mg/mL in NaCl 0.9%w/v ONLY	0.1 mg/kg over 10 mins	VTBI (mL) = 0.5 x Wt VTBI (mL) = 0.2 x Wt VTBI (mL) = 0.1 x Wt VTBI (mL) = 0.05 x Wt		n/a	n/a
Alteplase Infusion Weight-based >20kg also offered non weight-based option below	≤2.5kg >2.5 - ≤5kg >5 - ≤10kg All >10kg	0.2mg/mL 0.5mg/mL 1mg/mL 2mg/mL in NaCl 0.9%w/v ONLY	0.1 mg/kg/hour	0.5 x Wt 0.2 x Wt 0.1 x Wt 0.05 x Wt		n/a	n/a
Alteplase Load NON weight-based	>20kg	2mg/mL (variable volume)	10 mg over 10 mins	VTBI = 5mL		n/a	n/a
Alteplase Infusion NON weight-based	>20kg	2mg/mL (variable volume)	15 mg/hour	7.5mL/hour		n/a	n/a
Aminophylline Load CVAD *Use the same solution for load and maintenance infusion*	All <10kg 10 - 20kg >20kg	250mg/25mL 500mg/50mL 1000mg/50mL	5 mg/kg over 30mins	VTBI (mL) = 0.5 x Wt VTBI (mL) = 0.5 x Wt VTBI (mL) = 0.25 x Wt		n/a	n/a
Aminophylline Maintenance CVAD	All <10kg 10 - 20kg >20kg	250mg/25mL 500mg/50mL 1000mg/50mL	0.5 mg/kg/hour	0.05 x Wt 0.05 x Wt 0.025 x Wt		n/a	n/a
Aminophylline Load Peripheral *Use the same solution for load and maintenance infusion*	≤2.5kg All >2.5kg >20kg	50mg/50mL 50mg/50mL or 500mg/500mL 500mg/500mL ONLY	5 mg/kg over 30mins	VTBI (mL) = 5 x Wt		n/a	n/a
Aminophylline Maintenance Peripheral	≤2.5kg All >2.5kg	50mg/50mL 50mg/50mL or 500mg/500mL	0.5 mg/kg/hour	0.5 x Wt		n/a	n/a

CHILDREN'S HEALTH IRELAND SMART PUMP DRUG LIBRARY VERSION 5
All versions of this table issued before September 2023 are no longer valid

PICU AND THEATRE, CHILDREN'S HEALTH IRELAND CONTINUOUS INFUSIONS AND LOADING DOSES					Flow rate (mL/hour)	Prescribed Dose x Default Rate (mL/hour) / Default Start Dose	
Drug	**Weight Band**	**SCI (Normal)**	**Default Dose and Rate Calculator** *All Weights in kg - rounding can occur*			**High Strength SCI**	**High Strength Default Rate (mL/hr)**
			Default Start Dose	**Default Rate (mL/hr)**			
Amiodarone Load CVAD Weight-based >60kg also offered non weight-based option below *Use the same solution for load and maintenance infusion*	All ≤5kg >5 - ≤10kg >10 - ≤20kg >20kg	50mg/50mL 150mg/50mL 300mg/50mL 600mg/50mL in Glucose 5%w/v ONLY	5 mg/kg over 1 hour	VTBI (mL) = 5 x Wt VTBI (mL) = 1.67 x Wt VTBI (mL) = 0.83 x Wt VTBI (mL) = 0.42 x Wt		150mg/50mL 300mg/50mL 600mg/50mL 1200mg/50mL in Glucose 5%w/v ONLY	VTBI (mL) = 1.67 x Wt VTBI (mL) = 0.83 x Wt VTBI (mL) = 0.42 x Wt VTBI (mL) = 0.21 x Wt
Amiodarone Maintenance CVAD Weight-based >60kg see non-weight based option below	All ≤5kg >5 - ≤10kg >10 - ≤20kg >20kg	50mg/50mL 150mg/50mL 300mg/50mL 600mg/50mL in Glucose 5%w/v ONLY	5 microgram/kg/min	0.3 x Wt 0.1 x Wt 0.05 x Wt 0.025 x Wt		150mg/50mL 300mg/50mL 600mg/50mL 1200mg/50mL in Glucose 5%w/v ONLY	0.1 x Wt 0.05 x Wt 0.025 x Wt 0.0125 x Wt
Amiodarone Load CVAD (300mg Dose) NON weight-based (Pts >60kg) *Use the same solution for load and maintenance infusion*	>20kg ONLY	600mg/50mL in Glucose 5%w/v ONLY	300 mg over 1 hour	VTBI = 25mL		1200mg/50mL in Glucose 5%w/v ONLY	VTBI = 12.5mL
Amiodarone Maintenance CVAD NON weight-based (Pts >60kg)	>20kg ONLY	600mg/50mL in Glucose 5%w/v ONLY	50 mg/hr (if load given, reduce to 40mg/hr for next 23 hours)	4.2ml/hr for 1 hour (3.33ml/hr at 40mg/hr)		1200mg/50mL	2.1mL/hour
Amiodarone Load Peripheral Weight-based >60kg also offered non weight-based option below *Use the same solution for load and maintenance infusion*	All <10kg All >10kg	50mg/50mL 300mg/**250**mL in Glucose 5%w/v ONLY	5 mg/kg over 1 hour	VTBI (mL) = 5 x Wt VTBI (mL) = 4.2 x Wt		n/a	n/a
Amiodarone Maintenance Peripheral Weight-based >60kg see non-weight based option below	All	50mg/50mL or 300mg/**250**mL in Glucose 5%w/v ONLY	5 microgram/kg/min	0.3 x Wt 0.25 x Wt		n/a	n/a
Amiodarone Load Peripheral (300mg dose) NON weight-based (Pts >60kg) *Use the same solution for load and maintenance infusion*	>20kg ONLY	300mg/**250**mL in Glucose 5%w/v ONLY	300 mg over 1 hour	VTBI = 250mL		n/a	n/a
Amiodarone Maintenance Peripheral NON weight-based (Pts >60kg)	>20kg ONLY	300mg/**250**mL in Glucose 5%w/v ONLY	50 mg/hr (if load given, reduce to 40mg/hr for next 23 hours)	41.7mL/hr for 1 hour (33.3ml/hr at 40mg/hr)		n/a	n/a
Arginine Load *Use the same solution for load and maintenance infusion*	All	5g/50mL (Perfusor) or 100mg/mL (Infusomat) in Glucose 10%w/v ONLY	250 mg/kg	VTBI (mL) = 2.5 x Wt		n/a	n/a
Arginine Maintenance	All	5g/50mL (Perfusor) or 100mg/mL (Infusomat) in Glucose 10%w/v ONLY	200 mg/kg/24hours	0.083 x Wt		n/a	n/a
Atracurium Infusion	All ≤5kg All >5kg	40mg/**20**mL 10mg/mL (Neat) (variable volume)	300 microgram/kg/hr	0.15 x Wt 0.03 x Wt		10mg/mL (Neat) n/a	0.03 x Wt n/a

CHILDREN'S HEALTH IRELAND SMART PUMP DRUG LIBRARY VERSION 5
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PICU AND THEATRE, CHILDREN'S HEALTH IRELAND CONTINUOUS INFUSIONS AND LOADING DOSES				Flow rate (mL/hour)	$=$ $\dfrac{\text{Prescribed Dose} \times \text{Default Rate (mL/hour)}}{\text{Default Start Dose}}$	
Drug	**Weight Band**	**SCI (Normal)**	**Default Dose and Rate Calculator** *All Weights in kg - rounding can occur*		**High Strength SCI**	**High Strength Default Rate (mL/hr)**
			Default Start Dose	**Default Rate (mL/hr)**		
Calcium Gluconate CVAD Continuous Weight-based	All	0.225mmol/mL (Neat) (variable volume)	0.5 mmol/kg/24hrs **5-10**kg weight band only: 1 mmol/kg/24hrs	0.092xWt **5-10**kg only: 0.184 x Wt	n/a	n/a
Calcium Gluconate CVAD Continuous **(8.8mmol/24hr)** NON weight-based (Pts >20kg)	>20kg ONLY	0.225mmol/mL (Neat) (variable volume)	8.8 mmol/24hrs	1.62mL/hr	n/a	n/a
Calcium Gluconate Peripheral Continuous Weight-based	All	0.**045**mmol/mL (variable volume)	0.5 mmol/kg/24hrs **5-10**kg weight band only: 1 mmol/kg/24hrs	0.462xWt **5-10**kg only: 0.925 x Wt	n/a	n/a
Calcium Gluconate Peripheral Continuous **(8.8mmol/24hr)** NON weight-based (Pts >20kg)	>20kg ONLY	0.**045**mmol/mL (variable volume)	8.8 mmol/24hrs	8.14mL/hr	n/a	n/a
Clonidine CVAD (ideally)	All ≤5kg >5 - ≤10kg >10 - ≤20kg >20kg	150microgram/50mL 300microgram/50mL 600microgram/50mL 1200microgram/50mL	0.5 microgram/kg/hr	0.167 x Wt 0.084 x Wt 0.042 x Wt 0.021 x Wt	300microgram/50mL 600microgram/50mL 1200microgram/50mL n/a	0.084 x Wt 0.042 x Wt 0.021 x Wt n/a
Dexmedetomidine Load *Use the same solution for load and maintenance infusion*	All	200mcg/50mL	1 microgram/kg over 20min	VTBI (mL) = 0.25 x Wt	>5kg only: 400mcg/50mL	VTBI (mL) = 0.125 x Wt
Dexmedetomidine Maintenance	All	200mcg/50mL	0.5 microgram/kg/hr	0.125 x Wt	>5kg only: 400mcg/50mL	0.063 x Wt
Dinoprostone	All ≤10kg	50microgram/50mL in Glucose 5%w/v ONLY	5 nanogram/kg/min	0.3 x Wt	n/a	n/a
Dinoprostone (High Dose)	All ≤10kg	400microgram/50mL in Glucose 5%w/v ONLY	40 nanogram/kg/min	0.3 x Wt	n/a	n/a
Dobutamine CVAD (ideally)	≤2.5kg >2.5 - ≤10kg All >10kg	75mg/50mL 150mg/50mL 250mg/50mL CVAD only	5 microgram/kg/min	0.2 x Wt 0.1 x Wt 0.06 x Wt	150mg/50mL 250mg/50mL CVAD only n/a	0.1 x Wt 0.06 x Wt n/a
Dopamine Central	≤2.5kg >2.5 - ≤10kg All >10kg	75mg/50mL 150mg/50mL 250mg/50mL	5 microgram/kg/min	0.2 x Wt 0.1 x Wt 0.06 x Wt	150mg/50mL 250mg/50mL 500mg/50mL	0.1 x Wt 0.06 x Wt 0.03 x Wt
Dopamine Peripheral	All	75mg/50mL or 1.5 mg/mL (variable volume)	5 microgram/kg/min	0.2 x Wt	n/a	n/a
Epoprostenol Caution: multiple concentrations available	<10kg ONLY All All >10kg ONLY	20mcg/**40**mL 80mcg/**40**mL 500mcg/50mL 2000mcg/50mL Glycine diluent only	2 nanogram/kg/min	0.24 x Wt 0.06 x Wt 0.012 x Wt 0.003 x Wt	n/a	n/a
Esmolol CVAD (ideally)	All	10mg/mL (Neat) or 2500mg/**250**mL	50 microgram/kg/min	0.3 x Wt	n/a	n/a

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PICU AND THEATRE, CHILDREN'S HEALTH IRELAND CONTINUOUS INFUSIONS AND LOADING DOSES					Flow rate (mL/hour) = $\dfrac{\text{Prescribed Dose} \times \text{Default Rate (mL/hour)}}{\text{Default Start Dose}}$	
Drug	**Weight Band**	**SCI (Normal)**	**Default Dose and Rate Calculator** *All Weights in kg - rounding can occur*		**High Strength SCI**	**High Strength Default Rate (mL/hr)**
			Default Start Dose	**Default Rate (mL/hr)**		
Fentanyl	All ≤5kg	250mcg/50mL	1 microgram/kg/hr	0.2 x Wt	500mcg/50mL	0.1 x Wt
	>5 - ≤10kg	500mcg/50mL		0.1 x Wt	1000mcg/50mL	0.05 x Wt
	>10 - ≤20kg	1000mcg/50mL		0.05 x Wt	2500mcg/50mL	0.02 x Wt
	>20kg	2500mcg/50mL		0.02 x Wt	n/a	n/a
Flecainide Load	All ≤5kg	50mg/50mL	≤5kg: None	≤5kg: Variable	n/a	n/a
	>5 - ≤10kg	50mg/50mL	>5kg: 2mg/kg	VTBI (mL) = 2 x Wt		
	>10 - ≤20kg	150mg/50mL		VTBI (mL) = 0.66 x Wt		
	>20kg	250mg/50mL		VTBI (mL) = 0.4 x Wt		
Use the same solution for load and continuous infusion		in Glucose 5%w/v ONLY				
Flecainide Continuous	All ≤10kg	50mg/50mL	100 microgram/kg/hr	0.1 x Wt	n/a	n/a
	>10 - ≤20kg	150mg/50mL		0.033 x Wt		
	>20kg	250mg/50mL		0.02 x Wt		
		in Glucose 5%w/v ONLY				
Furosemide Continuous	All ≤10kg	50mg/50mL	0.125 mg/kg/hr	0.125 x Wt	100mg/50mL	0.0625 x Wt
	>10 - ≤20kg	100mg/50mL		0.0625 x Wt	250mg/50mL	0.025 x Wt
	>20kg	500mg/50mL (Neat)		0.0125 x Wt	n/a	n/a
		in NaCl 0.9%w/v ONLY			in NaCl 0.9%w/v ONLY	
Glucagon CVAD (ideally)	≤5kg	0.5mg/50mL	1 mcg/kg/hour	0.1 x Wt	2mg/50mL	0.025 x Wt
	>5 - ≤10kg	1mg/50mL		0.05 x Wt	5mg/50mL	0.01 x Wt
	>10 - ≤20kg	2mg/50mL		0.025 x Wt	5mg/50mL	0.01 x Wt
	>20kg	5mg/50mL		0.01 x Wt	10mg/50mL	0.005 x Wt
Glyceryl Trinitrate CVAD only	All ≤5kg	20mg/50mL	1 microgram/kg/min	0.15 x Wt	50mg/50mL	0.06 x Wt
	All >5kg	50mg/50mL		0.06 x Wt	n/a	n/a
Heparin Prophylaxis	All ≤5kg	2,500units/50mL	10 units/kg/hr	0.2 x Wt	n/a	n/a
	>5 - ≤10kg	5,000units/50mL		0.1 x Wt		
	All >10kg	10,000units/50mL		0.05 x Wt		
Heparin Load	All ≤5kg	2,500units/50mL	75 units/kg	VTBI (mL) = 1.5 x Wt	n/a	n/a
	>5 - ≤20kg	10,000units/50mL	over 10mins	VTBI (mL) = 0.375 x Wt		
	>20kg	25,000units/50mL		VTBI (mL) = 0.15 x Wt		
Use the same solution for load and therapeutic infusion						
Heparin Therapy < 1yr	All ≤5kg	2,500units/50mL	28 units/kg/hr	0.56 x Wt	n/a	n/a
	>5 - ≤20kg	10,000units/50mL		0.14 x Wt		
Heparin Therapy > 1yr	>5 - ≤20kg	10,000units/50mL	20 units/kg/hr	0.1 x Wt	n/a	n/a
	>20kg	25,000units/50mL		0.04 x Wt		

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PICU AND THEATRE, CHILDREN'S HEALTH IRELAND CONTINUOUS INFUSIONS AND LOADING DOSES					Flow rate (mL/hour)	$=\dfrac{\text{Prescribed Dose} \times \text{Default Rate (mL/hour)}}{\text{Default Start Dose}}$	
Drug	**Weight Band**	**SCI (Normal)**	**Default Dose and Rate Calculator** *All Weights in kg - rounding can occur*		**High Strength SCI**	**High Strength Default Rate (mL/hr)**	
			Default Start Dose	**Default Rate (mL/hr)**			
Insulin DKA and Hyperglycaemia	All ≤5kg	**5**units/50mL in NaCl 0.9%w/v ONLY Caution: 10-fold concentration difference	≤5kg (5units/50mL): 0.01 units/kg/hr	≤5kg (5units/50mL): 0.1 x Wt	All ≤5kg: 10units/50mL in NaCl 0.9%w/v ONLY	All ≤5kg: 0.05 x Wt	
	>5 -≤10kg All >10kg	**50**units/50mL **50**units/50mL in NaCl 0.9%w/v ONLY	>5 - ≤10kg: no default; dose depends on indication >10kg: 0.1 units/kg/hr	>10kg: 0.1 x Wt	>5kg: n/a	>5kg: n/a	
Isoprenaline Weight-based >5kg also offered non weight-based option below	≤2.5kg >2.5 - ≤5kg >5 -≤20kg	0.2mg/10mL 0.4mg/20mL 1mg/50mL in Glucose 5%w/v ONLY	0.05 microgram/kg/min	All: 0.15 x Wt	0.6mg/10mL 3mg/50mL 3mg/50mL in Glucose 5%w/v ONLY	All: 0.05 x Wt	
Isoprenaline NON weight-based (Pts > 5kg)	All >5kg	1mg/50mL in Glucose 5%w/v ONLY	1 microgram/min	3ml/hr	3mg/50mL in Glucose 5%w/v ONLY	1mL/hr	
Ketamine CVAD (ideally)	≤2.5kg 2.5 - ≤10kg >10 - ≤20kg >20kg	50mg/50mL 50mg/50mL 100mg/50mL 200mg/50mL	2 microgram/kg/min	0.12 x Wt 0.12 x Wt 0.06 x Wt 0.03 x Wt	n/a 100mg/50mL 200mg/50mL 500mg/50mL	n/a 0.06 x Wt 0.03 x Wt 0.012 x Wt	
Labetalol *(Large volume neat solution may be given using 250ml empty bag)*	≤2.5kg All >2.5kg	50mg/50mL 50mg/50mL or 1mg/mL (variable volume)	0.5 mg/kg/hr	0.5 x Wt	All weights: 5mg/mL (Neat) CVAD only	0.1 x Wt	
Lidocaine *(Large volume neat solution may be given using 250ml empty bag)*	All	5mg/mL (variable volume)	None	Variable	10mg/mL (Neat)	Variable	
Liothyronine Weight-based (Use bolus function to give loading dose) >20kg also offered non weight-based option below	All	20microgram/20mL	0.05 microgram/kg/hr	0.05 x Wt	n/a	n/a	
Liothyronine NON weight-based (Pts > 20kg) (Use bolus function to give loading dose)	>20kg only	20microgram/20mL or 40microgram/40mL	None	Variable	n/a	n/a	
Midazolam *(Large volume neat solution may be given using 250ml empty bag for patients > 20kg)*	≤2.5kg >2.5 - ≤5kg >5 - ≤20kg >20kg	10mg/50mL 25mg/50mL 50mg/50mL 100mg/50mL	1 microgram/kg/min	0.3 x Wt 0.12 x Wt 0.06 x Wt 0.03 x Wt	25mg/50mL 50mg/50mL 100mg/50mL 250mg/50mL (Neat) or 5mg/mL (Neat)	0.12 x Wt 0.06 x Wt 0.03 x Wt 0.012 x Wt	
Milrinone Load *Use the same solution for load and therapeutic infusion*	All ≤5kg >5 - ≤10kg >10 - ≤20kg >20kg	5mg/50mL 10mg/50mL 20mg/50mL 50mg/50mL (Neat)	50 microgram/kg over 30 mins	VTBI (mL) = 0.5 x Wt VTBI (mL) = 0.25 x Wt VTBI (mL) = 0.125 x Wt VTBI (mL) = 0.05 x Wt	10mg/50mL 20mg/50mL 50mg/50mL (Neat) n/a	VTBI (mL) = 0.25 x Wt VTBI (mL) = 0.125 x Wt VTBI (mL) = 0.05 x Wt n/a	
Milrinone Maintenance	All ≤5kg >5 - ≤10kg >10 - ≤20kg >20kg	5mg/50mL 10mg/50mL 20mg/50mL 50mg/50mL (Neat)	0.5 microgram/kg/min	0.3 x Wt 0.15 x Wt 0.075 x Wt 0.03 x Wt	10mg/50mL 20mg/50mL 50mg/50mL (Neat) n/a	0.15 x Wt 0.075 x Wt 0.03 x Wt n/a	

PICU AND THEATRE, CHILDREN'S HEALTH IRELAND CONTINUOUS INFUSIONS AND LOADING DOSES					Flow rate (mL/hour)	$=$	$\dfrac{\text{Prescribed Dose} \ \times \ \text{Default Rate (mL/hour)}}{\text{Default Start Dose}}$
Drug	**Weight Band**	**SCI (Normal)**	**Default Dose and Rate Calculator** *All Weights in kg - rounding can occur*		**High Strength SCI**		**High Strength Default Rate (mL/hr)**
			Default Start Dose	**Default Rate (mL/hr)**			
Morphine	≤2.5kg	2.5mg/50mL	20 microgram/kg/hr	0.4 x Wt	5mg/50mL		0.2 x Wt
	>2.5 - ≤5kg	5mg/50mL		0.2 x Wt	10mg/50mL		0.1 x Wt
	>5 - ≤10kg	10mg/50mL		0.1 x Wt	20mg/50mL		0.05 x Wt
	>10 - ≤20kg	20mg/50mL		0.05 x Wt	50mg/50mL		0.02 x Wt
	>20kg	50mg/50mL		0.02 x Wt	n/a		n/a
Noradrenaline	All ≤5kg	1mg/50mL	0.05 microgram/kg/min	0.15 x Wt	3mg/50mL		0.05 x Wt
	>5 - ≤10kg	3mg/50mL		0.05 x Wt	6mg/50mL		0.025 x Wt
	All >10kg	6mg/50mL		0.025 x Wt	12mg/50mL		0.0125 x Wt
Octreotide (dose = 1-3microgram/kg/hr) (Suggested concentration for 1-3microgram/kg/hr)	All ≤5kg	150mcg/**20**mL	1 microgram/kg/hr	0.133 x Wt	n/a		n/a
	>5 - ≤10kg	300mcg/**20**mL		0.067 x Wt			
	All >10kg	500mcg/**20**mL		0.04 x Wt			
		in NaCl 0.9%w/v ONLY					
Octreotide (dose = 4-6microgram/kg/hr) (Suggested concentration for 4-6microgram/kg/hr)	All ≤10kg	500mcg/**20**mL	1 microgram/kg/hr	0.04 x Wt	n/a		n/a
	>10 - ≤20kg	1000mcg/**20**mL		0.02 x Wt			
	>20kg	2000mcg/**20**mL		0.01 x Wt			
		in NaCl 0.9%w/v ONLY					
Octreotide (dose = 7-12microgram/kg/hr) (Suggested concentration for 7-12microgram/kg/hr)	All ≤10kg	1000mcg/**20**mL	1 microgram/kg/hr	0.02 x Wt	n/a		n/a
	All >10kg	2000mcg/**20**mL		0.01 x Wt			
		in NaCl 0.9%w/v ONLY					
Oxycodone	≤2.5kg	2.5mg/50mL	20 microgram/kg/hr	0.4 x Wt	5mg/50mL		0.2 x Wt
	>2.5 - ≤5kg	5mg/50mL		0.2 x Wt	10mg/50mL		0.1 x Wt
	>5 - ≤10kg	10mg/50mL		0.1 x Wt	20mg/50mL		0.05 x Wt
	>10 - ≤20kg	20mg/50mL		0.05 x Wt	50mg/50mL		0.02 x Wt
	>20kg	50mg/50mL		0.02 x Wt	n/a		n/a
Phenylephrine CVAD **only**	All ≤10kg	1mg/50mL	0.05 microgram/kg/min	0.15 x Wt	n/a		n/a
	All >10kg	3mg/50mL		0.05 x Wt			
Propofol 1%	All	10mg/mL (variable volume)	2 mg/kg/hr	0.2 x Wt	n/a		n/a
Propofol 1% (THEATRE)	All	10mg/mL (variable volume)	4 mg/kg/hr	0.4 x Wt	n/a		n/a
Remifentanil	All ≤5kg	1mg/50mL	0.1 microgram/kg/min	0.3 x Wt	2mg/50mL		0.15 x Wt
	All >5kg	2mg/50mL		0.15 x Wt	5mg/50mL		0.06 x Wt
Rocuronium	≤2.5kg	100mg/**40**mL	300 microgram/kg/hr	0.12 x Wt	250mg/50mL		0.06 x Wt
	>2.5 - ≤10kg	250mg/50mL		0.06 x Wt	10mg/mL (Neat)		0.03 x Wt
	All >10kg	10mg/mL (Neat) (variable volume)		0.03 x Wt	n/a		n/a
Salbutamol Weight-based >20kg also offered non weight-based option below	All	10mg/50mL	≤10kg: 1 microgram/kg/min >10kg lower default start: 0.2 microgram/kg/min	0.3 x Wt 0.06 x Wt	1mg/mL (Neat) Neat via CVAD ONLY		0.06 x Wt >10kg: 0.012 x Wt* (>10kg lower default start)

PICU AND THEATRE, CHILDREN'S HEALTH IRELAND CONTINUOUS INFUSIONS AND LOADING DOSES					Flow rate (mL/hour) =	$\frac{\text{Prescribed Dose} \times \text{Default Rate (mL/hour)}}{\text{Default Start Dose}}$
Drug	**Weight Band**	**SCI (Normal)**	**Default Dose and Rate Calculator** *All Weights in kg - rounding can occur*		**High Strength SCI**	**High Strength Default Rate (mL/hr)**
			Default Start Dose	**Default Rate (mL/hr)**		
Salbutamol NON weight-based (Pts > 20kg)	>20kg	10mg/50mL	5 microgram/min	1.5ml/hr	1mg/mL (Neat) Neat via CVAD ONLY	0.3ml/hr
Sildenafil Load *Use the same solution for load and maintenance infusion*	All	10mg/50mL	0.1 mg/kg over 30 minutes	VTBI (mL) = 0.5 x Wt	0.8mg/mL (Neat)	VTBI (mL) = 0.125 x Wt
Sildenafil Maintenance	All	10mg/50mL	0.03 mg/kg/hr	0.15 x Wt	0.8mg/mL (Neat)	0.0375 x Wt
Sodium Benzoate Load *Use the same solution for load and maintenance infusion*	All	2g/40mL (Perfusor) or 50mg/mL (Infusomat) in Glucose 10%w/v ONLY	250 mg/kg	VTBI (mL) = 5 x Wt	n/a	n/a
Sodium Benzoate Maintenance	All	2g/40mL (Perfusor) or 50mg/mL (Infusomat) in Glucose 10%w/v ONLY	500 mg/kg/24hours	0.417 x Wt	n/a	n/a
Sodium Bicarbonate Continuous Peripheral	All	0.1mmol/mL (variable volume)	None	Variable	n/a	n/a
Sodium Bicarbonate Continuous CVAD	All	0.2mmol/mL (variable volume)	None	Variable	n/a	n/a
Sodium Nitroprusside	All ≤5kg All >5kg	25mg/50mL 50mg/50mL in Glucose 5%w/v ONLY	0.5 microgram/kg/min	0.06 x Wt 0.03 x Wt	50mg/50mL n/a	0.03 x Wt n/a
Sodium Phenylbutyrate Load *Use the same solution for load and maintenance infusion*	All	2g/40mL (Perfusor) or 50mg/mL (Infusomat) in Glucose 10%w/v ONLY	250 mg/kg	VTBI (mL) = 5 x Wt	n/a	n/a
Sodium Phenylbutyrate Maintenance	All	2g/40mL (Perfusor) or 50mg/mL (Infusomat) in Glucose 10%w/v ONLY	500 mg/kg/24hours	0.417 x Wt	n/a	n/a
Sodium Phosphate CVAD	All	0.12mmol/mL (variable volume)	None	Variable	n/a	n/a
Sodium Phosphate Peripheral	All	0.05mmol/mL (variable volume)	None	Variable	n/a	n/a
Thiopental Sodium CVAD	All ≤10kg All >10kg	500mg/50mL 1250mg/50mL in NaCl 0.9%w/v ONLY	2 mg/kg/hr	0.2 x Wt 0.08 x Wt	1250mg/50mL 2500mg/50mL	0.08 x Wt 0.04 x Wt
Thiopental Sodium Peripheral Emergency ONLY	All	125mg/50mL in NaCl 0.9%w/v ONLY	2 mg/kg/hr	0.8 x Wt	n/a	n/a
Tranexamic Acid Continuous DILUTE (Loading dose offered at beginning of infusion)	All	20mg/mL (variable volume)	1 mg/kg/hour	0.05 x Wt	n/a	n/a
Tranexamic Acid Continuous NEAT (Loading dose offered at beginning of infusion)	All	100mg/mL (variable volume)	1 mg/kg/hour	0.01 x Wt	n/a	n/a

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PICU AND THEATRE, CHILDREN'S HEALTH IRELAND CONTINUOUS INFUSIONS AND LOADING DOSES					Flow rate (mL/hour)	=	Prescribed Dose x Default Rate (mL/hour) / Default Start Dose	

Drug	Weight Band	SCI (Normal)	Default Dose and Rate Calculator *All Weights in kg - rounding can occur*		High Strength SCI	High Strength Default Rate (mL/hr)
			Default Start Dose	Default Rate (mL/hr)		
Vasopressin	All ≤5kg	5unit/50mL	0.5 mUnit/kg/min	0.3 x Wt	20unit/50mL	0.075 x Wt
	>5 - ≤10kg	20unit/50mL	(0.0005unit/kg/min)	0.075 x Wt	50unit/50mL	0.03 x Wt
	All >10kg	50unit/50mL	Note:	0.03 x Wt	n/a	n/a
			1mUnit = 0.001unit			
Vecuronium CVAD (ideally)	All ≤5kg	8mg/**20**mL	50microgram/kg/hour	0.125 x Wt	20mg/**20**mL	0.05 x Wt
	>5 - ≤10kg	20mg/50mL		0.125 x Wt	50mg/50mL	0.05 x Wt
	>10 - ≤20kg	50mg/50mL		0.05 x Wt	n/a	n/a
	All >20kg	50mg/50mL		0.05 x Wt	100mg/50mL	0.025 x Wt

Available on the drug library with no fixed concentration:

Albumin 5%	Flush Replogle	Infliximab	Red Cells
IV Fluids incl bolus	Flush TAT	Octoplas	Rituximab
Flush PICC 1Fr Line	Gelofusine 4%	Platelets	Tocilizumab
Flush Post Dose	Glucose 10% Bolus	PN (formerly TPN)	Vedolizumab

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.