

LRI ED prescribing aid for dinoprostone ('Prostin E2') to prevent ductus arteriosus closure in neonates

Notes

This document covers prescription, preparation and administration of an intermediate-dose dinoprostone (aka Prostin E2) infusion (10-100nanogram/kg/min) for use in the ED and during subsequent transfers. It complements the Children's Hospital's [Procedure for IV administration of dinoprostone](#)

Preparations

- In the table below, tick patient's weight
- Clinician to prescribe required total dose of dinoprostone shown in **Column 1** on the fluid page of a drug chart as per example prescription

Patient weight		Dose	Volume
kg	1	microgram	2 mL from 100 microgram/mL solution as above
<input type="checkbox"/>	2.0	120	1.2
<input type="checkbox"/>	2.5	150	1.5
<input type="checkbox"/>	3.0	180	1.8
<input type="checkbox"/>	3.5	210	2.1
<input type="checkbox"/>	4.0	240	2.4
<input type="checkbox"/>	4.5	270	2.7
<input type="checkbox"/>	5.0	300	3.0

- Find dinoprostone (box will say 'Prostin E2') 0.75mg in 0.75mL ampoule in ER fridge ([concentration 1mg/mL](#))
- Using a 5mL syringe, dilute 0.5mL of dinoprostone from the vial with 4.5mL sodium chloride 0.9% ([concentration now 100microgram/mL](#))
- From the 5mL syringe, withdraw required volume of dinoprostone shown in **Column 2** (0.6mL/kg = 60microgram/kg) using syringes of an appropriate size
- Make up to a total volume of 50mL with sodium chloride 0.9% in a 50mL syringe ([concentration now 1.2microgram/kg/mL](#))
- Administer via syringe driver and dedicated IV cannula at an initial dose of 20nanogram/kg/min (see table below for required rate; **NB**: cardiologist might advise rapid upward titration)

Example prescription for a 3kg patient

PARENTERAL INFUSIONS											
Date	Infusion Fluid		Additions to Infusion		Route	Time to run or ml/hr	Prescriber	Fluid Batch No.	Start Time	Signatures	
	Type/Strength	Vol.	Medicine	Dose						Given by	Checked by
16/5/09	0.9% NaCl	50mL	DINOPROSTONE	180micrograms	IV	0.5-10mL/h	Name				

Rate of infusion

Intended dose nanogram/kg/min	Infusion rate mL/hour
10	0.5
20	1.0
30	1.5
40	2.0
50	2.5
60	3.0
70	3.5
80	4.0
90	4.5
100	5.0