Our Lady's Children's Hospital, Crumlin, Dublin 12.
Care plan number: 3c
All care plans must be used in conjunction with care plan 1

Care plan: 3c **Problem**		**Milrinone** **Goals**	**Issue date: June 2013** **Review date: June 2016**
_____ is on Milrinone therapy related to _____		• _____ will receive safe administration of I.V. Milrinone at ward level. • Change in vital signs or condition will be detected promptly and appropriate action taken • Adverse reactions of Milrinone to be detected, reported and documented immediately	
Commenced date, time and signature	No	**Nursing Intervention**	Discontinued, date, time and signature
	1.	**Observations**	
		• Record baseline observations in PICU prior to transfer of _____to the ward • Record baseline on arrival to ward and thereafter 1 hourly or as condition indicates …….. • Nurse _____ on continuous oxygen saturation monitor for duration of infusion • Nurse _____ on apnoea monitor for duration of infusion • Nurse _____ on a cardiac monitor at all times - Record hourly heart rate, rhythm and oxygen saturation, more or less frequently as condition or consultant in charge dictates …… • Record and report any abnormalities in vital signs • Ensure functioning resuscitation equipment is nearby • Ensure emergency drug dose calculations are at the bed side – recheck same daily • Monitor blood pressure as condition indicates - Report any changes in same • Assess capillary refill 4 hourly- unless condition indicates more frequently Report any abnormalities in same • Monitor temperature. Check peripheral temperature by touch and observations of colour of extremities. Report any deviations in same • Record in PEWs as per OLCHC …….. …….. …… ……	
	2.	**Fluid Balance**	
		• Record strict intake and output *If _____ has renal impairment, dose of milrinone may be reduced by medical team* • Administer prescribed diuretics and monitor the effectiveness of same …… …… …… • Record the volume of Milrinone infused each hour – read volume from syringe and corroborate using 'History' function of the infusion pump	

Patient name……

HCRN……..

Ward……

	3.	Medication	

- Administer Milrinone as per the OLCHC Medication Policy and IV Guidelines
- Milrinone must be prescribed dated and signed daily by the medical team.
  (Please see sheet for prescription)
- When preparing and administering Milrinone, ensure:
  - √ Dosage is correct
  - √ Milrinone is well dispersed within the syringe
  - √ tubing is primed
  - √ syringe is clearly labeled with the drug name, dose, rate and patient name and chart number
  - √ Correct infusion rate is set
- Check dosage, prescription and syringe label are correct prior to attaching infusion or when taking over the care of a patient on the drug infusion.
- Milrinone should be prescribed and changed every 24 hours (during day shift where possible)
- Milrinone should be administered as a continuous infusion via braun perfusor fm pump – A bolus can increase the risk of side effects.
- Administer using a giving set with an anti-syphon valve
- Ensure pump is securely clamped in position on IV pole
- **Note: Milrinone should NEVER be infused with any other drug as there is a risk of interactions (particularly frusemide)**

Side-effects of Milrinone
Include list here- Arrythmias
Hypotension
Hypokalaemia
Headache
Changes in LFTs
Thrombocytopenia

- When infusion is complete and discontinued, attach a new 'T-Piece' connector – flush same with 0.9% Saline. Record same.

Note: the child should have a second intravenous cannula in situ for access in an emergency situation. Check patency as per IV Guidelines. 6 hourly 0.9% Nacl Flushes

- Please refer to Careplan 9 for Care of the IV cannula)

Figure 1: Example Rate Calculation

E.g. **Milrinone 5mg/50mls** **Patient Wt = 4.22kgs**

Default dose = 0.5microgram/kg/min (A) ***Prescribed dose = 0.75microgram/kg/min (B)***

1. Calculate default rate as per right hand column on Standard Concentration Drug Library Table: 0.3 (value taken from table) x 4.22kg (patient's weight) = 1.27ml/hr ***(C)***

2. Calculate the actual rate (ml/hr) for the dose prescribed: = $\frac{(B) \times (C)}{(A)}$ =

$$\frac{\text{Prescribed dose (Actual Dose)} \times \text{Default Rate (mls/hour)}}{\text{Default Start Dose}} = \frac{0.75 \times 1.27}{0.5} = 1.9\text{mls/hour}$$

Patient name……

HCRN……..

Ward……