## Milrinone Newborn use only

Alert					
	May cause hypotension. Caution advised when using loading dose.				
Indication	Reduce infusion rate for mants with renal impairment and prematurity.				
mulcation	Inotrope and vasodilator for:				
	1. Treatment of low cardiac output and as an adjunct to innaled hitric oxide in neonates with persistent nulmonary hypertension of the neonate $^1$				
	persistent pulmonary hypertension of the neonate *.				
	<ol> <li>Prevention of low cardiac output syndrome (LCUS) post cardiac surgery<sup>4, 3</sup>.</li> <li>Treatment of myocardial dysfunction in peopeter and children with check particularly in cardiactic.</li> </ol>				
	5. meatment of myocardial dystunction in neonates and children with shock particularly in context of optoroviral 71 infection <sup>4</sup>				
Action	Selective inhibitor of type 2 cAMP phosphodiesterase in cardias and vascular muscle				
Drug type	Instrone and vasodilator	r phosphoulestert			
Trade name	Inotrope and vasounator.				
Procentation					
Doco	נוווג/ נווור (נוורנסצרמווו/ווור) vidi.				
Dose		Torm infant		Brotorm infant	
	Maintenance NO loading	0.33 = 0.75 micro	ogram/kg/minute	0.2 microgram/kg/minute	
	dose	0.33 - 0.75 mich	ografily kg/minute	0.2 microgram, kg/minute	
		Loading: 75 micr	ogram/kg over 1	Loading: 45 microgram/kg	
	Followed by maintenance	hour	ografily kg over 1	over 1 hour	
	dose	0.33 - 0.75 micr	ogram/kg/minute	0.2 microgram/kg/minute	
	Caution: Risk of hypotension wit	b loading dosel	ogram, kg/mmute	0.2 merogramy kg/minute	
Dose adjustment	Renal impairment (including hyr	onlastic left hear	t syndrome under	oing surgery)	
bose aujustment	0.2 –0.33 microgram/kg/minute	IV infusion	e synaronie unacią	,ong 50,80,97	
Maximum dose	Maximum IV Infusion rate for the	e maintenance dos	se is 1 microgram/k	g/minute and 0.5	
	microgram/kg/minute for term a	nd preterm infant	s respectively – cau	ition as risk of drug	
	accumulation over time.	- <b>P</b>			
Total cumulative dose					
Route	IV infusion.				
Preparation	Term infants				
	Infusion strengt	<u>h</u>	Prescribed amount		
	1 mL/hour = 0.33 microgram/k	g/minute	1 mL/kg milrinone and make up to 50mL		
	Draw up 1mL/kg (1000 microgram	m/kg of milrinone)	) and add sodium o	hloride 0.9% or glucose 5% to	
	Draw up 1mL/kg (1000 micrograr make a final volume of 50mL. Inf	m/kg of milrinone) using at a rate of 2	) and add sodium o 1mL/hour = 0.33 m	hloride 0.9% or glucose 5% to crogram/kg/minute	
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	Draw up 1mL/kg (1000 micrograr make a final volume of 50mL. Inf OPTIONAL- Give a loading dose o with loading dose). For term infants – if loading is no	n/kg of milrinone) using at a rate of 2 f 3.75 mL (75 mic) t given higher ma	) and add sodium o 1mL/hour = 0.33 m rogram/kg) over 1 l aintenance infusion	hloride 0.9% or glucose 5% to crogram/kg/minute nour (Note: risk of hypotension	
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	For Loading dose: IV infusion over ONE hour
Monitoring	Heart rate, ECG and blood pressure
	Urine output and peripheral perfusion frequently.
	Fluid and electrolytes.
	Liver function.
	Platelets
Contraindications	Severe obstructive aortic or pulmonary valvular disease or hypertrophic subaortic stenosis.
	Hypersensitivity to milrinone, other 3,4'-bipyridines (inamrinone) or any other ingredient of the
	formulation.
Precautions	Ensure adequate circulating blood volume prior to commencement.
	Loading dose: Considered optional depending on clinical circumstances. May cause hypotension.
	Monitor BP and heart rate closely and ensure adequate volume replacement.
	<b>Prematurity:</b> Long half-life reported (10 hours) in very preterm infants. <sup>3</sup> Avoid prolonged higher rate
	Infusion 20.2 microgram/kg/minute.
	Renal impairment: Significantly increases half-life of millinone. A reduction in the infusion rate in
	Patients with renai impairment to prevent drug accumulation is advised.
	reduction in the dose of divination. Potassium loss due to excessive divinasis may predistore divitalised
	natients to arrhythmias
Drug interactions	None known.
Adverse reactions	Ventricular arrhythmias in cardiac patients.
	Patent ductus arteriosus.
	May cause hypotension.
Compatibility	Fluids: Glucose 5%, sodium chloride 0.9%.
	Y-site: Amino acid solutions, aciclovir, adrenaline (epinephrine) hydrochloride, amikacin,
	amiodarone, atracurium, bivalirudin, calcium chloride, calcium gluconate, caspofungin, cefazolin,
	cefepime, cefotaxime, dexmedetomidine, digoxin, dobutamine, dopamine, doripenem, fentanyl,
	glyceryl trinitrate, heparin sodium, insulin (short-acting), magnesium sulfate heptahydrate,
	meropenem, metoprolol, midazolam, morphine sulfate pentahydrate, noradrenaline
	(norepinephrine), pancuronium, potassium chloride, ranitidine, rocuronium, sodium nitroprusside,
	vancomycin, vecuronium, verapamil.
Incompatibility	Fluids: Sodium bicarbonate.
	V cito: Rumatanida, acmalal, furacamida (frucamida), iminanam u cilastatin, andarestran
Stability	Primacore: If storage is necessary, diluted solution may be stored below 20°C and use within 24
Stability	hours
	Milrinone GH <sup>1</sup> If storage is necessary diluted solution may be stored at 2-8°C and use within 24
	hours.
	Milrinone-Baxter: Diluted solution should be used immediately or as soon as practical to reduce
	microbiological hazard.
Storage	Primacor and Milrinone Baxter: Store below 30°C. Do not freeze.
	Milrinone GH: Store below 25°C. Do not freeze. Protect from light.
Excipients	Primacore, Milrinone GH, Milrinone-Baxter: Glucose (monohydrate or anhydrous), lactic acid or
	sodium hydroxide (for pH adjustment), and water for injections.
Special comments	Discard mixtures exhibiting colour change.
Evidence	Refer to full version.
Practice points	Refer to full version.
References	Refer to full version.
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VERSION/NUMBER	DATE
Original	5/12/2015
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REVIEW	16/11/2025

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