

## Who can administer

Administration RESTRICTED - see [Appendix 1](#)

## Important information

- See under 'Dose' for adjustments required in **renal** impairment
- For Y-site compatibility [see below](#)

## Available preparations

Milrinone injection 10mg per 10ml ampoule

## Reconstitution

Already in solution

**Draw up using a 5 micron filter needle**

**Dilute further prior to administration**

## Infusion fluids

Sodium chloride 0.9% or Glucose 5%

## Methods of intravenous administration

**Intermittent intravenous infusion**

**Loading dose (using an electronically controlled infusion device)**

- Add 50 microgram/**kg** to 10 or 20ml infusion fluid, or use undiluted. Administer over 10 minutes <sup>(ref 1)</sup>

**Continuous intravenous infusion**

**Maintenance dose (using an electronically controlled infusion device)**

- **Syringe driver:** Add 10mg (10ml) to 40ml infusion fluid i.e. final infusion contains 10mg in 50ml
- **or Infusion Bag:** Add 50mg (50ml) to 200ml infusion fluid, i.e. final infusion contains 50mg in **250ml**
- Rate adjusted according to response - see 'Dose'

Â

Â

## Dose in adults

**Loading dose**

- Give 50microgram/**kg** over 10 minutes (3.5mg in a 70kg patient) followed by maintenance dose below

**Maintenance dose**

- Use a **200microgram/ml infusion** i.e. 10mg in 50ml or 50mg in 250ml solution

- 0.375 to 0.75 microgram/kg/minute according to haemodynamic/clinical response (time to steady-state in **normal** renal function approximately 10 hours ) - see table 1 below for rates
- Normal maximum daily dose is 1.13**mg/kg/day** (79mg/24hr/70kg)
- Cardiac failure: Usual duration of use 48 to 72 hours (normal maximum = 5 days)
- Following cardiac surgery: usually for up to 12 hours

<b>Dose (micrograms/kg/minute)</b>	<b>0.375</b>	<b>0.4</b>	<b>0.5</b>	<b>0.6</b>	<b>0.7</b>	<b>0.75</b>
<b>Weight (kg)</b>						
40	4.5	4.8	6	7.2	8.4	9
45	5.1	5.4	6.8	8.1	9.5	10.1
50	5.6	6	7.5	9	10.5	11.3
55	6.2	6.6	8.3	9.9	11.6	12.4
60	6.8	7.2	9	10.8	12.6	13.5
65	7.3	7.8	9.8	11.7	13.7	14.6
70	7.9	8.4	10.5	12.6	14.7	15.8
75	8.4	9	11.3	13.5	15.8	16.9
80	9	9.6	12	14.4	16.8	18
85	9.6	10.2	12.8	15.3	17.9	19.1
90	10.1	10.8	13.5	16.2	18.9	20.3
95	10.7	11.4	14.3	17.1	20	21.4
100	11.3	12	15	18	21	22.5
105	11.8	12.6	15.8	18.9	22.1	23.6
110	12.4	13.2	16.5	19.8	23.1	24.8
115	12.9	13.8	17.3	20.7	24.2	25.9
120	13.5	14.4	18	21.6	25.2	27

### **Renal impairment**

- Significantly increases terminal elimination half-life
- Loading dose NOT affected but REDUCE maintenance DOSE based on table below

<b>eGFR (ml/min/1.73 m<sup>2</sup>)</b>	<b>Maintenance infusion dose</b>	<b>Infusion delivery rate of 200microgram/ml solution in ml/kg/hour</b>
50	0.43 microgram/kg/minute	0.13 <b>ml/kg/hour</b>
40	0.38 microgram/kg/minute	0.11 <b>ml/kg/hour</b>
30	0.33 microgram/kg/minute	0.1 <b>ml/kg/hour</b>
20	0.28 microgram/kg/minute	0.08 <b>ml/kg/hour</b>
10	0.23 microgram/kg/minute	0.07 <b>ml/kg/hour</b>
5	0.20 microgram/kg/minute	0.06 <b>ml/kg/hour</b>

## Storage

Store below 25°C. Do not freeze.

## References

SPC December 2020

1. Medusa Injectable Medicines Guide: downloaded May18th 2022

Label for syringe drivers -see below

## Therapeutic classification

Phosphodiesterase enzyme inhibitor