Iloprost Intravenous Infusion for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- **Monitoring** as overleaf
- Be careful with drug **calculations** - nanograms vs micrograms
- A large volume of infusion may remain after the six hours infusion is complete. Any **unused solution should be discarded**
- **Prepare a new infusion every 24 hours**
- Unlicensed preparation
- See under 'Dose' for adjustments required in **renal impairment**

Available preparations

Ilomedin 100 microgram per 1ml 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

- Each 1ml ampoule (100 micrograms = 100,000 nanograms) to be diluted in 500ml infusion fluid
- This provides a final concentration of 200 nanograms per ml

Intermittent intravenous infusion (administer using an electronically controlled infusion device)

- **Using infusion as prepared above**
- Usually infused for six hours per day, rates as per guideline below

- May be used as a continuous 24 hour infusion for certain Rheumatology indications (ref 2)

Dose in adults

Usual dose - treatment of severe chronic ischaemia of lower limbs in patients at risk of amputation

- 0.5 to 2 nanograms/kg/minute for **6 hours per day** see example below
- Starting dose: 0.5 nanograms/kg/minute (ng/kg/minute) for 30 minutes
- The dose should then be increased at intervals of 30 minutes in steps of 0.5 nanograms/kg/minute, up to 2 nanograms/kg/minute, as tolerated
- See table below for rate calculations
- Stop the infusion after six hours from the start of the infusion
- Dose may be reduced to previously tolerated rate if adverse effects are experienced
- Repeat this titration regimen on days 2 and 3 to determine the maximum rate, which can then be used each day for 6 hours daily for up to 4 weeks
- If adverse effects occur (headache, nausea, undesired drop in blood pressure), the infusion rate should be reduced in a stepwise manner
- **Duration of treatment**
    - Usually 4 weeks. It may be less in case of early efficacy

Rheumatology indications: critical digital ischaemia and acute avascular necrosis (ref 2)

- **Under the guidance of Rheumatology specialist**
- Administer as a continuous infusion of 0.5 to 2ng/kg/minute for three to five days
- See table below for rate calculations

	Dose			
Body weight (kg)	**0.5ng/kg/min** **Rate in mL/hour (using a 100microgram per 500ml solution)**	**1ng/kg/min** **Rate in mL/hour (using a 100microgram per 500ml solution)**	**1.5ng/kg/min** **Rate in mL/hour (using a 100microgram per 500ml solution)**	**2ng/kg/min** **Rate in mL/hour (using a 100microgram per 500ml solution)**
40kg	6	12	18	24
45kg	6.8	13.5	20.3	27
50kg	7.5	15	22.5	30
55kg	8.3	16.5	24.8	33
60kg	9	18	27	36
65kg	9.8	19.5	29.3	39
70kg	10.5	21	31.5	42
75kg	11.3	22.5	33.8	45
80kg	12	24	36	48
85kg	12.8	25.5	38.3	51
90kg	13.5	27	40.5	54
95kg	14.3	28.5	42.8	57
100kg	15	30	45	60
105kg	15.8	31.5	47.3	63
110kg	16.5	33	49.5	66
115kg	17.3	34.5	51.8	69

120kg	18	36	54	72
125kg	18.8	37.5	56.3	75
130kg	19.5	39	58.5	78
140kg	21	42	63	84

Example: Patient weighs 60kg. Starting rate is 9mL per hour for 30 minutes, increasing to 18mL/hour for the next 30 minutes, and so on as tolerated to the maximum of 36mL/hour (2ng/kg/min), (stopping after total of 6 hours)

Rates rounded for convenience

Renal or hepatic impairment

- In patients with renal insufficiency requiring dialysis or severe hepatic impairment, cautious initial titration with a reduced dose is required (e.g. half the normal dose)

Monitoring

- **Blood pressure and heart rate** should be monitored at the start of the infusion and subsequently after each dosage increase
- Depending on the occurrence of adverse effects such as headache and nausea or an undesired blood pressure drop, the infusion rate should be reduced until the optimal tolerated dose is found
- If the adverse effects are severe, the infusion should be temporarily interrupted
- The treatment course can then be continued - with the dose based on the optimal tolerated dose
- If the drug comes into contact with the skin, a long-lasting but painless erythema may occur. In the event of such contact, the affected area should be washed immediately with copious amounts of water or saline.

Storage

Store below 25^{0}C

References

SPC UK Colonis Pharma 29/09/2021

1. Injectable Medicines Guide, Medusa downloaded June 26th 2024

2**.** Expert opinion, Prof John Carey, Consultant rheumatologist, email communication, GUH 4th Jan 2022 - strong preference for using continuous infusion rather than 6 hour infusion.

Therapeutic classification

Prostacyclin analogue