

# HNE AREA Intensive Care

Approved For: JHH ICU and HDU

## Epoprostanol iv

**Trade Name:** Flolan

**Presentation:** 500mcg dry powder

**Indications:** Sterile sodium salt of prostacyclin (or PGI<sub>2</sub>) ; normally produced in endothelial cells of blood vessels ; potent vasodilator of pulmonary and systemic arterial beds and is an inhibitor of platelet aggregation.

**Severe peripheral vascular disease (request by vascular surgeon)**

**Administration;**

1. Must be given via a Central Venous Line (CVC)
2. Admit to ICU or HDU for commencement of the infusion . Patient can go to the ward (F3V) after 24 hours if they are **stable** (no major side-effects and no pre-existing coronary artery disease). This has been agreed to by the NUM of F3. The infusion is usually given for 72 hours.
3. Monitor BP and Heart Rate HOURLY after dose stabilised Style.
4. *A printed copy of this protocol should accompany the patient to the ward for the information of the ward staff.*

Commencing dose: 2 nanograms/kg/min

Then increase by: 2 nanograms/kg/min (i.e. 0.012ml/kg/hour) increments every 15 minutes.

After each dose increment monitor BP and pulse every 5 minutes until dosage and pt have stabilised, and HOURLY thereafter.

**...to a max of** : 20 nanograms/kg/min if tolerated

**Or until:** Decrease in systolic BP to less than 100mmHg

**Or** Increase in heart rate > 40% from baseline

**Or** Nausea, vomiting, severe headache, lightheadedness, anxiety

If any of the above occur, decrease by 1 increment, ie 2 nanograms/kg/min(or 0.012ml/kg/hour)and maintain that rate for the remainder of the infusion if tolerated.

Weight(kg) Starting rate mL/hr Maximum rate mL/hr

50	0.6	6
60	0.7	7
70	0.8	8
80	0.9	9
90	1.1	11
100	1.2	12

**Dose** Commencing at 2nanograms/kg/min to max of 20nanograms/kg/min

**Precautions** PREPARATION OF INFUSION

- Take pack containing 500 microgram dry Flolan® powder and 50mL sterile buffer.
- Withdraw 10mL of the sterile buffer into a 50mL syringe.
- Inject this 10mL gently into the powder vial and shake gently to dissolve powder.
- Draw up total content of dissolved vial and re-inject back into the 40mL of remaining diluent. You now have a solution containing 500 micrograms in 50mLs.

- Take 25mL of this concentrated solution and give by a syringe driver at the prescribed rate and adjust as tolerated, as outlined above. This resulting solution contains 10 micrograms per mL (10000 nanograms per mL)
- The other 25mls can be placed in the refrigerator for up to 16 hours prior to use
- Once prepared, the syringe must only be used for a maximum of **8 hours** and the refrigerated vial within **24 hours**

**Compatibilities:** Monitoring required while on Epoprostenol Infusion

BP and heart rate: Every 5 minutes while dose being stabilised. Then hourly thereafter

Daily FBC, EUC, Coags, (in particular Platelet count), LFT's

**ADVERSE EFFECTS**

- Tachyardia/Bradycardia
- Hypotension
- Facial flushing (harmless and reversible)>
- Headache
- Nausea, Vomiting, Abdominal colic>
- Jaw pain, dry mouth
- Chest Tightness
- Increased risk of bleeding.

*Adverse effects can be controlled by reducing the drug infusion rate.*

**Contraindication:** Congestive heart failure secondary to severe LV dysfunction; pulmonary oedema secondary to initial Flolan use