

Epoprostenol (For Prisma) - Derby Only

Indication	To maintain patency of the filter during hemofiltration in patients where heparin is contraindicated due to low platelets / HIT																				
Dose	1-5 nanograms/kg/minute adjusted to keep the filter patent. Manufacturer advises 4 nanograms/kg/min initially. NB: ONE microgram = 1,000nanograms																				
Preparation	To make up a syringe containing 10,000 nanograms per ml: - 1. Withdraw approximately 10mls of the sterile diluent (50ml vial) into a sterile syringe 2. Inject the contents of the syringe into the vial containing Epoprostenol powder (500 micrograms) and shake gently until all the powder has dissolved 3. Draw up all the epoprostenol solution into the syringe 4. Re-inject the entire contents of this syringe back into the original 50ml of sterile diluent. 5. Mix well 6. Draw up 50mls into a 50ml sterile syringe and attach the filter provided and a cap to the open end of the filter. 7. This solution is referred to as the concentrated solution (containing 10,000nanograms per ml) and may be stored in the fridge. 8. This 'stock syringe can be used to transfer doses into 20ml sterile syringes which fit the PRISMA apparatus. The shelf life is then adjusted (see below) and so it is advisable not to draw up more than is required for 12 hours' worth of infusion. The PRISMA machine used on ICU requires 20ml syringes. Due to the short half-life of the drug, take extra care to ensure the syringe is changed immediately once empty/expired.																				
Administration	Epoprostenol should be infused via the arterial inlet of the dialyser [not for intravenous use]																				
Shelf-life	Concentrated Solution: Store for 36 hours in a fridge. In-use on the Dialyser: May be used for 8 hours at room temperature.																				
Common Compatibility Issues	Not applicable as infused via the arterial limb of the dialyser																				
Additional information	Side effects include facial flushing & headache, bradycardia, transient fall in blood pressure, thyroid disorders and interference with TFT's (thyroid function tests), photosensitivity, liver disorders and pulmonary fibrosis																				
Sample Label	<table border="1" style="width: 100%; background-color: yellow;"> <tr> <th colspan="4" style="text-align: center;">DRUGS ADDED TO THIS INFUSION</th> </tr> <tr> <td colspan="3">PATIENT <i>A. Patient (A. Number)</i></td> <td>WARD <i>ICU</i></td> </tr> <tr> <td>DRUG <i>Epoprostenol (20ml Neat)</i></td> <td>AMOUNT <i>200 micrograms</i></td> <td>ADDED BY</td> <td>CHECKED BY</td> </tr> <tr> <td>DATE ADDED TIME ADDED</td> <td>EXP. DATE EXP. TIME</td> <td colspan="2">BATCH No.</td> </tr> <tr> <th colspan="4" style="text-align: center;">DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS</th> </tr> </table>	DRUGS ADDED TO THIS INFUSION				PATIENT <i>A. Patient (A. Number)</i>			WARD <i>ICU</i>	DRUG <i>Epoprostenol (20ml Neat)</i>	AMOUNT <i>200 micrograms</i>	ADDED BY	CHECKED BY	DATE ADDED TIME ADDED	EXP. DATE EXP. TIME	BATCH No.		DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS			
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Epoprostenol Dose Checker

(Only for use with 10,000nanogram per ml Infusions). All rates are in ml per hour.

IDEAL BODY WEIGHT (Kg)	Dose of Epoprostenol in nanogram per kg per minute				
	Increasing anticoagulant effect→				
	1	2	3	4	5
	All Rates below are in ml per hour. (Only valid for 10,000nanogram/ml infusions)				
40	0.24	0.48	0.72	0.96	1.20
45	0.27	0.54	0.81	1.08	1.35
50	0.30	0.60	0.90	1.20	1.50
55	0.33	0.66	0.99	1.32	1.65
60	0.36	0.72	1.08	1.44	1.80
65	0.39	0.78	1.17	1.56	1.95
70	0.42	0.84	1.26	1.68	2.10
75	0.45	0.90	1.35	1.80	2.25
80	0.48	0.96	1.44	1.92	2.40
85	0.51	1.02	1.53	2.04	2.55
90	0.54	1.08	1.62	2.16	2.70
95	0.57	1.14	1.71	2.28	2.85
100	0.60	1.20	1.80	2.40	3.00
105	0.63	1.26	1.89	2.52	3.15
110	0.66	1.32	1.98	2.64	3.30

Documentation Controls

Development of Guideline:	Pharmacist – Critical Care & Theatres
Consultation with:	Pharmacy Department
Approved By:	Adult Drug Monograph process Written/Reviewed: Munthar Miah Critical Care Pharmacist December 2023 Checked by James Hooley, Medicines Safety Pharmacist December 2023
Review Date:	December 2026
Key contact:	Pharmacist – Critical Care & Theatres

References

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***** End of Monograph ****