

# Heparinised Saline

<b>Indication</b>	Maintain patency of arterial lines Treatment of thrombotic episodes
<b>Dose</b>	<p><b>Maintaining patency of arterial lines:</b>  <u>Umbilical arterial catheter</u>                      0.25 to 0.5 units per hour (depending on local guidelines)  <u>Peripheral arterial line</u>                      1 unit per hour</p> <p><b>Treatment of thrombotic episodes:</b>  <u>Neonate up to 35 weeks corrected gestation</u>                      Initially 50 units/kg                      Then 25 units/kg/hour by continuous infusion, adjusted according to APPT</p> <p><u>Neonate and child up to 11 months</u>                      Initially 75 units/kg                      Then 25 units/kg/hour by continuous infusion, adjusted according to APPT</p>
<b>Route of administration</b>	Intra-arterial Intravenous
<b>To prepare an infusion</b>	<p>Some units will have pre-prepared syringes of heparinised saline  <b>Preferred diluent:</b> sodium chloride 0.45% or sodium chloride 0.9%</p> <p><b>To make 1unit/mL for arterial line patency:</b>                      Add heparin to sodium chloride to make final volume in mL equal to number of units of heparin                      e.g. 30 units of heparin to sodium chloride to make final volume of 30mL or                      50 units of heparin to sodium chloride to make final volume of 50mL</p> <p><b>To make 100unit/mL for treatment of thrombosis:</b>                      Add 5mL (5000units) of heparin (1000unit/mL) to 45mL of 0.9% sodium chloride to make a final volume of 50mL</p>
<b>Compatibilities</b>	<p><b>If giving via arterial line:</b>                      No other drug should be given intra-arterially.</p> <p><b>If giving intravenously:</b>                      Glucose 5%, aciclovir, adrenaline, aminophylline, atracurium, caffeine citrate, calcium gluconate, ceftazidime, dexamethasone, dopamine, fentanyl, fluconazole, furosemide, insulin, magnesium, meropenem, metronidazole, midazolam, milrinone, morphine, noradrenaline, pancuronium, ranitidine, sodium bicarbonate, parenteral nutrition (vamin only).</p>
<b>Known incompatibilities</b>	Amiodarone, amphotericin, clarithromycin, dobutamine, gentamicin, hydrocortisone, phenytoin, vancomycin, parenteral nutrition (lipid).
<b>Notes</b>	<p>Reversed with protamine sulphate. 1mg protamine may reverse 100 units heparin - dose may need to be increased depending upon clinical efficacy.</p> <p><u>Contraindications:</u>                      Thrombocytopenia, acute bacterial endocarditis, trauma, haemophilia / haemorrhagic disorders, recent cerebral haemorrhage, recent eye surgery, severe hypertension.</p> <p>If there is no compatibility information for specific drugs, do not assume compatibility. For incompatible drugs or those with no compatibility information use a separate line or, for short infusions, flush well between drugs.                      For side-effects see the BNFC.</p>
<b>References</b>	Leeds Teaching Hospitals prescribing and administration monograph, BNFC, Neonatal Formulary 7 <sup>th</sup> edition, Handbook on Injectable Drugs, Medusa.

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 Clinicians must accept individual responsibility for using this information and prescribing safely.