FRUSEMIDE

DESCRIPTION
Inhibits the active chloride transport in the ascending limb of the loop of Henle and inhibits tubular sodium transport using a major loss of sodium and chloride. It also increases loss of potassium and calcium, and increases urinary pH. Also decreases pulmonary transvascular fluid filtration.

USE
1. Fluid overload, pulmonary oedema, congestive heart failure
2. Prevent fluid overload during blood transfusion
3. Chronic lung disease
4. Patent ductus arteriosus

PRESENTATION
20mg/2ml ampoule
10mg/1ml oral suspension

DOSE
IV BOLUS and ORAL 1mg/kg/dose 12 hrly for term infants, 24 hrly for preterm infants. Dose may be increased to 6mg/kg/dose and intervals can vary in some clinical situations.

IV INFUSION 0.5-1mg/kg/hr in severe renal failure

ROUTE
IV injection, oral

ADMINISTRATION
IV BOLUS Slow IV bolus injection using the proximal IV bung
IV INFUSION 24-hour dose diluted in appropriate amount of 0.9%sodium chloride depending on the fluid regime as per consultant's order.

STORAGE
Discard unused portion
Discard oral solution bottle 21 days after opening.

MONITORING
Urine output, specific gravity and serum electrolytes
DAILY WEIGHTS ARE NEEDED AFTER COMMENCING THERAPY!

ADVERSE EFFECT
Hypokalaemia, hypocalcaemia, hyponatraemia and hypochloremic alkalosis. Hypercalciuria and development of renal calculi occur with long term therapy. Ototoxicity when combined with vancomycin and aminoglycosides. Cholelithiasis also has been reported with long term therapy.

SOLUTION COMPATIBILITY
0.9%sodium chloride, water for injection
Dextrose cause frusemide to degrade when mixed together for several hours!

INCOMPATABILITY
dobutamine, dopamine, erythromycin, fluconazole, gentamicin, hydralazine, isoproterenol, metoclopramide, midazolam, netilmicin, vecuronium.
FRUSEMIDE cont

TERMINAL INJECTION SITE COMPATIBILITY amikacin, aminophylline, ampicillin, atropine, aztreonam, bumetanide, calcium gluconate, cimetidine, dexamethasone, digoxin, epinephrine, famotidine, heparin, hydrocortisone, indomethacin, lidocaine, lorazepam, meropenem, morphine, nitroglycerine, penicillin G, potassium chloride, propofol, prostaglandin E1, ranitidine, sodium bicarbonate, tobramycin and tolazoline.

REFERENCE
Brion LP, Primhak RA. Intravenous or enteral loop diuretics for preterm infants with (or developing) chronic lung disease. Cochrane Database Syst Rev. 2002;(1):CD001453.