Glucose 10%

FORM Solution containing 10g glucose in 100ml.

INDICATION

1. Treatment of hypoglycaemia

For treatment of hyperkalaemia (in combination with insulin) see 'Insulin and Glucose for Hyperkalaemia' monograph

DOSE RANGE

1a. Hypoglycaemia Symptomatic (blood glucose <1.5mmol/L OR seizures/reduced consciousness)

AGE	DOSE	FREQUENCY	ROUTE
All ages	2.5ml/kg Then 90ml/kg/day continuous infusion initially (increased as necessary to maintain blood glucose above 2.5mmol/L)	Once Continuous infusion	IV

1b. Hypoglycaemia Asymptomatic

AGE	DOSE	FREQUENCY	ROUTE
All ages	90ml/kg/day continuous infusion initially (increased as necessary to maintain blood glucose above 2.5mmol/L)	Continuous infusion	IV

Hypoglycaemia should be treated as an emergency in all infants with blood sugars (gas analyser or laboratory values) of less than 2mmol/l. Treatment should be with an IV bolus of 2.5mls/kg of 10% dextrose.

Blood sugars of 2-2.6mmol/l in a well infant may be managed with an additional feed but in infants in NICU, or infants who are premature, with sugars in the range 2-2.6mmol/l should also be promptly administered an IV bolus of 2.5mls of 10% dextrose.

RECONSTITUTION Already in solution.

DILUTION No further dilution required

METHOD OF ADMINISTRATION Initial doses should be administered by slow intravenous bolus

COMPATIBILITY

Solution compatibility	
Solution incompatibility	
IV Line compatibility	Adrenaline, calcium gluconate, dopamine,gentamicin, vancomycin, sodium bicarbonate, potassium chloride, morphine, isoprenaline, insulin, hydralazine, heparin
IV Line incompatibility	Enoximone, furosemide

THIS LIST IS NOT EXHAUSTIVE PLEASE CONTACT PHARMACY FOR FURTHER INFORMATION ON COMPATIBILITY WITH ANY MEDICINES NOT INCLUDED

CAUTIONS, CONTRA-INDICATIONS AND SIDE EFFECTS

- See Summary of Product Characteristics and most recent edition of BNF for Children (links below)

FURTHER INFORMATION

Frequent monitoring of potassium is required when treating hyperkalaemia. Blood glucose levels should be closely monitored for babies requiring insulin and glucose infusions.

Other concentrations of glucose infusion can be supplied but concentrations greater than 12.5% can be irritant to peripheral veins.

See local protocols regarding how to make up higher concentration glucose solutions.

LINKS

BNF for Children: / Electronic Medicines Compendium

APPLICABLE POLICIES

West of Scotland Neonatal Guidelines:

Consult local policy if applicable

Document Number:	003	Supersedes:	002
Prepared by:	WoS Neo pharm group	Checked by	June Grant
Date prepared	May 2016	Date updated	January 2023
Updated by	J Rooney	Review Date	January 2026

Administer reconstituted solutions immediately.
All vials, ampoules and infusion bags are for single use only unless otherwise stated.
Dose may vary depending on indication, age, renal function, hepatic function, and concomitant medications.
This monograph should be used in conjunction with the package insert, BNF for Children, and Summary of Product Characteristics. For further advice contact your clinical pharmacist or pharmacy department.