DIAZOXIDE

Indication	• Treatment of severe hypoglycaemia[1]—use only: o For established diagnosis of hyperinsulinemia o After endocrinologist consultation[2] • Hypertension (not in neonates)

ORAL

Presentation	• Compounded oral solution 4 mg/mL or 10 mg/mL o Pharmacist: refer to QH application '*iPharmacy*' for compounding instructions • Mater Hospital Brisbane Pharmacy: Oral solution 10 mg/mL • Capsule: 25 mg (not dispersible)
Dosage	• 2–5 mg/kg every 8 to 12 hours[1,3] o Once response is satisfactory, titrate to lowest effective dose[4]
Preparation (if no oral solution)	• Emergency preparation only if no compounded solution available • Open capsule and dissolve in 10 mL water for injection • Draw up into enteral/oral syringe and shake well o *Concentration now equal to 2.5 mg/mL*
Administration	• Draw up prescribed dose • Oral/OGT/NGT

Special considerations	• If indicated for hypoglycaemia, refer to Refer to Queensland Clinical Guideline: *Newborn hypoglycaemia*[5] • Schedule 4 medicine. Special Access Scheme (SAS) • Consider concomitant treatment with hydrochlorothiazide to prevent fluid retention[1] • As albumin bound[1], consider reduced starting dose in at risk groups (e.g. prematurity, low albumin) • Risk of PPHN especially if preterm, unwell or underlying cardiac or lung diseases[1,6]
Monitoring	• Baseline echocardiogram; repeat after 5 days when steady state levels achieved[6] o Seek expert advice if capability to perform is limited • BP (due to antihypertensive properties)[1], cardio-respiratory function[1] • Weight (daily for fluid retention) • Renal function[1], FBC[7], ELFT • BGL[1] • Bone growth (if prolonged use)[3]
Compatibility	• Nil known
Incompatibility	• Nil known
Interactions	• Diazoxide and thiazide diuretics in combination may blunt insulin secretion, cause hyperglycaemia, and potentiate hyperuricaemia and hypotension effects[7]
Stability	• Oral suspension o Store at 2–8 °C o Discard after 30 days • Oral solution (made from capsule and water) o Use immediately and discard unused portion
Side effects	• Blood pathology: leucopoenia[1], neutropenia[1,6], hyperglycaemia[3], hypernatremia[1], electrolyte disturbances, eosinophilia[3] • Circulatory: antihypertensive effects (hypotension[3] and reflex increases in heart rate and cardiac output), PPHN[1,6], oedema[1], primary myocardial toxicity[3] • Digestive: constipation[1], diarrhoea[1] • Immune: fever[3] • Integumentary: hypertrichosis (long term use)[1] • Urinary: hyperuricaemia (long term use)[3]
Actions	• Non-diuretic antihypertensive agent[7]—not indicated for hypertension in neonates but may have anti-hypertensive action and side effects • Elevation of blood glucose through inhibition of insulin release from pancreas[1]

Abbreviations	BGL: blood glucose level, BP: blood pressure, ELFT: electrolyte and liver function test, FBC: full blood count, NGT: nasogastric tube, OGT: oral gastric tube, PPHN: persistent pulmonary hypertension
Keywords	Diazoxide, hydrochlorothiazide, hyperinsulinemia, hypoglycaemia, neonatal hypoglycaemia newborn hypoglycaemia, blood glucose

The Queensland Clinical Guideline *Neonatal Medicines* is integral to and should be read in conjunction with this monograph. Refer to the disclaimer. Destroy all printed copies of this monograph after use.

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