

DIAZOXIDE

Trade Name	DBL Diazoxide Injection BP (Hospira) Proglycem Oral solution (Gate Pharmaceuticals)
Class	Antihypertensive Antihypoglycaemic agent
Mechanism of Action	Diazoxide promotes smooth muscle relaxation in peripheral arterioles resulting in decreased blood pressure with an associated reflex increase in heart rate and cardiac output. Diazoxide also inhibits insulin release from the pancreas
Indications	Indication 1: Severe resistant hypertension Indication 2: Intractable hypoglycaemia
Contraindications	Known family history of allergy to diazoxide, thiazide diuretics or sulphonamides. Aortic coarctation, arterio-venous shunts
Supplied As	IV: 300mg/20mL Oral: 50mg/mL solution
Dilution	N/A
Dosage	Indication 1: 1 to 3mg/kg single dose, then 2-5mg/kg/dose ongoing Indication 2: 2 mg/kg/dose, then increase to 3.5mg/kg/dose if required and up to a max of 5 mg/kg/dose Max recommended dose = 20mg/kg/day
Interval	Indication 1: Stat, then, 6 hourly Indication 2: 8 hourly
Administration	Indication 1: Rapid, direct IV injection over 30 sec or less. Indication 2: Oral – use pre-made solution, shake well Do not give iv solution orally
Compatible With	Do not mix with other medications
Incompatible With	Do not mix with other medications
Monitoring	FBC, blood pressure and blood glucose Sodium should be monitored Q12H and result should be recorded with blood glucose levels on the level 2 feeding sheet,
Stability	IV: Single use only Oral: Expires after 6 months or manufacturers expiry date (whichever is shortest)

Storage	<p>IV: Store unopened vials at room temperature. Protect from light.</p> <p>Oral: Stable at room temperature, do not store in the fridge. Protect from light.</p>
Adverse Reactions	Sodium and fluid retention (can precipitate congestive heart failure), hyperuricaemia, leukopaenia, neutropaenia, excessive (facial) hair growth, hyperglycaemia, hypotension, pulmonary hypertension
Metabolism	<p>Peak hypotensive effect within 5min</p> <p>Peak hyperglycaemic effect within 1hour, usually not more than 8 hours</p> <p>50% excreted unchanged in urine</p>
Comments	<p>Chlorothiazide must start at the same time as starting the diazoxide to minimise sodium and fluid retention.</p> <p>Chlorthiazide also works synergistically to control insulin levels</p> <p>Do not use the injection intramuscularly, subcutaneously or orally because the solution is very alkaline.</p> <p>Proglycem®- diazoxide oral solution is now funded in the community following application for special authority</p>
References	<ol style="list-style-type: none"> 1. Frank Shann: "Drug Doses" booklet; 1998 (10th Ed.):26. 2. Neonatal Formulary The Northern Neonatal Network.BMJ 2000. 3. Hull D et al. Eds. Medicines for Children RCPCH 1999.0 4. www.medsafe.govt.nz 5. Lacy et al. Paediatric Dosage Handbook 6th Edition 1999/2000. 6. NZHPA Notes on Injectable Drugs 5th Edition 7. Hussain K. Congenital hyperinsulinism. Sem Fetal Neonatal Med. 2005;10:369-76.
Updated By	<p>P Schmidt & B Robertshawe November 2005</p> <p>A Lynn, B Robertshawe October 2007</p> <p>A Lynn, B Robertshawe February 2010</p> <p>A Lynn, B Robertshawe June 2012 (re-order profile) June 2014 SA</p> <p>A Lynn, B Robertshawe April 2017 (Update storage)</p> <p>A Lynn, M de Bock Aug 2018 (Alter dosing to mg/kg/dose, max15mg/kg/d Diuretics must start concurrently)</p> <p>A Lynn, M Wallenstein, B Robertshawe December 2020 (routine review)</p> <p>N Austin B Roberstshawe June 2021, need to monitor Na levels</p>