

Diazoxide

Newborn use only

2020

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| Alert | Concomitant use of a thiazide diuretic is recommended. Avoid higher dose where possible. Proglycem 50mg/mL suspension contains alcohol 7.25%. Oral solution prepared by Pharmacy is preferred. |
| Indication | Treatment of transient or persistent neonatal hyperinsulinaemic hypoglycaemia. |
| Action | Opens potassium-ATP channels on pancreatic beta-cells to inhibit insulin secretion. Also occurs in cardiac and vascular smooth muscle leading to decrease in blood pressure and potential for cardiorespiratory deterioration. |
| Drug type | Antihypertensive, antidiuretic benzothiadiazine. |
| Trade name | Oral: Proglycem suspension, Proglycem capsules |
| Presentation | Oral: 10 mg/mL solution (prepared by Pharmacy using Proglycem 25mg or 100mg capsules); Proglycem 50 mg/mL oral suspension is commercially available as an unregistered product. IV preparations are available but beyond the scope of this formulary. Discuss with specialist. |
| Dose | 2–5 mg/kg/dose every 8 hours OR 2.5–7.5 mg/kg/dose every 12 hours. |
| Dose adjustment | |
| Maximum dose | 20 mg/kg/day, although higher doses have been reported. ^{14,15} |
| Total cumulative dose | |
| Route | Oral. |
| Preparation | Oral: Shake well before use. |
| Administration | Oral: Administer after feeds (preferred). |
| Monitoring | Blood pressure and blood glucose levels during initial treatment. Sodium and fluid retention (urine output, electrolytes and weight). Consider monitoring albumin and liver function. ¹ |
| Contraindications | Hypersensitivity to thiazide derivatives. |
| Precautions | Avoid sodium and water overload. Concomitant use of a thiazide diuretic is recommended. Avoid higher doses where possible. Use with caution in premature infants – increased risk of cardiorespiratory complications. Use with caution in jaundice – may displace bilirubin from albumin. Reduce dose in infants with renal impairment. Use with caution in infants with hepatic impairment. Use with caution in mechanical hypertension, e.g. secondary to aortic coarctation or arteriovenous shunt. Use with caution in pulmonary hypertension. |
| Drug interactions | Concomitant administration of diuretics may result in potentiation of the hyperglycaemic, hyperuricaemic or hypotensive effect of diazoxide. |
| Adverse reactions | Tolerance to diazoxide is usually good. Severe adverse effects include sodium and fluid retention which may precipitate congestive heart failure in patients with compromised cardiac reserve. Usually responds to diuretic therapy. Life-threatening episodes of pulmonary hypertension were observed in some neonates receiving diazoxide. ² Prematurity and higher diazoxide doses are risk factors for cardiovascular side effects. ³ Severe hypotension can be controlled with sympathomimetic agents if necessary. With prolonged use, hypertrichosis can sometimes be marked and distressing in young children, but will be reversible after treatment cessation. Haematological side effects are very rare with the usual doses. Overdose of diazoxide produces hyperglycaemia and possibly ketoacidosis which should be treated promptly with insulin and restoration of fluid and electrolyte balance. |
| Compatibility | Not applicable. |
| Incompatibility | Not applicable. |
| Stability | Oral solution: Refer to expiry on bottle |
| Storage | 10mg/mL oral solution (prepared by Pharmacy): Store according to instructions on bottle. 50mg/mL oral suspension: Store at 25°C. Protect from light |

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| Excipients | Proglycem 50mg/mL suspension contains alcohol 7.25%, sorbitol, chocolate cream flavour, propylene glycol, magnesium aluminum silicate, carboxymethylcellulose sodium, mint flavour, sodium benzoate, methylparaben, hydrochloric acid or sodium hydroxide, poloxamer 188, propylparaben, purified water (ref: Product Info) Proglycem capsules contain lactose, magnesium stearate (ref: Product info) |
| Special comments | Concomitant use of a thiazide diuretic is recommended to counter sodium and fluid retention from use of diazoxide. ^{4,5} Oral diazoxide preparations are not registered in Australia. Complete a Special Access Scheme - Category C form and obtain parental consent. |
| Evidence | Refer to full version. |
| Practice points | Refer to full version. |
| References | Refer to full version. |

| VERSION/NUMBER | DATE |
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| Original 1.0 | 6/10/2016 |
| Current version 2.0 | 6/11/2020 |
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