

# Cyclomydril

## Newborn use only

2020

<b>Alert</b>	Unapproved medicine in Australia and New Zealand. Available only through Special Access Scheme Category C Pathway. For topical ophthalmic use only.
<b>Indication</b>	Mydriatic (dilates the pupil) and cycloplegic (prevents accommodation of the eye) for ophthalmic examinations and therapeutic procedures
<b>Action</b>	Contains cyclopentolate hydrochloride 0.2% and phenylephrine hydrochloride 1%. Cyclopentolate hydrochloride is an anticholinergic drug and phenylephrine hydrochloride is an adrenergic drug. This combination induces mydriasis that is greater than that of either drug alone at its respective concentration. The concentrations of cyclopentolate and phenylephrine have been selected to induce mydriasis with little accompanying cycloplegia.
<b>Drug type</b>	Antimuscarinic (cyclopentolate) and sympathomimetic (phenylephrine).
<b>Trade name</b>	Cyclomydril
<b>Presentation</b>	2 mL DROP-TAINER® dispenser. Each mL contains: Cyclopentolate hydrochloride 0.2%, phenylephrine hydrochloride 1%.
<b>Dose</b>	One drop into each eye 30–60 minutes prior to procedure, may be repeated up to three times (maximum of four drops), at least 5 minutes apart. Dark irises may require additional drops
<b>Dose adjustment</b>	Therapeutic hypothermia – Not applicable. ECMO – Not applicable. Renal impairment – Not applicable. Hepatic impairment – Not applicable.
<b>Maximum dose</b>	Four drops into each eye.
<b>Total cumulative dose</b>	
<b>Route</b>	Topical instillation into the eyes.
<b>Preparation</b>	Not applicable
<b>Administration</b>	Instil one drop in each eye. Apply pressure to the lacrimal sac during and for 2 minutes after instillation of eye drop to minimise systemic absorption. Wipe away excess medication.
<b>Monitoring</b>	Observe infants for at least 30 minutes up to 120 minutes. Blood pressure, heart rate and oxygen saturation. Signs of ileus.
<b>Contraindications</b>	Concurrent use with beta-blockers. Acute stage of necrotising enterocolitis (NEC).
<b>Precautions</b>	To minimise systemic absorption, apply pressure over the nasolacrimal sac for 2 to 3 minutes following instillation. Bronchopulmonary dysplasia. Feeding intolerance. Severe neurological impairment.
<b>Drug interactions</b>	Propranolol: An enhanced pressor response to phenylephrine has been shown in patients on propranolol (blocks the beta-adrenergic vasodilation that normally reduces the blood pressure effect).
<b>Adverse reactions</b>	These usually only occur with excess dosing. Anticholinergic side effects include fever, tachycardia, vasodilation, dry mouth, restlessness, delayed gastric emptying and decreased gastrointestinal motility, and urinary retention. Alpha-adrenergic side effects include decreased pulmonary compliance, tidal volume and peak airflow in babies with bronchopulmonary dysplasia. Increased heart rate and blood pressure.
<b>Compatibility</b>	N/A
<b>Incompatibility</b>	N/A
<b>Stability</b>	Single use only. Discard after use.
<b>Storage</b>	Store at room temperature < 25°C.
<b>Excipients</b>	Preservative: Benzalkonium chloride 0.01%. Inactives: Edetate disodium, boric acid, hydrochloric acid and/or sodium carbonate (to adjust pH), purified water.
<b>Special comments</b>	Cyclomydril is an unapproved medicine in Australia and New Zealand.
<b>Evidence</b>	Refer to full version.
<b>Practice points</b>	Refer to full version.
<b>References</b>	Refer to full version.

<b>VERSION/NUMBER</b>	<b>DATE</b>
Original 1.0	24/08/2017
Current 2.0	15/12/2020
<b>REVIEW</b>	15/12/2025

**Authors Contribution**

Original author/s	Srinivas Bolisetty, David Osborn
Evidence Review	David Osborn
Expert review	Kimberley Tan
Nursing Review	Eszter Jozsa, Kirsty Minter
Pharmacy Review	Jessica Mehegan
ANMF Group contributors	Ansar Kunjunju, Nilkant Phad, Bhavesh Mehta, John Sinn, Carmen Burman, Michelle Jenkins, Helen Huynh, Wendy Huynh, Thao Tran
Final editing and review of the original	Ian Whyte
Electronic version	Cindy Chen, Ian Callander
Facilitator	Srinivas Bolisetty