**Alert**  
Watch for apnoeas and abdominal distension following administration. Lower concentration solutions and regimens minimising number of additional drops are recommended.

| **Indication** | Induction of mydriasis and cycloplegia for diagnostic and therapeutic ophthalmic procedures. |
| **Action** | Anticholinergic drug that produces pupillary dilatation by inhibiting the sphincter pupillae muscle and paralysis of accommodation. |
| **Drug Type** | Antimuscarinic. |
| **Trade Name** | Minims Tropicamide Eye Drops  
Mydriacyl Eye drops |
| **Presentation** | Minims Tropicamide Eye Drops 0.5%, 1.0% solution.  
Mydriacyl Eye drops 0.5%, 1.0% 15 mL (multidose—excipients benzalkonium chloride 0.01%, sodium chloride, disodium edetate, hydrochloric acid and/or sodium hydroxide, purified water). |
| **Dosage/Interval** | Use in combination with phenylephrine 2.5% with or without cyclopentolate 0.5%.  
**REGIMEN 1:**  
Phenylephrine 2.5% + cyclopentolate 0.5% + tropicamide 0.5% eye drops [1-4].  
Instil one drop of each agent (5 minutes apart) into each eye 60 minutes prior to examination.  
Repeat if pupillary dilatation inadequate.  
Perform examination 60 to 120 minutes after instillation.  
**REGIMEN 2:**  
Phenylephrine 2.5% + tropicamide 0.5% eye drops [5-7].  
Instil one drop of each agent (5 minutes apart) into each eye 60 minutes prior to examination.  
Repeat if pupillary dilatation inadequate.  
Perform examination 60 to 120 minutes after instillation.  
Dark irides may require additional drops. |
| **Maximum daily dose** | REGIMEN 1: 3 drops of each agent.  
REGIMEN 2: 4 drops of each agent. |
| **Route** | Topical instillation into the eyes from the container or use a microdrop (5–7 microL) cannula. |
| **Administration** | Apply pressure to the lacrimal sac during and for 60 seconds after instillation of eye drop to minimise systemic absorption. Wipe away excess medication.  
Consider withholding feeds for four hours from administration of the last drops to reduce incidence of feed intolerance. |
| **Monitoring** | Blood pressure, heart rate, oxygen saturation in infants with bronchopulmonary dysplasia or at risk of apnoea.  
Signs of ileus. |
| **Contraindications** | Necrotising enterocolitis (NEC) at the time of examination. |
| **Precautions** | Bronchopulmonary dysplasia.  
Severe neurological impairment—may increase risk of seizures.  
Feeding intolerance.  
Lower concentration solutions and regimens minimising number of additional drops are recommended to minimise toxicity. |
| **Drug Interactions** | Cyclopentolate, phenylephrine, tetracaine (amethocaine) |
| **Adverse Reactions** | Feeding intolerance, abdominal distension and increased gastric residuals.  
Apnoea, transient bradycardia (especially infants on respiratory support).  
Stinging or burning of eye.  
Rarely dry mouth, urinary retention, fever, tachycardia, vasodilatation, restlessness, agitation, seizures. |
| **Compatibility** | Phenylephrine, cyclopentolate, tetracaine (amethocaine) |
| **Incompatibility** | No information. |
### Stability
Discard immediately after use.

### Storage
Store in refrigerator at 2°C to 8°C. Do not freeze. Protect from light.

### Special Comments
Without lacrimal sac occlusion, approximately 80% of each drop may pass through the nasolacrimal system and be available for rapid systemic absorption by the nasal mucosa. Consider withholding feeds for four hours from administration of the last drops. Used in conjunction with topical anaesthetic, e.g. tetracaine (amethocaine).

### Evidence summary
Refer to full version.

### References
Refer to full version.

---

**Authors Contribution**

<table>
<thead>
<tr>
<th>Role</th>
<th>Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original author/s</td>
<td>Himanshu Popat</td>
</tr>
<tr>
<td>Expert review</td>
<td>Mark Jacobs, Hughie Tsang, Kimberley Tan</td>
</tr>
<tr>
<td>Evidence Review</td>
<td>David Osborn</td>
</tr>
<tr>
<td>Nursing Review</td>
<td>Eszter Jozsa</td>
</tr>
<tr>
<td>Pharmacy Review</td>
<td>Jing Xiao, Mariella De Rosa</td>
</tr>
<tr>
<td>Final content and editing review of the original</td>
<td>Ian Whyte</td>
</tr>
<tr>
<td>Electronic version</td>
<td>Mariella De Rosa, Cindy Chen, Ian Callander</td>
</tr>
<tr>
<td>Facilitator</td>
<td>Srinivas Bolisetty</td>
</tr>
</tbody>
</table>

**Original version Date:** 13/03/2018  
**Author:** NMF Consensus Group

**Current Version number:** 1.0  
**Current Version Date:** 13/03/2018

**Risk Rating:** Medium  
**Due for Review:** 13/03/2021

**Approval by:** JHCH CQ&PCC  
**Approval Date:** 24/07/2018

---