### Drug Information Table

#### Therapeutic Use
- **Beta blockers**: Topical therapy that helps lower IOP in chronic open-angle glaucoma and acute closed angle glaucoma
- **Cholinergic agonists and cholinesterase inhibitors**: Topical therapy that helps lower IOP in glaucoma; adjunct to laser and other eye surgeries and procedures

#### Administration
- **echothiophate**: Administer in evening at least 5 min. apart from other eye drops
- All eye drops: hold pressure on puncta and nasolacrimal sac at least 60 seconds after instillation
- All eye drops: take care not to touch or drop the eye dropper; when instilling eye drops for a patient, apply clean gloves, and instruct patient to wash hands before instilling eye drops
- Do not apply with contact lens in place

#### Side/Adverse Effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Interventions</th>
<th>Patient Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beta blockers</strong>: stinging, burning, and eye discomfort</td>
<td>Monitor for these effects</td>
<td>Advise patient that these effects are transitory after application; patient should not rub eyes</td>
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<tr>
<td><strong>Beta blockers</strong>: systemic cardiac or respiratory effects (bradycardia, hypotension, bronchospasm)</td>
<td>Monitor vital signs</td>
<td>Instruct patient on correct instillation technique to minimize systemic effects</td>
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<tr>
<td><strong>Cholinergic agonists and cholinesterase inhibitors</strong>: systemic effects (urinary urgency, bradycardia, and constriction of the bronchioles)</td>
<td>Monitor vital signs</td>
<td>Instruct patient on correct instillation technique to minimize systemic effects</td>
</tr>
<tr>
<td><strong>Pilocarpine</strong>: decreased visual acuity (especially at night), headache (occurs more often in younger patients and may subside with time)</td>
<td>Monitor for these effects</td>
<td>Instruct patient to report decreased visual acuity and headache to provider</td>
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<tr>
<td><strong>Pilocarpine</strong>: retinal detachment could occur</td>
<td>Monitor for symptoms of retinal detachment</td>
<td>Teach patient to recognize symptoms of retinal detachment (dark floaters, flashes of light, feeling as if “curtain” has been pulled over part of vision in one eye)</td>
</tr>
<tr>
<td><strong>Echothiophate</strong>: decreased visual acuity (especially at night), development of cataracts</td>
<td>Implement safety measures for nighttime ambulation</td>
<td>Avoid driving, especially at night, and participating in other activities that require good visual acuity if vision is affected</td>
</tr>
<tr>
<td><strong>Echothiophate</strong>: decreased visual acuity (especially at night), development of cataracts</td>
<td>Observe for opacity behind pupil when shining penlight into eye</td>
<td>Instruct patient to report decrease in both day and night time vision to provider</td>
</tr>
</tbody>
</table>

#### Precautions

- **Beta blockers**:
  - Use with systemic beta blockers cause increased systemic effects
  - Calcium channel blockers can increase systemic effects
  - May interfere with effects of insulin in diabetic patients
- **Pilocarpine**: Anticholinergic drugs
- **Echothiophate**: Organophosphates for gardening may increase effects of the drug

#### Contraindications

- **Beta blockers**
  - Use with systemic beta blockers cause increased systemic effects
  - Calcium channel blockers can increase systemic effects
  - May interfere with effects of insulin in diabetic patients
- **Pilocarpine**: Anticholinergic drugs
- **Echothiophate**: Organophosphates for gardening may increase effects of the drug