# REGIONAL ADULT PARENTERAL DRUG MONOGRAPH

GENERIC NAME
## neostigmine

| Effective Date: Dec 2012<br>Revised Date: January 2025 | CLASSIFICATION<br>**Cholinergic** | OTHER NAMES<br>**Prostigmin** | PAGE<br>1 of 1 |
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**ADMINISTRATION POLICY:**

IV Bolus - May be administered by a nurse experienced in ICU/PACU/ED
IM Injection - May be administered by a nurse experienced in ICU/PACU/ED
Subcutaneous - May be administered by a nurse experienced in ICU/PACU/ED

**RECONSTITUTION/DILUTION/ADMINISTRATION:**

**Available as:** 0.5 mg/mL & 1 mg/mL - 10 mL vial

**IV Bolus:** Administer undiluted slowly into an infusing IV over 2 to 3 minutes

**IM/Subcutaneous:** Administer undiluted

**Maximum rate:** 0.25 mg/minute
**Maximum concentration:** 2.5 mg/mL

**DOSAGE:**

Myasthenia Gravis Diagnosis: IM/IV - 0.02 mg/kg

Neuromuscular Blockade Antagonism: dose varies depending on depth of blockage: 0.02 to 0.07 mg/kg IV (must administer IV glycopyrrolate or atropine IMMEDIATELY PRIOR to neostigmine to avoid significant bradycardia) Repeat as needed.

**Maximum single dose:** 5 mg (only for reversal of neuromuscular blockade)

**STABILITY/COMPATIBILITY:**

**Compatibility:** Compatible with D5W and normal saline.

**PRECAUTIONS, POTENTIAL ADVERSE REACTIONS:**

- Cholinergic reactions: nausea and vomiting, diarrhea, salivation, gastrointestinal cramping, muscle cramps, fasciculations, bronchospasm, hypotension, bradycardia. Intravenous atropine may be needed to counteract these effects.

**ADDITIONAL NOTES AND NURSING CONSIDERATIONS:**

- Use with caution in patients with asthma, arrhythmias, epilepsy, hyperthyroidism, or peptic ulcer.
- In the diagnosis of myasthenia gravis, stop all anticholinesterase medications 8 hours prior to administration
- Elderly patients: May require dose reduction by 50% for patients with decreased renal function.