



El Dorado County Emergency Medical Services
Agency
Quick Reference

Revised Date: July 1, 2020

Medication Profile

Glucagon

Class:

Antihypoglycemic Agent/Insulin Antagonist (Pancreatic Hormone)

Action:

Glucagon is a protein secreted by the alpha cells of the pancreas. It causes an increase in blood glucose concentration by converting liver glycogen to glucose (glycogenolysis). It inhibits glycogen synthesis and exerts positive inotropic action on the heart and decreases renal vascular resistance.

It is a smooth muscle relaxant of the bronchi, esophagus, stomach, duodenum, small bowel, and colon.

Onset: 5-20 minutes

Peak: 30 minutes

Duration: 60-90 minutes

Adult Administration:

Hypoglycemia: 1mgIM/IN

Allergic Reaction: 2-4mg IV/IN/IM Base MD Order

Beta blocker OD: 2-4mg IV/IN/IM Base MD Order

Pediatric Administration:

Hypoglycemia: 0.1mg/kg IN/IM (Max 1mg)

Allergic Reaction: 0.1mg/kg IV/IN/IM Base MD Order

Beta Blocker OD: 0.1mg/kg IV/IN/IM Base MD Order

Indications:

Hypoglycemia
Beta Blocker OD
Symptomatic Bradycardia with patients on Beta Blockers

Contraindications:

Hypersensitivity/allergy

Side Effects:

CV: Tachycardia, hypotension CNS:
Headache
GI: Nausea, vomiting INTEG:
Urticaria

Pregnancy:

Category B

Notes:

Only effective if there are sufficient stores of glycogen in the liver.