# Drug Information Table

## Class II/Beta adrenergic blockers – propranolol (Inderal)

### Therapeutic Use
- Management of cardiac tachydysrhythmias, such as atrial and ventricular tachycardia and tachycardia caused by exercise or emotion
- Treats hypertension alone or along with other drugs, such as diuretics
- Prevents pain from angina pectoris
- Treatment to decrease mortality following MI
- Used for prophylaxis against migraine headaches

See the section on hypertension in this Module for information on the beta blockers, metoprolol and atenolol.

### Administration
- Available for oral or IV use
- Use the IV route to treat life-threatening dysrhythmias
- Take either with or without food at consistent times during the day to minimize adverse effects
- Take patient’s BP and pulse before administering propranolol; withhold drug and notify provider if BP is below 90 mm/Hg systolic or if pulse is slower than 60 beats/min
- Give IV dose either directly by IV bolus over 1 minute or give an intermittent infusion over 15 to 20 minutes

### Side/Adverse Effects

| Bradycardia due to blockade of beta receptors; may lead to reduced cardiac output |
| Heart failure |
| Rebound excitation causing angina pain or MI with sudden withdrawal of beta blocker in patient with CHD |
| Peripheral arterial insufficiency (similar to Raynaud’s disease) |
| CNS effects: confusion, fatigue, drowsiness |

### Interventions
- Monitor heart rate and report rate slower than 60 beats/min (or prearranged parameter) to provider
- Monitor for signs of heart failure and report to provider
- Teach patient not to stop beta blocker suddenly
- On discontinuation, taper dose slowly over 1 to 2 weeks
- Monitor for color, temperature, and pulses in extremities (pulses may be present even if poor circulation exists)
- Monitor for CNS effects

### Patient Instructions
- Check pulse rate daily before taking drug and report to provider for pulse slower than 60 beats/min (or prearranged parameter)
- Report shortness of breath, extremity edema, night cough to provider
- Do not stop taking this drug abruptly; talk to the provider
- Report increase in angina or new onset of chest pain to provider
- Report sensations of cold, numbness in hands or feet
- Protect extremities from severe cold
- Report these (CNS) effects to provider
- Avoid hazardous activities such as driving until effects are known

### Contraindications
- Sinus bradycardia or second to third degree heart block
- Pulmonary edema
- Mitral or aortic valve disease
- Cardiogenic shock
- Peripheral vascular disease, Raynaud’s disease
- Asthma, severe COPD, or other chronic respiratory disorder

### Precautions
- Hyperthyroidism or thyrotoxicosis
- Renal or liver disorders
- Myasthenia gravis
- Cerebrovascular disorders, stroke
- Diabetes mellitus, patients with hypoglycemia
- Surgery
- History of allergy to stinging insects
- Pheochromocytoma (adrenal gland tumor)
- Wolff-Parkinson-White syndrome
- Older adults

### Interactions
- Use with other antihypertensive drugs may increase risk for hypotension
- Antacids may decrease absorption
- Digoxin has an additive effect and may increase bradycardia
- Beta blockers with oral hypoglycemic agents may increase risk for hypoglycemia and propranolol may mask tachycardia caused by hypoglycemia
- Beta blockers may increase effect of neuromuscular blockers
- Antimuscarinic and anticholinergic drugs may decrease beta blocker effects