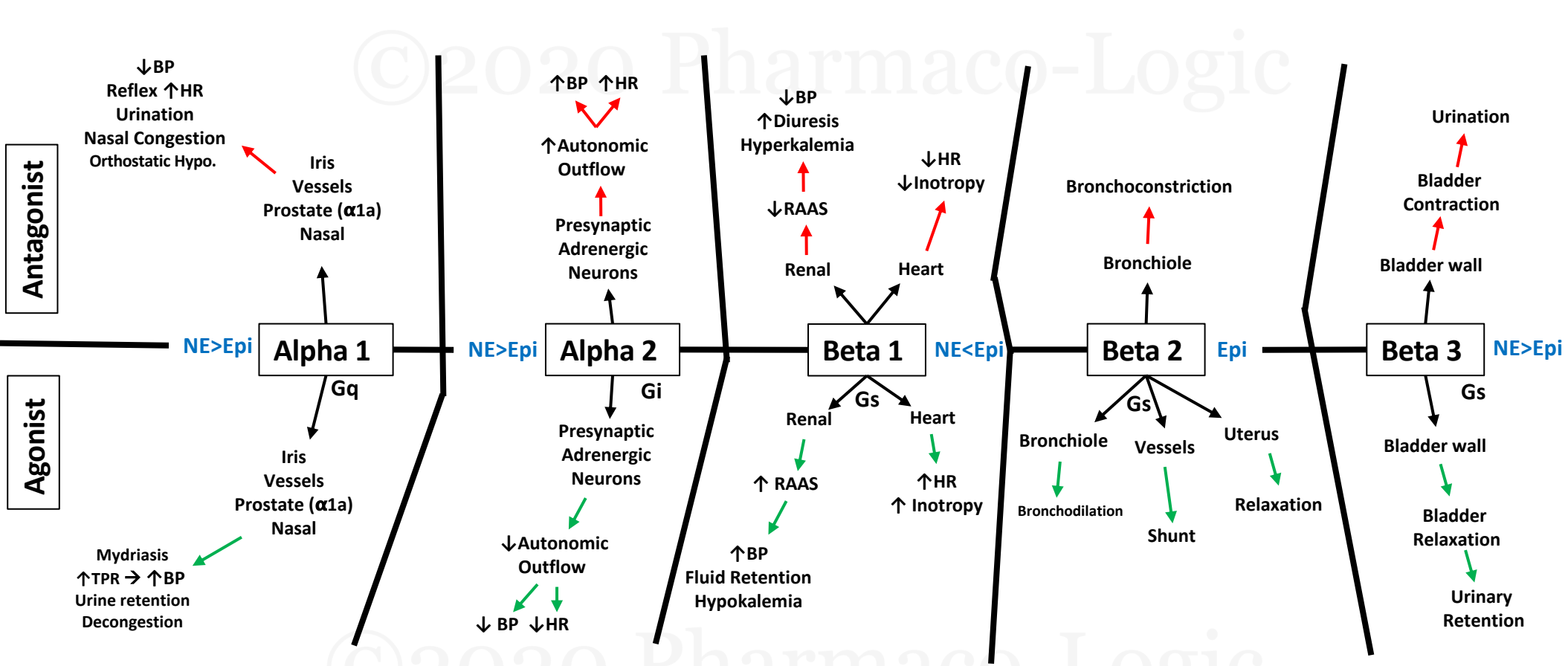
1. α_1 Antagonists
MOA: blockade of α_1 receptors
Prazosin
Doxazosin
Tamsilosin - α1a – Prostate specific
Silodosin α1a – Prostate specific
Use: Hypertension, BPH
SE: 1st dose effect, Orthostatic hypo, Sexual dysfunction, Tachycardia (less),

2. Nonselective α Antagonists
MOA: blockade of α_1 & α_2 receptors
Phentolamine
Phenoxybenzamine -Irreversible
Use: hypertension, Pheochromo, Serotonin syndrome (MAOI)
SE: Orthostatic hypo, Sexual dysfunction, **Tachycardia (reflex)**

3. α_2 Antagonist
MOA: Central activation of SNS outflow
Mirtazapine
Use: Depression
SE: Sedation, ↑cholesterol, ↑appetite

4. α/β-Blockers
MOA: Block Beta and alpha receptors
Carvedilol, Labetalol
Use: Hypertension, HF
SE: Rebound, Adverse lipid profile, No Reflex
CI: Diabetes

5. β-Blockers
MOA: Inhibit RAAS, ↓SNS, ↓BP, ↓Demand, ↓Aq humor, production, ↓AV node conduction
Atenolol – Beta 1
Esmolol - Beta 1 – super short T1/2
Metoprolol – Beta 1
Nebivolol – Beta 1 and 3 → NO production
Propranolol – Beta 1 & 2
Use: Angina, Arrhythmia, Diastolic CHF, MI, Hypertension, Hyperthyroid, Glaucoma
SE: Asthma exacerbation, Fatigue, exercise intolerance, Hyperglycemia (β_2), Hyperkalemia (RAAS, $\beta_{1/2}$), Rebound
CI: Verapamil, diltiazem, asthma, Diabetes, K-sparing Diuretics, ACEI, ARB, Left ventricular failure



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6. α_1 Agonists
MOA: Activation of α_1 receptors
Phenylephrine
Midodrine
Oxymetazoline – Nasal spray
Use: Low Blood pressure, Nasal congestion
SE: Hypertension, Blurred vision, urinary retention

7. α_2 Agonists
MOA: Central inhibition of SNS outflow
α-methyldopa –DOC pregnancy
Clonidine
Guafacine, Guanabenz
Use: Hypertensive urgency, HF, ANS failure, ADHD
SE: SLE, Sedation, Rebound, Dry mouth, H_2O retention,
CI: Alcohol – sedation

8. Beta adrenergic agonists
MOA: Activate beta receptors → ↑cAMP
SABAs – Albuterol, Terbutaline, Levalbuterol
LABAs – Salmeterol, Formoterol, Vilanterol
Use: Asthma rescue/prophylaxis, prevent preterm labor
SE: tachyarrhythmia, hypokalemia, tolerance (PDE4/BARK)
PK: Metabolized by CYP3A4

9. β Agonists
MOA: Activate Beta 1 receptors - ↑CO, ↑HR
Dobutamine – beta 1
Isoproterenol - beta 1, 2, 3
Mirabegron – Beta 3 – TX: overactive bladder
Use: Cardiogenic shock, Systolic HF
SE: Tachyarrhythmia

Indirect Sympathomimetics
Cocaine - NET inhibitor
Amphetamine – NET reversal
Dopamine D1> B1>A1
MAO inhibitors
COMT inhibitors