

9. Mixed Target anti-epileptics - MOA: (1) Block Na⁺, (2) Ca²⁺, (3) NMDA channels, (4) Activate GABA channels
Valproate
 USE: Migraine (Prophylaxis)
 SE: Liver toxicity, pancreatitis, GI toxicity
 CI: Pregnancy (teratogen)
Topiramate
 USE: Partial, tonic clonic seizures, Migraine (Prophylaxis)
 SE: Carbonic anhydrase inhibition, Sedation, mental slowing, Kidney stones, suicidal thoughts
 CI: Pregnancy (teratogen), CNS depressants

8. β-Blockers
 MOA: inhibit CO, ↓SNS, ↓RAAS, ↑PGI
Propranolol – Beta 1&2
Timolol
Metoprolol – Beta 1
Atenolol – Beta 1
Nebivolol – Beta1 & NO production
 USE: Migraine - Prophylaxis
 SE: Adverse lipid profile, Hyperglycemia (β₂), Hyperkalemia (β₂), rebound
 CI: asthma, Diabetes, NSAIDs, K-sparing Diuretics, ACEI, ARB, Hyperadrenergic

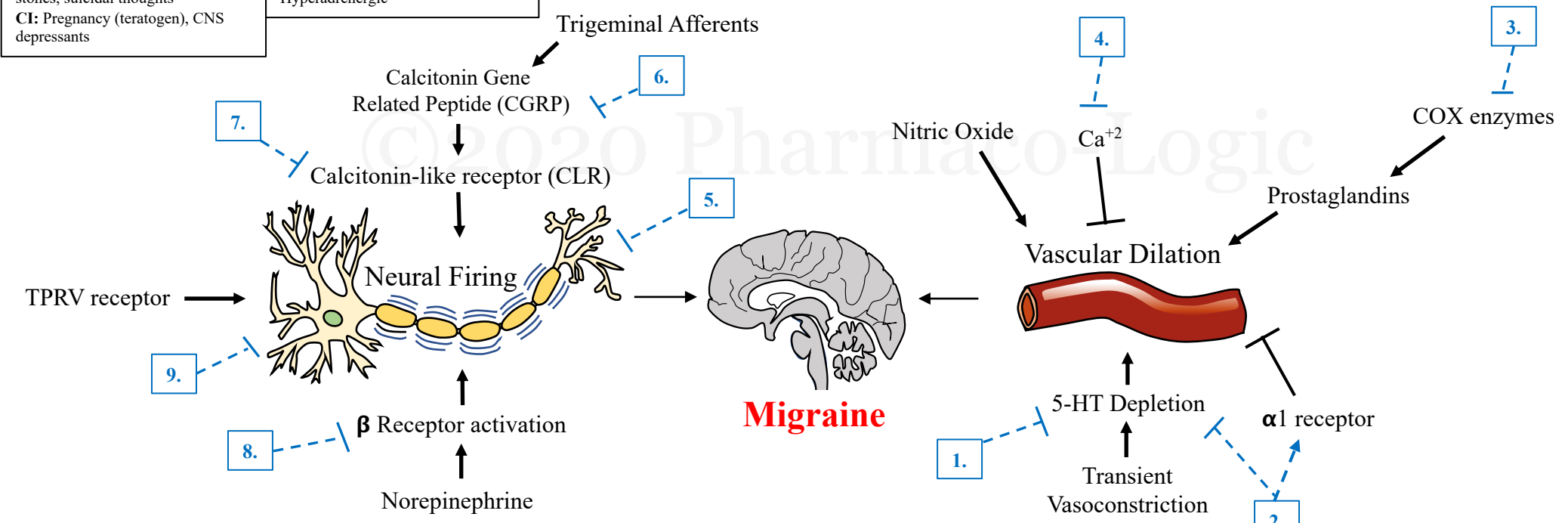
7. CGRP Receptor Antagonists
 MOA: Bind and inhibit activation of CGRP receptor
Erenumab
Ubrogrepant
 USE: migraine prophylaxis
 SE: Anaphylaxis, constipation, pruritis

6. CGRP Inhibitors
 MOA: Monoclonal antibody which binds to CGRP → inhibit activity
Galcanezumab
Fremanezumab
 USE: migraine prophylaxis
 SE: Anaphylaxis

5. Botulinum toxin
 MOA: Block Neurotransmitter release – inhibit SNAP
 USE: migraine prophylaxis
 SE: Muscle paralysis, diplopia, dysphagia, dyspnea

4. Non-Selective CCBs
 MOA: Block Vascular AND cardiac Ca²⁺ channels
Verapamil
Diltiazem
 USE: Hypertension – low renin, arrhythmia, migraine prophylaxis
 SE: Gingival hyperplasia, AV block

Prophylaxis



1. 1st Gen Anti-histamines
 MOA: Bind and activate Histamine 1 receptors
Dimenhydrinate – anti-emetic
Diphenhydramine – anti-emetic
Doxylamine – antiemetic, morning sickness
Promethazine – anti-emetic
Chlorpheniramine – OTC cold med
Brompheniramine
Cyproheptadine – 5-HT antagonist
Hydroxyzine – Anxiety, psychosis
Meclizine – anti-emetic
 USE: Allergies, sleep aids, motion sickness
 SE: Anti-cholinergic effects, Alpha 1 antagonist, sedation
 DDI: CYP3A4 inhibitors

2. 2nd Gen Anti-histamines
 MOA: Bind and activate Histamine 1 receptors – DOES NOT CROSS BBB
Loratidine
Desloratidine
Fexofenidine
Cetirizine
 USE: Allergies

3. H2 Anti-histamines
 MOA: Bind and activate Histamine 2 receptors
Cimetidine – Strong CYP inhibitor, Anti-Androgenic effects, Impotence,
Ranitidine – Thrombocytopenia
Famotidine
 USE: Peptic ulcer, GERD, Reflux

1. Triptans
 MOA: 5-HT_{1B/D} agonists → vasoconstriction, ↓Vasopeptide release
Sumatriptan – Intranasal spray, needle free parenteral, patch, oral
Eletriptan – CYP3A4 substrate
Zolmitriptan – Intranasal spray
Frovatriptan – long T1/2
Lasmiditan – 5-HT_{1F} agonist
 USE: Abortive migraine therapy
 SE: Serotonin syndrome, angina
 CI: CAD, peripheral vascular disease
 DDI: MAOIs, SSRIs

2. Ergots
 MOA: 5-HT and α₁ agonists → vasoconstriction
Ergotamine
Dihydroergotamine – Nasal spray
Methysergide
Ergonovine – post-partum hemorrhage
Lysergic acid – LSD - hallucinations
 USE: Abortive migraine therapy (without aura)
 SE: Myocardial ischemia/infarct, Dementia, hallucinations, Ischemia of limbs/cerebrum, uterine stimulation
 CI: Strong CYP3A4 inhibitors – increased vasoconstriction

3. NSAIDs
 MOA: Inhibit COX enzymes → decreases prostaglandins
Aspirin
Ibuprofen
Naproxen
Diclofenac
 USE: Abortive migraine therapy
 SE: Bleeding, decreased GFR, peptic ulcer, salicylate toxicity
 CI: Children – Reyes syndrome

Abortive