

Class	Mechanism	Indications	Drugs	Side Effects	Cost
Antidopaminergic Therapies	<ul style="list-style-type: none"> Block emetic pathways originating from the GI and CTZ Antidopaminergic (D2) Direct pro-kinetic effect (metoclopramide) 	Opioids, chemotherapy, toxins, or drugs associated nausea and vomiting	<ul style="list-style-type: none"> Prochlorperazine Promethazine Metoclopramide Haloperidol 	<ul style="list-style-type: none"> Extra-pyramidal effects Sedation Hypotension Contraindicated in bowel obstruction 	Low
Serotonin receptor antagonists	Block emetic pathways occurring through vagal stimulation, 5-HT3 receptors in the GI tract, and/or the CTZ	Chemotherapy, toxins (CTZ, GI tract) associated nausea and vomiting	<ul style="list-style-type: none"> Ondansetron Granisetron Dolasetron Tropisetron Palonosetron (second generation) 	<ul style="list-style-type: none"> Constipation Headache 	Moderate
Antihistamines	Uncertain action at the vomiting center	Inner ear pathology, adjuvant to other agents	<ul style="list-style-type: none"> Diphenhydramine Hydroxyzine Meclizine Doxepin 	<ul style="list-style-type: none"> Sedation Constipation Confusion Orthostatic hypotension Dry mouth 	Low
Anxiolytics – Benzodiazepines	Works via the cerebral cortex Pathway	<ul style="list-style-type: none"> Anxiety, PTSD post-chemotherapy Useful as an adjunct 	<ul style="list-style-type: none"> Lorazepam Oxazepam Diazepam 	<ul style="list-style-type: none"> Sedation Confusion Falls and fractures 	Low
Corticosteroids	<ul style="list-style-type: none"> May relieve cancer associated nausea through effects on reducing inflammatory mediators, tumor edema, pressure on GI tract, and reducing intracranial pressure from tumor mass The exact mechanism in nausea and vomiting is unknown 	<ul style="list-style-type: none"> Bone pain Stimulate appetite 	<ul style="list-style-type: none"> Dexamethasone Methylprednisolone Prednisone 	<ul style="list-style-type: none"> Fluid retention Increased blood pressure Mood swings Weight gain Increased risk of infections Thinning bones (osteoporosis) and fractures 	Low

Class	Mechanism	Indications	Drugs	Side Effects	Cost
Cannabinoids	Cannabinoid receptors are widespread in the central nervous system and the mechanism of action is unknown	<ul style="list-style-type: none"> • Nausea unresponsive to conventional treatment • May be used in combination with other antiemetic therapies • Combination antiemetic therapy with dronabinol and prochlorperazine may result in synergistic antiemetic effects and minimize the toxicities 	<ul style="list-style-type: none"> • Dronabinol • Nabilone 	<ul style="list-style-type: none"> • Tachycardia • Low blood pressure • Blood shot eyes • Muscle relaxation • Slowed digestion • Dizziness • Depression • Hallucinations • Paranoia 	Moderate
Medical Marijuana	THC or tetrahydrocannabinols is the psychoactive compound in marijuana. CBD or cannabidiol is another compound in marijuana that is not psychoactive	<ul style="list-style-type: none"> • Three randomly controlled trials involving 43 subjects demonstrated cannabis to be an effective antiemetic 	<ul style="list-style-type: none"> • THC • CBD 	<ul style="list-style-type: none"> • Headaches • Dry mouth and dry eyes • Lightheadedness and dizziness • Drowsiness • Fatigue 	Moderate
Neurokinin-1 receptor (NK-1) antagonists	Prevent both central and peripheral stimulation of vomiting centers	<ul style="list-style-type: none"> • Added to the standard antiemetic regimen (the combination of 5HT3 + steroid) for high dose chemotherapy or highly emetogenic chemotherapy 	<ul style="list-style-type: none"> • Aprepitant • Rolapitant 	<ul style="list-style-type: none"> • Many drug-drug interactions • Anemia • Dizziness • Urinary tract infection • Indigestion • Decreased appetite • Hiccups • Abdominal pain • Headache 	High