ASCO® Guidelines

ANTIEMETICS: ASCO GUIDELINE UPDATE		
Category	**Recommendation**	**Evidence Rating**
Adult Patients		
High-emetic-risk antineoplastic agents	Adults treated with cisplatin and other high-emetic-risk single agents should be offered a four-drug combination of an NK_1 receptor antagonist, a serotonin (5-HT_3) receptor antagonist, dexamethasone, and olanzapine (day 1). Dexamethasone and olanzapine should be continued on days 2 to 4.	Type: evidence based, benefits outweigh harms Evidence quality: high Strength of recommendation: strong
	Adults treated with an anthracycline combined with cyclophosphamide should be offered a four-drug combination of an NK_1 receptor antagonist, a 5-HT_3 receptor antagonist, dexamethasone, and olanzapine (day 1). Olanzapine should be continued on days 2 to 4.	Type: evidence based, benefits outweigh harms Evidence quality: high Strength of recommendation: strong
Moderate-emetic-risk antineoplastic agents	Adults treated with carboplatin area under the curve (AUC) ≥ 4 mg/mL/min should be offered a three-drug combination of an NK_1 receptor antagonist, a 5-HT_3 receptor antagonist, and dexamethasone (day 1).	Type: evidence based; benefits outweigh harms Evidence quality: high Strength of recommendation: strong
	Adults treated with moderate-emetic-risk antineoplastic agents (excluding carboplatin AUC ≥ 4 mg/mL/min) should be offered a two-drug combination of a 5-HT_3 receptor antagonist and dexamethasone (day 1).	Type: evidence based, benefits outweigh harms Evidence quality: high Strength of recommendation: strong
	Adults treated with cyclophosphamide, doxorubicin, oxaliplatin and other moderate-emetic-risk antineoplastic agents known to cause delayed nausea and vomiting may be offered dexamethasone on days 2 to 3.	Type: informal consensus, benefits outweigh harms Evidence quality: low Strength of recommendation: moderate

ANTIEMETICS: ASCO GUIDELINE UPDATE		
Category	**Recommendation**	**Evidence Rating**
Adult Patients		
Low-emetic-risk antineoplastic agents	Adults treated with low-emetic-risk antineoplastic agents should be offered a single dose of a 5-HT_3 receptor antagonist or a single 8-mg dose of dexamethasone before antineoplastic treatment.	Type: informal consensus, benefits outweigh harms Evidence quality: low Strength of recommendation: moderate
Minimal emetic risk antineoplastic agents	Adults treated with minimal emetic risk antineoplastic agents should not be offered routine antiemetic prophylaxis.	Type: informal consensus, benefits outweigh harms Evidence quality: low Strength of recommendation: moderate
Antineoplastic combinations	Adults treated with antineoplastic combinations should be offered antiemetics appropriate for the component antineoplastic agent of greatest emetic risk.	Type: informal consensus, benefits outweigh harms Evidence quality: intermediate Strength of recommendation: moderate
Adjunctive drugs	Lorazepam is a useful adjunct to antiemetic drugs, but is not recommended as a single-agent antiemetic.	Type: informal consensus; benefits outweigh harms Evidence quality: low Strength of recommendation: moderate
Cannabinoids	Evidence remains insufficient for a recommendation regarding medical marijuana for the *prevention* of nausea and vomiting in patients with cancer receiving chemotherapy or radiation therapy. Evidence is also insufficient for a recommendation regarding the use of medical marijuana in place of the tested and US Food and Drug Administration-approved cannabinoids dronabinol and nabilone for the *treatment* of nausea and vomiting caused by chemotherapy or radiation therapy.	
Complementary and alternative therapies	Evidence remains insufficient for a recommendation for or against the use of ginger, acupuncture/acupressure, and other complementary or alternative therapies for the *prevention* of nausea and vomiting in patients with cancer.	

ANTIEMETICS: ASCO GUIDELINE UPDATE		
Category	**Recommendation**	**Evidence Rating**
Adult Patients		
High-dose chemotherapy with stem-cell or bone marrow transplantation	Adults treated with high-dose chemotherapy and stem-cell or bone marrow transplantation should be offered a three-drug combination of an NK_1 receptor antagonist, a 5-HT_3 receptor antagonist, and dexamethasone.	Type: evidence based, benefits outweigh harms Evidence quality: high Strength of recommendation: strong
	(New) A four-drug combination of an NK_1 receptor antagonist, a 5-HT_3 receptor antagonist, dexamethasone, and olanzapine may be offered to adults treated with high-dose chemotherapy and stem-cell or bone marrow transplantation.	Type: evidence based, benefits outweigh harms Evidence quality: low Strength of recommendation: weak
Multi-day antineoplastic therapy	Adults treated with multi-day antineoplastic agents should be offered antiemetics before treatment that are appropriate for the emetic risk of the antineoplastic agent given on each day of the antineoplastic treatment and for 2 days after completion of the antineoplastic regimen.	Type: evidence based, benefits outweigh harms Evidence quality: intermediate Strength of recommendation: moderate
	Adults treated with 4- or 5-day cisplatin regimens should be offered a three-drug combination of an NK_1 receptor antagonist, a 5-HT_3 receptor antagonist, and dexamethasone.	Type: evidence based, benefits outweigh harms Evidence quality: high Strength of recommendation: strong
Breakthrough nausea and vomiting	For patients with breakthrough nausea or vomiting, clinicians should re-evaluate emetic risk, disease status, concurrent illnesses, and medications; and ascertain that the best regimen is being administered for the emetic risk.	Type: informal consensus, benefits outweigh harms Evidence quality: low Strength of recommendation: moderate
	Adults who experience nausea or vomiting despite optimal prophylaxis, and who did not receive olanzapine prophylactically, should be offered olanzapine in addition to continuing the standard antiemetic regimen.	Type: evidence based; benefits outweigh harms Evidence quality: intermediate Strength of recommendation: moderate

ANTIEMETICS: ASCO GUIDELINE UPDATE		
Category	**Recommendation**	**Evidence Rating**
Adult Patients		
	Adults who experience nausea or vomiting despite optimal prophylaxis, and who have already received olanzapine, may be offered a drug of a different class (e.g. an NK_1 receptor antagonist, lorazepam or alprazolam, a dopamine receptor antagonist, dronabinol, or nabilone) in addition to continuing the standard antiemetic regimen.	Type: informal consensus; benefits outweigh harms Evidence quality: intermediate for dronabinol and nabilone, low otherwise Strength of recommendation: moderate
Anticipatory nausea and vomiting	All patients should receive the most active antiemetic regimen appropriate for the antineoplastic agents being administered. Clinicians should use such regimens with initial antineoplastic treatment, rather than assessing the patient's emetic response with less effective antiemetic treatment. If a patient experiences anticipatory emesis, clinicians may offer behavioral therapy with systematic desensitization.	Type: informal consensus, benefits outweigh harms Evidence quality: low Strength of recommendation: moderate
High emetic risk radiation therapy	Adults treated with high-emetic-risk radiation therapy should be offered a two-drug combination of a 5-HT_3 receptor antagonist and dexamethasone before each fraction and on the day after each fraction, if radiation therapy is not planned for that day.	Type: evidence based, benefits outweigh harms Evidence quality: high Strength of recommendation: strong
Moderate emetic risk radiation therapy	Adults treated with moderate-emetic-risk radiation therapy should be offered a 5-HT_3 receptor antagonist before each fraction, with or without dexamethasone before the first five fractions.	Type: evidence based, benefits outweigh harms Evidence quality: high Strength of recommendation: moderate
Low emetic risk radiation therapy	Adults treated with radiation therapy to the brain should be offered breakthrough dexamethasone therapy. Patients who are treated with radiation therapy to the head and neck, thorax, or pelvis should be offered breakthrough therapy with a 5-HT_3 receptor antagonist, dexamethasone, or a dopamine receptor antagonist.	Type: informal consensus, benefits outweigh harms Evidence quality: low Strength of recommendation: weak
Minimal emetic risk radiation therapy	Adults treated with minimal emetic risk radiation therapy should be offered breakthrough therapy with a 5-HT_3 receptor antagonist, dexamethasone, or a dopamine receptor antagonist.	Type: informal consensus, benefits outweigh harms Evidence quality: low Strength of recommendation: weak

ANTIEMETICS: ASCO GUIDELINE UPDATE		
Category	**Recommendation**	**Evidence Rating**
Adult Patients		
Concurrent radiation and antineoplastic agent therapy	Adults treated with concurrent radiation and antineoplastic agents should receive antiemetic therapy appropriate for the emetic risk level of the antineoplastic agents, unless the risk level of the radiation therapy is higher. During periods when prophylactic antiemetic therapy for the antineoplastic agents has ended, and ongoing radiation therapy would normally be managed with its own prophylactic therapy, patients should receive prophylactic therapy appropriate for the emetic risk of the radiation therapy until the next period of antineoplastic therapy, rather than receiving breakthrough therapy for the antineoplastic agents as needed.	Type: informal consensus, benefits outweigh harms Evidence quality: intermediate Strength of recommendation: moderate
Pediatric Patients		
High emetic risk antineoplastic agents	(Updated) Pediatric patients treated with high-emetic-risk antineoplastic agents should be offered a three-drug combination of a 5-HT_3 receptor antagonist, dexamethasone, and aprepitant or fosaprepitant.	Type: evidence based, benefits outweigh harms Evidence quality: intermediate Strength of recommendation: strong
	(Updated) Pediatric patients treated with high-emetic-risk antineoplastic agents who are unable to receive aprepitant or fosaprepitant should be offered a two-drug combination of a 5-HT_3 receptor antagonist and dexamethasone.	Type: evidence based, benefits outweigh harms Evidence quality: intermediate Strength of recommendation: strong
	(Updated) Pediatric patients treated with high-emetic-risk antineoplastic agents who are unable to receive dexamethasone should be offered a two-drug combination of palonosetron and aprepitant or fosaprepitant.	Type: evidence based, benefits outweigh harms Evidence quality: intermediate Strength of recommendation: strong
Moderate emetic risk antineoplastic agents	Pediatric patients treated with moderate-emetic-risk antineoplastic agents should be offered a two-drug combination of a 5-HT_3 receptor antagonist and dexamethasone.	Type: evidence based, benefits outweigh harms Evidence quality: intermediate Strength of recommendation: strong

ANTIEMETICS: ASCO GUIDELINE UPDATE		
Category	**Recommendation**	**Evidence Rating**
Pediatric Patients		
	(Updated) Pediatric patients treated with moderate-emetic-risk antineoplastic agents who are unable to receive dexamethasone should be offered a two-drug combination of a 5-HT_3 receptor antagonist and aprepitant or fosaprepitant.	Type: evidence based, benefits outweigh harms Evidence quality: intermediate Strength of recommendation: weak
Low emetic risk antineoplastic agents	Pediatric patients treated with low-emetic-risk antineoplastic agents should be offered ondansetron or granisetron.	Type: evidence based, benefits outweigh harms Evidence quality: low Strength of recommendation: strong
Minimal emetic risk antineoplastic agents	Pediatric patients treated with minimal emetic risk antineoplastic agents should not be offered routine antiemetic prophylaxis.	Type: evidence based, benefits outweigh harms Evidence quality: low Strength of recommendation: strong