

INTRAVENOUS/INJECTABLE AGENTS

HIGH RISK (>90% frequency)[†]

AC combination: any regimen containing anthracycline + cyclophosphamide
 Carboplatin AUC ≥4
 Carmustine (**BiCNU**) >250mg/m²
 Cisplatin
 Cyclophosphamide >1,500mg/m²
 Dacarbazine

Doxorubicin ≥60mg/m²
 Epirubicin (**Elice**) >90mg/m²
 Ifosfamide (**Ifex**) ≥2g/m² per dose
 Mechlorethamine
 Melphalan (**Evomela**) ≥140mg/m²
 Sacituzumab govitecan-hziy (**Trodelvy**)
 Streptozocin (**Zanosar**)

MODERATE RISK (>30–90% frequency)[†]

Aldesleukin (**Proleukin**) >12–15 million IU/m²
 Amifostine (**Ethylol**) >300mg/m²
 Amivantamab-vmjw (**Rybrevant**)
 Azacitidine (**Vidaza**)
 Bendamustine (**Treanda**)
 Busulfan (**Busulfex**)
 Carboplatin AUC <4*
 Carmustine (**BiCNU**) ≤250mg/m²*
 Clofarabine (**Clolar**)
 Cyclophosphamide ≤1,500mg/m²
 Cytarabine >200mg/m²
 Dactinomycin (**Cosmegen**)*
 Daunorubicin (**Cerubidine**)*
 Dual-drug liposomal cytarabine + daunorubicin (**Vyxeos**)
 Dinutuximab (**Unituxin**)

Doxorubicin <60mg/m²*
 Epirubicin (**Elice**) ≤90mg/m²*
 Fam-trastuzumab deruxtecan-nxki (**Enhertu**)
 Idarubicin (**Idamycin PFS**)
 Ifosfamide (**Ifex**) <2g/m² per dose*
 Irinotecan (**Camptosar**)*
 Irinotecan liposomal (**Onivyde**)
 Lurbinectedin (**Zepzelca**)
 Melphalan (**Evomela**) <140mg/m²
 Methotrexate ≥250 mg/m²*
 Naxitamab-gqgk (**Danyelza**)
 Oxaliplatin (**Eloxatin**)*
 Romidepsin (**Istodax**)
 Temozolomide (**Temodar**)
 Trabectedin (**Yondelis**)*

LOW RISK (10–30% frequency)[†]

Ado-trastuzumab emtansine (**Kadcyla**)
 Aldesleukin (**Proleukin**) ≤12 million IU/m²
 Amifostine (**Ethylol**) ≤300mg/m²
 Arsenic trioxide (**Trisenox**)
 Axicabtagene ciloleuce (**Yescarta**)
 Belinostat (**Beleodaq**)
 Brentuximab vedotin (**Adcetris**)
 Brexucabtagene autoleuce (**Tecartus**)
 Cabazitaxel (**Jevtana**)
 Carfilzomib (**Kyprolis**)
 Copanlisib (**Aliqopa**)
 Cytarabine (low dose) 100–200mg/m²
 Docetaxel (**Taxotere**)
 Doxorubicin liposomal (**Doxil**)
 Enfortumab vedotin-ejfv (**Padcev**)
 Eribulin (**Halaven**)
 Etoposide (**Etopophos**)
 Floxuridine
 Fluorouracil (**5-FU**)
 Gemcitabine (**Gemzar**)
 Gemtuzumab ozogamicin
 Idcabtagene vicleuce (**Abecma**)
 Inotuzumab ozogamicin (**Besponsa**)
 Isatuximab-irfc (**Sarclisa**)
 Ixabepilone (**Ixempra**)

Lisocabtagene maraleuce (**Breyanzi**)
 Loncastuximab tesirine-lpyl (**Zynlonta**)
 Methotrexate >50mg/m²–<250mg/m²
 Mitomycin
 Mitomycin pyelocalyceal solution (**Jelmyto**)
 Mitoxantrone
 Mogamulizumab-kpkc (**Poteligeo**)
 Moxetumomab pasudotox-tdfk (**Lumoxiti**)
 Necitumumab (**Portrazza**)
 Omacetaxine (**Synribo**)
 Paclitaxel (**Taxol**)
 Paclitaxel-albumin (**Abraxane**)
 Pemetrexed (**Alimta**)
 Pentostatin
 Polatuzumab vedotin-piig (**Polivy**)
 Pralatrexate (**Folotyn**)
 Tafasitamab-cxix (**Monjuvi**)
 Tagraxofusp-erzs (**Elzonris**)
 Talimogene laherparepvec (**Imlygic**)
 Thiotepa (**Tepadina**)
 Tisagenlecleuce (**Kymriah**)
 Tisotumab vedotin-tftv (**Tivdak**)
 Topotecan (**Hycamtin**)
 Ziv-aflibercept (**Zaltrap**)

MINIMAL RISK (<10% frequency)[†]

Alemtuzumab (**Campath**)
 Atezolizumab (**Tecentriq**)
 Avelumab (**Bavencio**)
 Asparaginase (**Erwinaze, Rylaze**)
 Belantamab mafodotin-blmf (**Blenrep**)
 Bevacizumab (**Avastin**)
 Bleomycin
 Blinatumomab (**Blincyto**)
 Bortezomib (**Velcade**)
 Cemiplimab-rwlc (**Libtayo**)
 Cetuximab (**Erbixut**)
 Cladribine
 Cytarabine <100mg/m²
 Daratumumab (**Darzalex**)
 Daratumumab + hyaluronidase-fihj (**Darzalex Faspro**)
 Decitabine (**Dacogen**)
 Denileukin diftitox (**Ontak**)
 Dexrazoxane (**Totect, ZinCARD**)
 Dostarlimab-gxly (**Jemperli**)
 Durvalumab (**Imfinzi**)
 Elotuzumab (**Empliciti**)
 Fludarabine
 Ipilimumab (**Yervoy**)

Luspatercept-aamt (**Reblozyl**)
 Margetuximab-cmkb (**Margenza**)
 Methotrexate ≤50mg/m²
 Nelarabine (**Arranon**)
 Nivolumab (**Opdivo**)
 Obinutuzumab (**Gazyva**)
 Ofatumumab (**Arzerra**)
 Panitumumab (**Vectibix**)
 Pembrolizumab (**Keytruda**)
 Pertuzumab (**Perjeta**)
 Pertuzumab/trastuzumab + hyaluronidase-zzxf (**Phesgo**)
 Ramucirumab (**Cyramza**)
 Rituximab (**Rituxan**)
 Rituximab + hyaluronidase (**Rituxan Hycela**)
 Siltuximab (**Sylvant**)
 Temsirolimus (**Torisel**)
 Trastuzumab (**Herceptin**)
 Trastuzumab + hyaluronidase-oysk (**Herceptin Hylecta**)
 Valrubicin (**Valstar**)
 Vinblastine
 Vincristine
 Vincristine liposomal (**Marqibo**)
 Vinorelbine (**Navelbine**)

ORAL AGENTS

MODERATE TO HIGH RISK (≥30% frequency)[†]

Altretonine (Hexalen)	Etoposide
Avapritinib (Ayvakit)	Fedratinib (Inrebic)
Azacitidine (Onureg)	Imatinib (Gleevec) >400mg/day
Binimetinib (Mektovi)	Lenvatinib (Lenvima) >12mg/day
Bosutinib (Bosulif) >400mg/day	lomustine single day (Gleostine)
Busulfan (Myleran) ≥4mg/day	Midostaurin (Rydapt)
Cabozantinib (Cabometyx, Cometriq)	Mitotane (Lysodren)
Ceritinib (Zykadia)	Mobocertinib (Exkivity)
Crizotinib (Xalkori)	Niraparib (Zejula)
Cyclophosphamide ≥100mg/m ² /day	Olaparib (Lynparza)
Dabrafenib (Tafinlar)	Procarbazine (Matulane)
Enasidenib (Idhifa)	Rucaparib (Rubraca)
Encorafenib (Braftovi)	Selinexor (Xpovio)
Estramustine (Emcyt)	Temozolomide (Temodar) >75mg/m ² /day

MINIMAL TO LOW RISK (<30% frequency)[†]

Abemaciclib (Verzenio)	Melphalan (Alkeran)
Acalabrutinib (Calquence)	Mercaptopurine
Afatinib (Gilotrif)	Methotrexate
Alectinib (Alecensa)	Neratinib (Nerlynx)
Alpelisib (Piqray, Vijoice)	Nilotinib (Tasigna)
Asciminib (Scemblix)	Osimertinib (Tagrisso)
Axitinib (Inlyta)	Palbociclib (Ibrance)
Belzutifan (Welireg)	Pazopanib (Votrient)
Bexarotene (Targretin)	Pemigatinib (Pemazyre)
Brigatinib (Alunbrig)	Pexidartinib (Turalio)
Bosutinib (Bosulif) ≤400mg/day	Pomalidomide (Pomalyst)
Busulfan (Myleran) <4mg/day	Ponatinib (Iclusig)
Capecitabine (Xeloda)	Pralsetinib (Gavreto)
Capmatinib (Tabrecta)	Regorafenib (Stivarga)
Chlorambucil (Leukeran)	Ribociclib (Kisqali)
Cobimetinib (Cotellic)	Ripretinib (Qinlock)
Cyclophosphamide <100mg/m ² /day	Ruxolitinib (Jakafi)
Dacomitinib (Vizimpro)	Selpercatinib (Retevmo)
Dasatinib (Sprycel)	Sonidegib (Odomzo)
Decitabine/cedazuridine (Inqovi)	Sorafenib (Nexavar)
Duvelisib (Copiktra)	Sotorasib (Lumakras)
Entrectinib (Rozlytrek)	Sunitinib (Sutent)
Erdafitinib (Balversa)	Talazoparib tosylate (Talzenna)
Erlotinib (Tarceva)	Tazemetostat (Tazverik)
Everolimus (Afinitor)	Temozolomide (Temodar) ≤75mg/m ² /day
Fludarabine	Tepotinib (Tepmetko)
Gefitinib (Iressa)	Thalidomide (Thalomid)
Gilteritinib (Xospata)	Thioguanine
Glasdegib (Daurismo)	Tivozanib (Fotivda)
Hydroxyurea (Hydrea)	Topotecan (Hycamtin)
Ibrutinib (Imbruvica)	Trametinib (Mekinist)
Idelalisib (Zydelig)	Tretinoin
Imatinib (Gleevec) ≤400mg/day	Trifluridine/tipiracil (Lonsurf)
Infigratinib (Truseltiq)	Tucatinib (Tukysa)
Ivosidenib (Tibsovo)	Vandetanib (Caprelsa)
Ixazomib (Ninlaro)	Vemurafenib (Zelboraf)
Lapatinib (Tykerb)	Venetoclax (Venclexta)
Larotrectinib (Vitrakvi)	Vismodegib (Erivedge)
Lenalidomide (Revlimid)	Vorinostat (Zolinza)
Lenvatinib (Lenvima) ≤12mg/day	Zanubrutinib (Brukinsa)
Lorlatinib (Lorbrena)	

NOTES

[†] Frequency of emesis in the absence of effective antiemetic prophylaxis.

* May be highly emetogenic in certain patients.

REFERENCES

National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Antiemesis. Version 2.2022—March 23, 2022. https://www.nccn.org/professionals/physician_gls/pdf/antiemesis.pdf. Accessed May 23, 2022.