

EMETOGIC POTENTIAL OF ANTINEOPLASTIC AGENTS

High Risk (>90% frequency without antiemetics)

<ul style="list-style-type: none"> • AC combination: Doxorubicin or Epirubicin (Ellence) + Cyclophosphamide (Cytoxan) <i>IV</i> • Altretamine (HMM, Hexalen) <i>oral</i> • Carmustine (BCNU, BiCNU) <i>IV</i>: >250mg/m² • Cisplatin (CDDP) <i>IV</i> • Cyclophosphamide (CTX, Cytoxan) <i>IV</i>: >1,500mg/m² • Dacarbazine (DTIC, DTIC-Dome) <i>IV</i> 	<ul style="list-style-type: none"> • Doxorubicin <i>IV</i>: >60mg/m² • Epirubicin (Ellence) <i>IV</i>: >90mg/m² • Ifosfamide (Ifex) <i>IV</i>: ≥2g/m² per dose • Mechlorethamine (Mustargen) <i>IV</i> • Procarbazine (Matulane) <i>oral</i> • Streptozocin (Zanosar) <i>IV</i>
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Moderate Risk (30–90% frequency without antiemetics)

<ul style="list-style-type: none"> • Aldesleukin (IL-2, Proleukin) <i>IV</i>: >12–15 million IU/m² • Amifostine (Ethyol) <i>IV</i>: >300mg/m² • Arsenic trioxide (As₂O₃, Trisenox) <i>IV</i> • Azacitidine (Vidaza) <i>IV</i> • Bendamustine (Treanda) <i>IV</i> • Busulfan (Busulfex) <i>IV</i>; <i>oral</i>: >4mg/day • Carboplatin <i>IV</i> • Carmustine (BCNU, BiCNU) <i>IV</i>: ≤250mg/m² • Clofarabine (Clolar) <i>IV</i> • Cyclophosphamide (CTX, Cytoxan) <i>IV</i>: ≤1,500mg/m² • Cyclophosphamide (CTX) <i>oral</i> ≥100mg/m²/day • Cytarabine (ARA-C) <i>IV</i>: >200mg/m² • Dactinomycin (Cosmegen) <i>IV</i> • Daunorubicin (Cerubidine) <i>IV</i> 	<ul style="list-style-type: none"> • Doxorubicin <i>IV</i>: ≤60mg/m² • Epirubicin (Ellence) <i>IV</i>: ≤90mg/m² • Estramustine (Emcyt) <i>oral</i> • Etoposide (VP-16) <i>oral</i> • Idarubicin (Idamycin) <i>IV</i> • Ifosfamide (Ifex) <i>IV</i>: <2g/m² • Interferon alpha (IFN-alfa, Intron A) <i>IV</i>: ≥10 million IU/m² • Irinotecan (CPT-11, Camptosar) <i>IV</i> • Lumustine (CCNU, CeeNU) <i>oral</i> • Melphalan (L-PAM, Alkeran) <i>IV</i> • Methotrexate (MTX) <i>IV</i>: ≥250mg/m² • Oxaliplatin (Eloxatin) <i>IV</i> • Temozolomide (Temodar) <i>IV</i>; <i>oral</i> >75mg/m²/day
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Low Risk (10–30% frequency without antiemetics)

<ul style="list-style-type: none"> • Aldesleukin (IL-2, Proleukin) <i>IV</i>: ≤12 million IU/m² • Amifostine (Ethyol) <i>IV</i>: ≤300mg • Bexarotene (Targretin) <i>oral</i> • Cabazitaxel (Jevtana) <i>IV</i> • Capecitabine (Xeloda) <i>oral</i> • Cyclophosphamide (CTX) <i>oral</i> <100mg/m²/day • Cytarabine (ARA-C) <i>IV</i>: 100–200mg/m² • Docetaxel (Taxotere) <i>IV</i> • Doxorubicin liposomal (Doxil) <i>IV</i> • Eribulin (Halaven) <i>IV</i> • Etoposide (VP-16, Etopophos) <i>IV</i> • Fluorouracil (5-FU) <i>IV</i> 	<ul style="list-style-type: none"> • Gemcitabine (Gemzar) <i>IV</i> • Interferon alpha (IFN-alfa, Intron A) <i>IV</i>: >5–<10 million IU/m² • Ixabepilone (Ixempra) <i>IV</i> • Methotrexate (MTX) <i>IV</i>: >50mg/m² to <250mg/m² • Mitomycin (MTC) <i>IV</i> • Mitoxantrone (DHAD) <i>IV</i> • Paclitaxel (Taxol) <i>IV</i> • Paclitaxel albumin (Abraxane) <i>IV</i> • Pemetrexed (Alimta) <i>IV</i> • Pentostatin <i>IV</i> • Pralatrexate (Folotyn) <i>IV</i> • Romidepsin (Istodax) <i>IV</i> • Thiotepa <i>IV</i> • Topotecan (Hycamtin) <i>IV</i>, <i>oral</i>
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Minimal Risk (<10% frequency without antiemetics)

<ul style="list-style-type: none"> • Alemtuzumab (Campath) <i>IV</i> • Bevacizumab (Avastin) <i>IV</i> • Bleomycin <i>IV</i> • Bortezomib (Velcade) <i>IV</i> • Busulfan (Busulfex) <i>oral</i>: <4mg/day • Cetuximab (Erbix) <i>IV</i> • Chlorambucil (Leukeran) <i>oral</i> • Cladribine (2-CdA) <i>IV</i> • Cytarabine (ARA-C) <i>IV</i>: <100mg/m² • Dasatinib (Sprycel) <i>oral</i> • Decitabine (Dacogen) <i>IV</i> • Denileukin difitox (Ontak) <i>IV</i> • Dexrazoxane (Totect, Zinecard) <i>IV</i> • Erlotinib (Tarceva) <i>oral</i> • Everolimus (Afinitor, Zortress) <i>oral</i> • Fludarabine (Fludara) <i>IV</i> • Hydroxyurea (Hydrea) <i>oral</i> • Imatinib (Gleevec) <i>oral</i> • Interferon alpha (IFN-alfa, Intron A) <i>IV</i>: ≤5 million IU/m² • Ipilimumab (Yervoy) <i>IV</i> • Lapatinib (Tykerb) <i>oral</i> • Lenalidomide (Revlimid) <i>oral</i> • Melphalan (L-PAM, Alkeran) <i>oral</i> • Mercaptopurine (purinethol) <i>oral</i> 	<ul style="list-style-type: none"> • Methotrexate (MTX) <i>IV</i>: ≤50mg/m²; <i>oral</i> • Nelarabine (Arranon) <i>IV</i> • Nilotinib (Tasigna) <i>oral</i> • Ofatumumab (Arzerra) <i>IV</i> • Panitumumab (Vectibix) <i>IV</i> • Pazopanib (Votrient) <i>oral</i> • Pegaspargase (Oncaspar) <i>IV</i> • Peginterferon <i>IV</i> • Rituximab (Rituxan) <i>IV</i> • Sorafenib (Nexavar) <i>oral</i> • Sunitinib (Sutent) <i>oral</i> • Temsirolimus (Torisel) <i>IV</i> • Temozolamide (Temodar) <i>oral</i>: ≤75mg/m²/day • Thalidomide (Thalomid) <i>oral</i> • Thioguanine (6-TG, Tabloid) <i>oral</i> • Trastuzumab (Herceptin) <i>IV</i> • Tretinoin (Vesanoide) <i>oral</i> • Valrubicin (Valstar) <i>IV</i> • Vandetanib (Caprelsa) <i>oral</i> • Vinblastine (VLB) <i>IV</i> • Vincristine (VCR) <i>IV</i> • Vinorelbine (Navelbine) <i>IV</i> • Vorinostat (Zolinza) <i>oral</i>
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NOTES

Daily use of antiemetics is not recommended based on clinical experience.

REFERENCES

Adapted from:

1. Kris MG, Hesketh PJ, Somerfield MR, et al. American Society of Clinical Oncology Guideline for Antiemetics in Oncology: Update 2006. *J Clin Oncol* 2006;24:2932-2947.
2. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology; v.1.2012: Antiemesis.

Available at: http://www.nccn.org/professionals/physician_gls/PDF/antiemesis.pdf. Accessed August 8, 2012.

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