

CHEMOTHERAPY DRUG SEQUENCING GUIDE (Evidenced Based*)

First Drug Administered	Second Drug Administered	Effect if Drug Administration Is Reversed
Gemcitabine	Cisplatin	Increased toxicity
Oxaliplatin	Carboplatin	
Doxorubicin	Docetaxel	
Liposomal doxorubicin	Docetaxel	
Cyclophosphamide	Paclitaxel	
Etoposide	Topotecan	
Gemcitabine	5-fluorouracil	
Paclitaxel	Cisplatin	Increased toxicity and pharmacokinetic differences of unknown significance.
Topotecan	Cisplatin	
Ifosfamide	Docetaxel	
Docetaxel	Vinorelbine	
Doxorubicin	Paclitaxel	
Epirubicin	Paclitaxel	
Irinotecan	5-fluorouracil	
Gemcitabine	5-fluorouracil	
Doxorubicin	Vinorelbine	

None of the regimens showed a difference in efficacy based on chemotherapy administration sequencing. Based on this information, our own institutional guidelines for drug sequencing are as follows.

1. Vesicants are administered first with no difference given for peripheral versus central line administration.
2. Follow the order given by the physician. If the regimen includes a vesicant, then follow #1 and give the remaining drugs in the order written.
3. Oncology clinical pharmacists review the orders and make recommendations to the physician based on the above abstract information.

Reference

Stanford, B.L., Zondor, S.D., & Jumper, C.A. (2005). Chemotherapy administration sequences—Review of the literature and administration recommendations [Abstract]. *Journal of Clinical Oncology*, 23(16S), Abstract 6121.

Derived from: Volume 19, Issue 1, January 2008



Chemotherapy
special interest group newsletter