

NCCN Chemotherapy Order Templates (NCCN Templates®) Appendix F

Appendix F: Chemotherapy Administration Sequence

The NCCN Templates® designate a specific recommended order of administration when there has been conclusive evidence to support a suggested chemotherapy sequence based on improved efficacy, decreased toxicity, or established clinical practice.

Regimens with a recommended order of administration are designated with the phrase “followed by.”

For example:

PACLitaxel 175 mg/m² IV over 3 hours on Day 1 followed by

CARBOplatin AUC 5 IV over 30 minutes on Day 1

The order of administration of agents within chemotherapy regimens is complex, and for most regimens, evidence is lacking. In practice, a number of safety and logistical considerations are considered for medication sequences, including:

- Patient-specific considerations
 - Tolerance
 - Assessment for labs or toxicities prior to administration
 - Type of intravenous access
- Drug-specific properties
 - Vesicants
 - Duration of infusion
 - Timing of supportive medications
 - Theoretical or established benefits (increased efficacy/decreased toxicity)
 - Preparation and reconstitution time
 - Compatibility of multiple agents
 - Risk of infusion reactions
 - Investigational agents (requirements of clinical trial)

A single resource does not exist for sequence of administration of chemotherapy agents. One review article providing an overview of this topic is Mancini R, et al. Chemotherapy Administration Sequence: A Review of the Literature and Creation of a Sequencing Chart. *J Hematol Oncol Pharm.* 2011;1(1):17-23.

Newly approved agents not included in the above reference will be reviewed on a template-by-template basis to assess the need for specific instructions regarding order of administration.