

## 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.

The order in which agents are listed within the Template Title does not dictate order of administration.

Regimens with a recommended order of administration are designated with the phrase “followed by” between agent entries in the Chemotherapy Regimen section of the Template.

For example:

**PACLitaxel** 175 mg/m<sup>2</sup> 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.