

NURSING SERVICE GUIDELINES GENERAL

Guideline: Administration of Antineoplastic Chemotherapy and Biotherapy Agents with a Known Potential for Hypersensitivity Reactions



Effective Date: 5/1/2026

Policy Number Superseded: 3364-110-05-07

Initial Effective Date: 9/1984

Responsibility: Chief Nursing Officer

Purpose of Guidelines: To provide guidelines for the safe administration of antineoplastic chemotherapeutic medications and biotherapy agents, including those agents with a known potential for hypersensitivity.

Registered Nurses (RN's) who are Oncology Nursing Society (ONS) chemotherapy providers and who have completed a clinical practicum may administer antineoplastic chemotherapeutic medications and biotherapy agents in accordance with this established policy

Procedure:

(A) RN's may administer antineoplastic chemotherapy and biotherapy agents under a physician's order via oral, subcutaneous, intramuscular, intraperitoneal, intravesical (bladder) and intravenous routes. Refer to Practice Guidelines Section F-Oncological Nursing. Intrathecal via Ommaya Reservoir route must be administered by attending or fellow with attending supervision.

If a patient is admitted to a floor other than 4th floor/2A Infusion room/Dana Cancer Center and has an oral, subcutaneous, intramuscular, intraperitoneal, intrathecal, or intravenous route chemotherapy ordered other than oral methotrexate, megestrol (Megace), and hormonal therapies (i.e., tamoxifen, aromatase inhibitors):

1. Verify patients have an oncology consult ordered (pharmacy can order).
2. Call lead nurse on 4th floor to set up chemotherapy administration by a qualified RN; and
3. If chemotherapy is given by any route, ensure a yellow precaution sign is posted outside of the patient's door for 48 hours after last dose is given.

(B) Antineoplastic agents administered intravenously may be administered via central venous access devices or peripheral lines. The method of administration may be via IV push, IV sidearm, IV piggyback, or IV continuous infusion. The preferred method of administration varies according to the agent and regimen.

Guideline:

- (C) All antineoplastic chemotherapy and biotherapy orders, oral or parenteral, must be written by the qualified attending physician. All antineoplastic chemotherapy and biotherapy orders written for an oncology indication must be written by an oncology attending physician or oncology fellow. Verbal orders for antineoplastic chemotherapy and biotherapy are not acceptable, except to hold or stop chemotherapy administration.
- (D) All antineoplastic chemotherapy and biotherapy must be prepared and dispensed by the Pharmacy Department.
- (E) All established safety measures and protocols should be followed in both the administration of chemotherapy and biotherapy and the disposal of any equipment or materials used. Refer to Mosby's Nursing Skills.
- (F) All research and experimental antineoplastic chemotherapy and biotherapy should be given by a physician or RN who has received specific education regarding the medication. A physician and qualified nurse must be immediately accessible during administration of the drug.
- (G) When administering the initial dose of antineoplastic chemotherapy or biotherapy, which the patient has not previously received, a physician must be immediately accessible to intervene in case of an untoward reaction.
- (H) Drugs with a potential for allergic response should be administered by an RN who is qualified to administer IV Chemotherapy (see Guideline: Qualifications for oncology nurses providing direct patient care and to administer Antineoplastic chemotherapy). Adequate personnel and equipment to ensure optimal patient management, in the event of an anaphylactic/hypersensitivity reaction, is necessary.
- (I) Drugs known with a potential for anaphylaxis or hypersensitivity should preferably be initiated on the day shift or early 3pm-11pm shift.. If chemotherapy orders are written on other shifts, the attending physician must approve delay in administration of the antineoplastic chemotherapy medication before administration is held.
- (J) An allergy history should be documented in the patient's medical record before the administration of the initial dose.
- (K) Emergency drugs and equipment will be readily available for immediate intervention.

References:

Neuss, M. N., Gilmore, T. R., Belderson, K. M., Billett, K. L., Conti-Kalchik, T., Harvey, B. E., ...& Polovich, M. (2017). 2016 updated American Society of Clinical Oncology/Oncology Nursing Society chemotherapy administration safety standards, including standards for pediatric oncology. *Oncology Nursing Forum*, 44(1), 31-43. <http://doi.org/10.1188/17.ONF.31-43>.

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Oncology Nursing Society Position: Education of the RN who administers and cares for the individual receiving chemotherapy, targeted therapy, and immunotherapy. (Rev. 10/17). Pittsburgh, PA: Oncology Nursing Society.

Olsen, M. M., LeFebvre, K. B., & Brassil, K. J. (Eds) (2019). *Chemotherapy and Immunotherapy Guidelines and Recommendations for Practice*. Pittsburgh, PA: Oncology Nursing Society.

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