University Health	POLICY#: 3.2
SUBJECT: High Risk – Antineoplastic/Cytotoxic Agents	Effective: 10/01/13
APPROVED BY: Pharmacy and Therapeutics Committee	Page 1 of 2

<u>Purpose</u>: To identify antineoplastic agents as high alert medications and provide guidelines for the prescribing and administration of these medications in patients with hematologic or solid organ malignancies, or other autoimmune disorders.

Definitions:

- 1. Antineoplastic/Cytotoxic agents: are drugs that inhibit or prevent the growth, development, maturations, or spread of malignant cells.
- Vesicant: An agent that has the potential to cause blistering, severe tissue injury, or tissue necrosis when extravasated.
- 3. Irritant: An agent that causes aching, tightness, and phlebitis with or without inflammation, but does not cause tissue necrosis.
- 4. Extravasation: Unintentional leakage (or instillation) of fluid out of a blood vessel into surrounding tissue.

Prescribing:

- 1. Appropriate indications for use included:
 - a. Hematologic malignancies
 - b. Solid organ malignancies
 - c. Autoimmune disorders such as rheumatoid arthritis, or nephrotic syndrome.
- 2. Current height and weight must be obtained.
- 3. All antineoplastic/cytotoxic agent must be ordered by or co-signed by an attending (faculty) physician in the departments of hematology/oncology, Rheumatology or Nephrology.
- 4. Verbal orders for initial antineoplastic/cytotoxic chemotherapy will not be accepted.
- 5. A verbal order can be taken for clarification of an existing antineoplastic/cytotoxic agent order.
- 6. Physician orders must include all of the following to be processed:
 - a. Antineoplastic/Cytotoxic agent
 - b. Dose of the agent in units (i.e. mg/m², mg/kg)
 - c. Total dose of medication
 - d. Route of administration
 - e. Rate of administration
 - f. Frequency of administration
 - g. Order of administration if multiple medications are ordered
 - h. Total course of therapy (i.e. duration of therapy)

Dispensing:

- 1. Pharmacy will verify the appropriateness and dosing of all antineoplastic/cytotoxic agents.
- 2. Medications intended for INTRATHECAL administration will be packaged in a separate bag that does not contain any other medications.
- 3. Pharmacy will complete independent calculations as a pharmacy "double check"
 - a. A second pharmacist will verify the dosing and document this check in the electronic health record
- 4. A dual preparation check will be conducted by pharmacy personnel prior to dispensing. This check will be documented by each person's initials on the product label. The first initials shall be the pharmacy technician/pharmacist preparing the product. The second verification final check shall be performed by a pharmacist
- 5. Pharmacy will ensure that all drugs are dispensed in appropriate concentrations and appropriate containers.

Administration:

- 1. Antineoplastic/Cytotoxic agents should not be transported through the pneumatic tube system.
- 2. Antineoplastic/Cytotoxic agents can only be administered by registered nurses that have completed the appropriate antineoplastic/cytotoxic agent administration competency.

- 3. Antineoplastic/Cytotoxic agents must undergo a "double check" procedure per nursing protocol/policy prior to administration to the patient.
- 4. Nursing will verify all pump settings to ensure proper administration

<u>Specific Monitoring Parameters</u>: The patient should be monitored as written in the guidelines issued by the Oncology Nurses Society (ONS). Guidelines are available to nursing staff in areas where antineoplastic/cytotoxic medications are administered.

- 1. Infusion reactions should be monitored with antineoplastic/cytotoxic agents such as the monoclonal antibodies and taxanes.
- 2. All vesicants and irritants should be monitored for extravasations and infusion site irritation.

Safety Strategies in Place:

- 1. Nurses perform a double check on all antineoplastic/cytotoxic agents prior to administration to the patient.
- 2. Extravasation Protocol is readily available for pharmacy and physician/nursing staff in areas where vinca alkaloids are administered.