

	POLICY#: 2.5
SUBJECT: High Risk – Vinca Alkaloids	Effective: 10/01/13
APPROVED BY: Pharmacy and Therapeutics Committee	Page 1 of 1

Purpose: To identify the vinca alkaloids as high alert medications and provide guidelines for the prescribing and administration of these medications in patients with hematologic or solid organ malignancies.

Definitions:

1. Vinca alkaloids: are drugs which bind to tubulin and inhibits microtubule formation, therefore, arresting the cell at metaphase by disrupting the formation of the mitotic spindle; it is specific for the M and S phases.
2. Vesicant: An agent that has the potential to cause blistering, severe tissue injury, or tissue necrosis when extravasated.
3. 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
2. All vinca alkaloids must be ordered by or co-signed by an attending (faculty) hematology/oncology prior to processing.
3. Verbal orders for initial vinca alkaloid chemotherapy will not be accepted.
4. A verbal order can be taken for clarification of an existing vinca alkaloid agent order.
5. Physician orders must include all of the following to be processed:
 - a. Vinca Alkaloid must be ordered through an Beacon-Approved treatment plan.
 - b. Dose of the agent in units (i.e. mg/m², mg/kg)
 - c. Total dose of medication
 - i. Note for vincristine the usual maximum dose is 2mg, however this may vary in some study protocols
 - d. Route of administration
 - i. Note for all vinca alkaloids route of administration is **IV ONLY**.
 - 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 vinca alkaloids agents.
2. All doses of vinca alkaloids **MUST** be prepared in the hospital pharmacy as an IVPB in 25mL of NS. Vinblastine dose greater than 10mg and vinorelbine doses greater than 50mg should be placed in 50mL.
3. Pharmacy will ensure that bag that is dispensed will contain the following phrase: ***“For I.V. use only. Fatal if given intrathecally.”***
4. All doses of vinca alkaloids shall be clearly labeled: “Infuse as IVPB over 15 minutes”
5. Pharmacy will ensure that all drugs are dispensed in appropriate concentrations and appropriate containers
6. Pharmacy will ensure that vinca alkaloids shall be dispensed in a separate Ziploc container that does not contain any intrathecal medications.
7. 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
8. 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.

Administration:

1. Vinca alkaloids should not be transported through the pneumatic tube system.

2. Vinca alkaloids can only be administered by registered nurses that have completed the appropriate antineoplastic/cytotoxic agent administration competency.
3. Vinca alkaloids must undergo a "double check" procedure per nursing protocol/policy prior to administration to the patient.
4. Vinca alkaloids must be administered via IV route only. Note: inadvertent intrathecal administration will result in death.

Specific Monitoring Parameters: The patient should be monitored as listed in the package insert.

1. Since all vinca alkaloids are considered vesicant, they should be monitored for extravasations and infusion site irritation at all times.

Safety Strategies in Place:

1. Nurses perform a double check on all vinca alkaloid 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.