Metro Infusion Center Cancer Treatment Administration Policy

Policy Statements: It is the policy of MIC to administer a defined list of oncology systemic injectable therapies (hereafter referred to as "cancer treatments") that have been evaluated and determined to be appropriate for safe administration within MIC locations (see approved medication list on the MIC website). Cancer treatments will be administered in accordance with current evidence-based standards, including those established by the **American Society of Clinical Oncology (ASCO)**, the **Oncology Nursing Society (ONS)**, and the **Infusion Nurses Society (INS)** Standards of Practice

Definition of Terms:

Chemotherapy: Medication that is cytotoxic that and targets DNA, tubulin or cellular division to kill the cancer. All chemotherapy agents are considered hazardous drugs.

KEY POINT: MIC does not currently administer cytotoxic chemotherapy for the treatment of cancer.

Targeted Therapy (previously referred to as biotherapy): The treatment of cancer using molecularly targeted anticancer agents that selectively target molecular pathways. Some targeted therapies are conjugated to a toxin and thus must be mixed in the biologic safety cabinet that is located in Burr Ridge.

Key Point: Hormonal therapies are considered targeted but may not be biologic agents

Immunotherapy: The treatment of cancer using the patient's own immune system to manage or eradicate diverse cancer types.

Cancer Treatment: For purposes of this policy, the term "cancer treatment" refers collectively to chemotherapy, targeted therapy, and immunotherapy administered for the treatment of malignant disease. Although Metro Infusion Center administers several chemotherapy and biologic medications for non-oncologic conditions, this policy specifically applies to medications administered with the intent to treat or eradicate cancer. Oncology dosing, patient assessment, monitoring requirements, and management of adverse events may differ significantly from those used for non-oncology indications.

Hazardous drugs: All hazardous drugs must be mixed in Burr Ridge as the other offices do not have a biologic safety cabinet for safe handling. Hazardous injectable drugs often have short stability and thus must be mixed in Burr Ridge and can only administered in the surrounding Chicago area.

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Infusion Staff: Metro Infusion Centers employ both RN's and APRN's to infuse the treatments. Some of the offices only have 1 staff member. If this is the case, the goal is that this person is an APRN so they can manage any complications

Metro Infusion Center (MIC): Metro Infusion Center locations provide outpatient infusion services only. Physicians do not routinely evaluate patients onsite.

Metro Infection Disease Consultants (MIDC): Metro Infectious Disease Consultants locations provide both physician office visits and outpatient infusion services. Infectious Disease physicians are available onsite, and these locations administer antimicrobial therapies, biologics, and approved cancer treatments.

Procedure Steps

Order Writing	
1. Who can write the order	• Referral orders will be accepted from either the oncology physician or the oncology advanced practice provider as per the accepted practices within the practice and state regulations.
2. Cancer Treatment should be written on a preprinted and approved order form.	• The order will preferably be completed on the approved preprinted orders located on the metro infusion site • The order will then be reviewed for completeness by the biologic RN and chemo coordinator. Once transcribed, will be signed off by one of the physicians employed by Metro Infusion
3. Order corrections	• If an order needs correction based on changes in patient condition or notation of something missing, the order should be resubmitted fully corrected. • KEY POINT: If this is an emergent situation (the patient is in the center and the provider is unavailable to rewrite the corrected order), a verbal order will be taken by the biotherapy or clinic RN/APRN with verbal readback noted on the form.
4. Hold orders	• If the patient is in clinic and needs to have their treatment held, a telephone order can be taken for this. After the hold, the provider will need to

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	see the patient and determine appropriate timing for the next cycle and any dose reductions with new orders being written. If no changes are made, the provider will send clearance stating the patient is ok to resume therapy.
5. All cancer treatment orders will include: • Patient name • DOB • Date of order • Diagnosis (code) • Ht/Wt and calculated BSA if applicable • BSA Calculator used • Testing to be done prior and time frame it can be done before treatment • Parameters to hold • Premedication and any other supportive medication as needed • Drug name, dose, route, rate of infusion, fluid diluents if appropriate • Dates of treatment initiation • Reasons to call the provider • Signature of licensed provider • Phone number/fax for the provider; their NP and nurse if they have one	• The Ht and weight should be measured not stated. • Any weight/dose variation of 10% or greater during treatment should be called to the physician unless otherwise specified on the order or patients clinical condition warrants it inappropriate to change the dose (ascites; swelling). **KEY NOTE**: This variation will be documented in the medical record. • Mostellar is the preferred BSA formula although other formula's such as Dubois may be used • Metro Infusion Centers do not round to the nearest vial, we utilize whatever is on the order. The referring provider can round as per HOPA guidelines and their own standards (typical rounding % variability is based on drug and pharmacokinetics) • Preceding zeros should be used (0.5mg) • Terminal zeroes should NOT be used (i.e. 5.0mg) • If any of the necessary components of the order are missing or inaccurate, a licensed provider will be called for clarification/correction.
Oncology Certification for Chemotherapy	
1. Only infusion staff who have been appropriately educated and simulated clinical validated will administer cancer treatment	The skills portion of the competency is done via simulation because metro infusion centers span the entire United States. **Key Point:** All staff have access to an APRN and RN with extensive oncology experience for all infusions

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2. Didactic training APRN and RN administering cancer treatments must successfully complete the didactic education requirements prior to independently administering the cancer treatments a. The MIC-approved course will include, at minimum: cancer basics; chemotherapy, targeted therapy and immunotherapy concepts; safe administration; safe handling; symptoms management including reaction management and logistics of cancer patients flow through MIC. b. The ONS Fundamentals chemotherapy/immunotherapy admiration course	• New staff with extensive chemotherapy administration experience within the last 5 years may not need to attend the MIC course • The chemotherapy/oncology coordinator will determine their needs and will request they take the ONS course if they have not taken this in the past. • Previous Chemotherapy certification from a cancer program with CNE will also be accepted. KEY POINT: Staff completing the MIC cancer treatment course can administer cancer treatments prior to completion of the ONS fundamentals course assuring that it get completed in the next few months. They have the chemo/oncology coordinator as their resource.
3. A simulation skills packet/handout will be completed during their course and placed in their file	
4. Ongoing cancer treatment competency will be validated annually	• A score of 80% is considered passing on the annual competency exam **Key Point**: Although the ONS course is the initial course needed, the ONS renewal course is not required as it does not reflect the type of treatment currently given at MIC centers. MIC requires a Chemotherapy Credential Refresher course centered around the specific medications we provide at our facility.
Cancer Treatment Verification	

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1. The biologic RN and chemo coordinator will review any cancer treatment orders that come in.	• Will perform an independent calculation of the BSA/Dose and document 1st check and placed as a progress note in patients chart. • Will review the order to assure that all aspects of the order are filled out and clear. • If any part of the order is not completed or it is unclear, they will reach out to the provider/staff to ask for resubmission Key Point: The referring provider will be notified of dose variations greater than 10%.
2. Pharmacy will perform an independent double check before cancer treatment label dispensed.	
3. The infusion staff administering the cancer treatment will weigh patient at each encounter	• If the weight has changed by 10%, the infusion staff will evaluate if there is an error in weight. • If the weight is off by >10% and the order says to call for wt change, then the infusion staff will assess patient to assure that the weight is not erroneous (i.e. excess clothing, purse, keys) or that there is excess fluid retention- if deemed accurate, the infusion staff will call the provider. • The infusion staff will need to inform the pharmacy and insurance if there is a discrepancy for any drugs they will be mixing as well as to adjust the label and assure insurance coverage of a different dose
4. The infusion staff administering the cancer treatment will perform an independent calculation of the dose. And verify that the biologic RN or chemo coordinator has done the first check.	This will be the 2nd RN check as the Biologic RN should have done the first. Staff should watch trends and if the weight is getting close to the 10% variation, report to the referring provide so new orders can be sent. KEY POINT: For serial recurring orders, unless there is a weight change or submission of new order, the dose will only need to be recalculated by the administering RN while referring to the original 1st check notation.

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~~5.~~ Identity Verification	Because the bulk of the MIC offices only have 1 staff member working in the office, the 2nd identity verification will be done with the patient. • Have the patient state name and date of birth ○ The infusion staff will read the components of the drug name/DOB to the patient to verify that it is them and the right drug
Mixing of cancer treatments	• All hazardous drugs will be mixed under the approved biologic safety cabinet by the pharmacist only in Burr Ridge • All nonhazardous drugs will be mixed by the infusion staff using the INS recommended Non Touch Aseptic Technique
Safe Handling of Hazardous Drugs	
1. All staff handling hazardous drugs will wear appropriate apparel and take appropriate safety precautions when administering and handling hazardous drugs in accordance with the USP 800 Standards	Metro infusion will follow guidelines set out by USP800 and any other regulatory agency. **Key Point:** All NIOSH list tier 1 drugs will be mixed in the pharmacy and will only be given at centers within driving distance from Burr Ridge. Hormonal agents that are considered "reproductive hazardous" will have protective apparel sent with the drug.
2. All hazardous and reproductive risk drugs will come with safe handling engineering devices already attached.	These devices are utilized to decrease the risk of exposure to the hazardous drug.
Patient Assessment	
1. All patients undergoing cancer treatment will have a symptom assessment to evaluate for treatment and disease r/t symptoms.	• The drug specific documentation form should be utilized by the infusion staff and will serve as their day of assessment to be the for clinical

	clearance regardless if the referring provider saw the patient. • Symptoms that could impact treatment will be called to the referring provider office. **Key Point**: Supportive care drugs and hormonal therapies do not require clearance or lab
2. . Assess allergies	Allergies will be placed in patients' chart and will be reviewed prior to initiating therapy.
3. Assess laboratory data	• It will be encouraged that ALL patients go to get their labs and see their oncology providers within 72 hours (or otherwise specified by the provider on the order) prior to the treatment visit to "clear the patient" for the treatment. This clearance/lab will be faxed to MIC. • A reminder email is sent from the oncology Biologic RN within 4-8 days of the next infusion, reminding them that they need to send the labs for clearance • It is the infusion staff responsibility to ensure that they have labs are review labs and hold parameters noted prior to infusion • If any laboratory values are outside an acceptable level, call referring provider/staff for further direction KEY POINT: For any patient of childbearing potential who is receiving cancer treatment, will need to add a pregnancy test onto the pre treatment labs.
4. Assess appropriate test results	Some examples include: • MUGA/ECHO for trastuzumab, pertuzumab, ado traztuzumab.
5. Assess reproductive history • For women of child bearing age/potential; assure that the pregnancy test is negative within 72 hours of the treatment	• Cancer treatments may have teratogenic effects on the unborn child. • Some physicians will place menstruating females on birth control prophylaxis while receiving cancer treatment

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Cancer Treatment Administration	
1. Back up fluids will be available as needed for cancer treatment infusions.	This can be used in case of reaction so that there are fluids ready for infusion. KEY POINT: Assure that all the drug is infused through the tubing by flushing the line above the pump.
2. Small bore extension set tubing may be utilized: • If the drug ordered is known to have a greater than 10% potential to cause a reaction • If the patient has history that indicates possible reaction.	• The infusion staff administering the cancer treatment will assess the risk of reaction.
4. Securing the IV tubing to the patient with tape on the arm/clothing	• This ensures that if the IV is pulled the "torque" is at the taped site instead of the IV/Port insertion site.
IV Infusions- Peripheral	
1. Peripheral IV sites must be initiated with good technique.	• If there is any puncturing of the vein, cancer treatment can leak into the tissue.
2. When administering a cancer treatment avoid sites that are high risk for complications if extravasated.	• Antecubital fossa (should be a last resort as medication can infiltrate without knowing) • Injured or sclerosed veins • Areas of flexion • Small, fragile, tortuous veins • An extremity with altered venous return or lymph flow (i.e. on the side of axillary lymph dissection with breast cancer; lymphoma or melanoma) • An extremity with decreased sensation or paresthesia • Lower extremity

3. When administering cancer treatment through a peripheral IV, apply clear, occlusive dressing unless the patient is allergic.	This stabilizes the IV.
IV Infusions- Central Venous Catheter (CVC)	
Patients with CVC's should have an order filled out for care and maintenance as well as PRN alteplase.	MIC has a preprinted order for CVC maintenance that is sent to the provider office by the biologic RN once CVC is identified.
1. A brisk blood return must be obtained prior to giving any cancer treatment through a CVC as per ONS and INS guidelines	• If there is no blood return from the CVC; the infusion staff should: o Reposition the patient to see if the blood will come out o Assure the proper needle position for an implanted port o Utilize alteplase 2mg/2ml instillation as needed to dissolve fibrin sheath KEY POINT: Alteplase should be instilled for 30 min-2 hours and may be repeated x 1 if no blood return obtained after 2 hours. If there still is no blood return, or if the line requires alteplase routinely, the line should be evaluated for other causes for lack of blood return. Alteplase should NOT be flushed into the line before 2 hours; after 2 hours the drug is inactive. • The infusion staff can initiate a peripheral line until the CVC has re established a blood return.
SQ injections	• Rotate sites when administering SQ injections KEY POINT: as per PI and nursing quick reference guide Ideally, no more than 2mL should be administered into a single SQ site KEY POINT: There are a few drugs that are now being administered with hyaluronidase, and these

	drugs are acceptable to be given in a larger volume b/c the hyaluronidase opens the tissue to allow for the larger volume.
IM injections	All IM injections will be given in the location as per the PI and as outlined in the nursing quick reference- for oncology this is in the gluteal region Assurance of patient privacy will be a priority
Patient Education	
All patients will have a consent form or notation of informed consent that will be completed by their referring provider	The biologic RN will ensure that this comes in with the referral documents and order. If the provider does not routinely do consents for cancer treatment, will ask them document in the note that cancer treatment education has been completed
Patient education material can be given additionally by the Metro Infusion staff if the patient has lost/misplaced their education given by their provider	Chemocare.com or Home - Patient Education Sheets (http://patienteducationsheets.com) are the preferred source to print out cancer treatment sheets.
Documentation	Documentation will be done in Cerner and on the drug specific Treatment Documentation Sheet The treatment documentation sheet will be faxed to the referring oncologist

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