

**Hartford Hospital**  
**Department of Pharmacy Services**  
**Procedure for Antineoplastic Drug Preparation**

**Date:** April 4, 2007

The new procedure for processing chemotherapy orders and antineoplastic drug preparation in central pharmacy will be described in this memo.

- 1- The **Decentralized Pharmacist** will be responsible for the initial processing of any inpatient and Hematology/Oncology outpatient chemotherapy orders written on the "Hartford Hospital Antineoplastic Drug Order Form". Their responsibilities include:
  - a. Verifying:
    - i. The chemotherapy regimen
    - ii. Drug doses
  - b. Assessing the orders for:
    - i. Proper antiemetics,
    - ii. Hydration,
    - iii. Pre-meds,
    - iv. Lab work evaluation
  - c. Coordination of:
    - i. Chemotherapy administration times with the nursing staff
    - ii. Other miscellaneous issues related to the chemotherapy order.
  
- 2- The **Decentralized Pharmacists** are responsible for:
  - a. Signing the original order in the chart
  - b. Co-signing the paper MAR (medication administration record- blue form).
  - c. Entering antineoplastic drug orders written on the "HH Antineoplastic Drug Order Form" into WORX → labels print in clean room
  - d. Entering non-chemotherapy agent orders written on the "HH Antineoplastic Drug Order Form" into CPOE, including leucovorin and Mesna.
  - e. Entering "Chemotherapy Treatment Ordered" into CPOE to alert nursing to check for the "Hartford Hospital Antineoplastic Drug Order Form" and paper chemotherapy MAR in the chart.
  
- 3- After the chemotherapy order is reviewed by the Decentralized Pharmacist, it is faxed to Central Pharmacy + call
  
- 4- These responsibilities listed in #1-3 will be the **Central Pharmacist's** job in the following circumstances:
  - a. Evenings and nights between 3:30 PM and 7:00 AM
  - b. Weekends
  - c. Holidays.
  
- 5- The **Chemotherapy Technician** of the day is responsible for: triggered by call + printed labels

→ uses order, labels

- a. Writing up the preparation information for each drug on the "Checklist for Preparing and Labeling Antineoplastic Drugs" under the designated area.
- b. Preparation information includes:
  - i. Drug,
  - ii. Dose,
  - iii. Lot #,
  - iv. Vial expiration date,
  - v. Vial concentration,
  - vi. Diluent used for reconstitution,
  - vii. Volume of diluted medication to be added to IV bag,
  - viii. Bag diluent (i.e.:D5W, NS) amount,
  - ix. Final product concentration,
  - x. Stability for prepared product,
  - xi. Technician initials,
  - xii. Special instructions.
- c. The Chemotherapy Technician should fill out this checklist prior to the second Pharmacist check.
- d. The Chemotherapy Technician also will transcribe the chemotherapy regimen onto the "Chemotherapy Profile" for multiple day orders.
- e. Non-chemotherapeutic agents, such as leucovorin and Mesna should be transcribed, and preparation information written onto the "Chemotherapy Profile".

brings checklist, order, labels to

- 6- The **Central Pharmacist** doing the Second Check of the chemotherapy order will be responsible for:
- a. Verifying the chemotherapy regimen,
  - b. Calculated drug doses,
  - c. Label checks, including:
    - i. Patient name,
    - ii. Patient location,
    - iii. Drug name,
    - iv. Dose,
    - v. Diluent,
    - vi. Volume of diluent.
  - d. Verifying all Technician calculations and preparation information.

- 7- The **Second Check Pharmacist** is responsible for:
- a. Initialing and checking off the items listed under the "pre-check" on the "Checklist for Preparing and Labeling Antineoplastic Drugs."
  - b. Initialing and signing the bottom of the checklist.
  - c. Verifying the schedule for the chemotherapy has been transcribed correctly to the "Chemotherapy Profile".
  - d. Cosigning the "Hartford Hospital Antineoplastic Drug Order Form".

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- 8- After these checks have been completed the **Chemotherapy Technician** can proceed with drawing up the chemotherapy drug into a syringe for the Post-Check Pharmacist.

The Technician may prepare one (1) chemotherapy drug at a time in the chemotherapy hood.

- 9- The **Third Check Centralized Pharmacist** will be responsible for:
  - a. Verifying the chemotherapy regimen,
  - b. Calculated drug doses,
  - c. Labels,
  - d. Special instructions,
  - e. Final considerations as listed on the "Checklist for Preparing and Labeling Antineoplastic Drugs"
  - f. Verifying all technician calculations and preparation information.
  - g. Syringe check for vial reconstitution
  - h. Syringe check for drug to be added to final product.
  
- 10- Once the final product is prepared, the **Third Check Pharmacist** is responsible for:
  - a. Inspection of the final product
  - b. Initialing and checking off the items listed under the "post-check" on the "Checklist for Preparing and Labeling Antineoplastic Drugs."
  - c. Initialing and signing the bottom of the checklist.
  
- 11- Once the chemotherapy final product is completed, prepared antineoplastic medications are placed in a sealed bag for transport. Medical Daycare needs to have the "Hartford Hospital Antineoplastic Drug Order Form" photocopied to be sent with the product. The **Chemotherapy Technician** and **Final Check Pharmacist** need to document on the "Chemotherapy Profile" that the chemotherapy drug is made on that date of processing.

The initial review of the chemotherapy order should be done by the three (3) independent Pharmacists, but with subsequent days of the same chemotherapy regimen, only two (2) independent Pharmacists are necessary for the pre-check and post-check. Subsequent days of the same chemotherapy regimen can be checked by any of the Pharmacists that checked on previous days as long as they are separate people on the same day.

**For Inpatient Orders and/or Multiday Medical Day Care Orders:**

While the patient is actively receiving the chemotherapy treatment, the order and worksheets will be placed in a manila folder and stored in the metal brackets. After treatment is completed, the paperwork will be filed in black notebook located next to the metal bracket in alphabetical order for one (1) month for reference purposes. After one (1) month, orders will be removed, to a predetermined location for storage in accordance with the appropriate timeframe set forth in statute and/or by appropriate regulatory agencies.

Medical Daycare orders can be filed in the metal bins on the shelf above since they are same day admissions and will be processed in the same manner as inpatient orders.

**Checklist for Preparing and Labeling Antineoplastic Drugs**

Affix Label Here

Day \_\_\_\_ of a \_\_\_\_ day regimen

RPh Initials		Pharmacist Pre-check	Technician Work Area (show calculations and/or special notes)
	<input type="checkbox"/>	<u>Calculations check:</u> Height:                      Weight: BSA:                              AUC: Dose:	<u>Drug/Dose:</u>  Lot #: Exp. Date:  Vial concentration:  Reconstituted with:  Volume of medication to be added:  Bag/Syringe Diluent (D5W/NS):
	<input type="checkbox"/>	<u>Verify the following (verify all technician calculations):</u> Vial concentration Volume of medication to be added Final concentration Stability for prepared product	<u>Bag volume:</u> + bag overfill: + vol. of medication to be added: - vol. of tubing: =Total volume=
	<input type="checkbox"/>	<u>Label check including:</u> Patient name Patient location Drug name Dose Diluent name Volume of diluent	Final product concentration:  Stability for prepared product:
	<input type="checkbox"/>	<input type="checkbox"/> Correct date and time to prepare <input type="checkbox"/> Regimen Check <input type="checkbox"/> Protocol attached to chemotherapy order	
	<input type="checkbox"/>	<input type="checkbox"/> Sign chemotherapy order form on day 1 only <input type="checkbox"/> Verify & sign transcription of regimen onto profile sheet for multiday regimens	<input type="checkbox"/> Transcribed regimen to profile sheet for multiday regimen
<u>Pharmacist Post-check</u>			<u>Special Instructions:</u>
<u>On day 1 of regimen only:</u>			
	<input type="checkbox"/>	<input type="checkbox"/> Check regimen and schedule on profile sheet <input type="checkbox"/> Check calculations <input type="checkbox"/> Sign chemotherapy order form	
<u>On all days:</u>			<u>Auxiliary Labels:</u>
	<input type="checkbox"/>	<input type="checkbox"/> Syringe check for vial reconstitution <input type="checkbox"/> Syringe check for drug to be added to final product	
	<input type="checkbox"/>	<input type="checkbox"/> Correct drug <input type="checkbox"/> Correct diluent <input type="checkbox"/> Volume of diluent <input type="checkbox"/> Total volume of prepared product <input type="checkbox"/> Final concentration of prepared product <input type="checkbox"/> Final concentration stability and expiration sticker	
	<input type="checkbox"/>	<input type="checkbox"/> Special instructions checked on chemotherapy chart <input type="checkbox"/> Tubing affixed, tubing primed with diluent	
	<input type="checkbox"/>	<input type="checkbox"/> Caution chemo label attached <input type="checkbox"/> Other auxiliary labeling <input type="checkbox"/> Zip-lock bag is sealed <input type="checkbox"/> Extra copy of order if for MDC <input type="checkbox"/> Sign off profile sheet for multiday regimens	

Tech. Initials: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 RPh Initials: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 RPh Initials: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

