



# Systemic Therapy Update

Volume 9, Number 4 *for health professionals who care for cancer patients* April 2006

Website access at <http://www.bccancer.bc.ca/HPI/ChemotherapyProtocols/stupdate.htm>

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IN TOUCH phone list is provided if additional information is needed.

## EDITOR'S CHOICE

### BC CANCER AGENCY CHEMOTHERAPY PREPARATION AND STABILITY CHART

A user-friendly chart has been developed at the BC Cancer Agency which provides the basic information for the preparation of parenteral cancer drugs. The aim of the chart is to provide essential information for the safe, effective and economical preparation of chemotherapy. The development of the chart is based on the BC Cancer Agency Pharmacy Policy II-20. Principles were developed for the following areas:

#### Stability data from different brands

Data from different brands of a drug are not considered interchangeable. This is because the formulations of the same drug can vary when prepared by different manufacturers. In general, data from different brand (including generic) products are only used when the manufacturer can assure that there has been no formulation change from previous brands.

#### Expiry date of vial

This is mainly determined by a combination of physicochemical and microbial stability:

- A drug is microbiologically stable after vial puncture if the vial contains antimicrobial preservative and prepared with aseptic technique in the biological safety cabinet.
- Assuming physicochemical stability, drug from a vial with preservative (or reconstituted with bacteriostatic diluent) is used up to a maximum of 14 days. Without preservative, it is used up to a maximum of 2 days.
- Unused portion from single-use vials is discarded at the end of the day unless otherwise specified.
- Unused portion from single-use vials is discarded at the end of the day unless otherwise specified.

#### Infusion volume and stability

- When there is no recommended infusion volume for drugs commonly given as intravenous infusion (e.g., cyclophosphamide), suggested infusion volumes are determined based on the usual dose range and concentration range of the stability data.

- If the infusion and stability are specified but no standard volume is stated, the commonly used mini-bag volumes (e.g., 100 mL, 250 mL) are used because the drug stability is likely to be independent of the concentration.
- If the infusion fluid is specified but no corresponding stability is stated, the final product should be used within 4 hours.
- If an expiry date is not specified whether it is for the infusion (i.e., mini-bag) or syringe products, the stability data are applied to both.

Syringe preparations

Chemotherapy products given as IV push or subcutaneously are often prepared in syringes. If there is no information from the current manufacturer on the stability of syringe preparations (e.g., cladribine, fluorouracil, vincristine), then it may be assumed that the syringe preparation has a similar stability as:

1. the original vial after puncture for liquid formulation, or
2. the reconstituted solution for reconstituted formulation.

Products to be used immediately

Sometimes, the manufacturer recommends that the final product to be used immediately after preparation. Apart from drugs with significant spontaneous decomposition (e.g., mechlorethamine), a 4-hour expiry is empirically assigned from initial puncture or reconstitution. This duration should be sufficient to accommodate the delivery of most ambulatory chemotherapy.

More details can be found on the [User’s Guide](#) of the chemotherapy chart.

**CANCER DRUG MANUAL**

**Bevacizumab Monograph and Handout** These have been developed to coincide with the use of this agent at the BC Cancer Agency (see March issue of the Systemic Update for more details).

**Paclitaxel Monograph and Handout** These have been completely updated with full citations of references.

**Parenteral Chemotherapy Preparation** A chemotherapy preparation and stability chart for the injectable cancer drugs is now available on the website (**Cancer Drug Manual [Appendix 8](#)**). Each injectable cancer drug monograph is hyperlinked to this chart in the **Solution Preparation and Compatibility** section. For more information on the chart, see the Editor’s Choice in this issue of Systemic Therapy Update.

**CANCER MANAGEMENT GUIDELINES**

‘**Headlines**’ is a new quarterly newsletter for brain tumour patients and their families. This publication will highlight appropriate patient resources and provide updates about new treatments, complementary therapies, and symptom and side effect management. Content will be guided by a patient and family editorial board, with input from the brain tumour site group health care professionals. Paper copies will be available at all BCCA brain tumour clinics; an electronic version can be found on the BC Cancer Agency website (<http://www.bccancer.bc.ca/HPI/CancerManagementGuidelines/NeuroOncology/PatientResources.htm>).

**LIST OF NEW AND REVISED PROTOCOLS**

The **BC Cancer Agency Protocol Summaries** are revised on a periodic basis. New and revised protocols for this month are listed below. Protocol codes for treatments requiring “Undesignated Indication” approval are prefixed with the letter **U**.

**New protocol:**

Code	Protocol Name
<b>HNAVGEM</b>	Treatment of local-regionally recurrent and/or metastatic nasopharyngeal cancer with gemcitabine
<b>HNRADC</b>	Treatment of locally advanced nasopharyngeal cancer with concurrent cisplatin and radiation

Code	Protocol Name
ULYMFCEP	Treatment of cutaneous T-cell lymphoma (Sézary syndrome) with extracorporeal photopheresis

**Revised protocols:**

Code	Changes	Protocol Name
GIA	<i>clarification of eligibility, tests, emetogenic classification, dose modifications</i>	Palliative therapy for hepatoma using doxorubicin
GIAVCAP	<i>creatinine clarified in Tests</i>	Palliative therapy of advanced colorectal cancer using capecitabine
GIRAI	<i>deleted</i>	Adjuvant therapy for rectal carcinoma using fluorouracil + leucovorin + XRT
GUPLHRH	<i>reformatted, dosing regimen clarified</i>	Therapy for prostate cancer using LHRH agonist (goserelin, leuprolide or busserelin)
LYGDP	<i>clarified Dexamethasone dosing</i>	Treatment of lymphoma with gemcitabine, dexamethasone and cisplatin (GDP)

**LIST OF NEW AND REVISED PRE-PRINTED ORDERS**

The **INDEX to BC Cancer Agency Pre-printed Orders** are revised on a periodic basis. The revised pre-printed orders for this month are listed below.

**New pre-printed orders:**

Code	Protocol Name
HNRADC	Treatment of locally advanced nasopharyngeal cancer with concurrent cisplatin and radiation
HNAVGEM	Treatment of locally advanced nasopharyngeal cancer with concurrent cisplatin and radiation

**Revised pre-printed orders:**

Code	Changes	Protocol Name
GIA	<i>clarification of eligibility, tests, emetogenic classification, dose modifications</i>	Palliative therapy for hepatoma using doxorubicin
GIAVCAP	<i>creatinine clarified in Tests</i>	Palliative therapy of advanced colorectal cancer using capecitabine
GIRAI	<i>deleted</i>	Adjuvant therapy for rectal carcinoma using fluorouracil + leucovorin + XRT
HNDE	<i>Tests clarified</i>	Treatment of recurrent and metastatic nasopharyngeal cancer using cisplatin and etoposide

**NURSING UPDATE**

**Continuing Competency in Chemotherapy: Update for all Chemotherapy Certified Nurses**

Two years ago we implemented the Continuing Competency in Chemotherapy Initiative. The following changes have been made in response to your helpful comments and questions and also because of what we learned through implementing the initiative.

#### Changes To The Process

1. You will inform your nurse manager that you have met the requirements annually by Feb 28. The forms (records) you need to use for this are on the website under:  
<http://www.bccancer.bc.ca/HPI/Nursing/Education/BCCA/ChemoEd/ContComp/default.htm>
2. We are no longer specifying that you participate in 10 hours of education annually. Instead, we encourage you to make and follow a learning plan for expanding your chemotherapy knowledge and skills just as you do for the College of Registered Nurses of British Columbia (CRNBC) re-registration annually. (You can use your chemotherapy learning plan as part of your CRNBC learning plan).
3. You will document the various learning activities that you have engaged in throughout the year in relation to chemotherapy. What you choose to focus on will depend on your previous experience and current learning interests. The types of learning activities you might choose can be varied. These suggestions are the same as before and include conferences, workshops, rounds, reading, developing patient education materials/protocols/Pre printed Orders, teaching new nurses about chemotherapy.  
<http://www.bccancer.bc.ca/HPI/Nursing/Education/BCCA/ChemoEd/ContComp/LearningActivities.htm>
4. The form “Exposure to Cytotoxic Drugs” has been updated to include newer drug names. Some drugs have been removed to make space for newcomers.  
<http://www.bccancer.bc.ca/HPI/Nursing/Education/BCCA/ChemoEd/ContComp/ExposureRecord.htm>
5. Nurses who become certified part-way through the year will prorate their Continuing Competency in Chemotherapy (CCC) requirements, ie, if you are certified half way through the year you would be expected to have given 25 drugs in the remainder of the year. In this way every nurse can report his/her CCC requirements to the nurse leader/manager at the end of February.

Please call Judy Oliver at 604.877.6000 local 2639 if you have any questions about these changes.

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#### **Continuing Nursing Education Opportunity: Extended Adjuvant Therapy Options in Breast Cancer**

##### Objectives:

1. Identify the role of aromatase inhibitors (AI) in the treatment of breast cancer.
2. Discuss the nursing implications for postmenopausal women with primary breast cancer treated with extended hormonal therapy.

The 2 sections of the program that are recommended are:

- Introduction to Endocrine Therapy
- Nursing Implications

This program is available at <http://oes.digiton.com/breastcancer/info.asp>

Judy Oliver, RN, BScN, M.Ed  
Education Resource Nurse

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#### **WEBSITE RESOURCES**

The following are available on the BC Cancer Agency website ([www.bccancer.bc.ca](http://www.bccancer.bc.ca)) under the Health Professionals Info section:

Reimbursement and Forms: Benefit Drug List, Class II, Undesignated Indication	<a href="http://www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Forms">www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Forms</a>
Cancer Drug Manual	<a href="http://www.bccancer.bc.ca/cdm">www.bccancer.bc.ca/cdm</a>

Cancer Management Guidelines	<a href="http://www.bccancer.bc.ca/CaMgmtGuidelines">www.bccancer.bc.ca/CaMgmtGuidelines</a>
Cancer Chemotherapy Protocols	<a href="http://www.bccancer.bc.ca/ChemoProtocols">www.bccancer.bc.ca/ChemoProtocols</a>
Cancer Chemotherapy Pre-Printed Orders	<a href="http://www.bccancer.bc.ca/ChemoProtocols">www.bccancer.bc.ca/ChemoProtocols</a> under the index page of each tumour site
Systemic Therapy Program Policies	<a href="http://www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Policies">www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Policies</a>
Unconventional Cancer Therapies Manual	under Patient/Public Info, Unconventional Therapies

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<b>IN TOUCH</b>	<a href="http://www.bccancer.bc.ca">www.bccancer.bc.ca</a>	<a href="mailto:bulletin@bccancer.bc.ca">bulletin@bccancer.bc.ca</a>
BC Cancer Agency .....	(604) 877-6000 .....	Toll-Free 1-(800) 663-3333
Communities Oncology Network.....	Ext 2744.....	<a href="mailto:jvenkate@bccancer.bc.ca">jvenkate@bccancer.bc.ca</a>
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Provincial Systemic Therapy Program.....	Ext 2247.....	<a href="mailto:gconcon@bccancer.bc.ca">gconcon@bccancer.bc.ca</a>
Communities Oncology Network Pharmacist.....	Ext 6277.....	<a href="mailto:lkovacic@bccancer.bc.ca">lkovacic@bccancer.bc.ca</a>
Drug Information.....	Ext 6275.....	<a href="mailto:druginfo@bccancer.bc.ca">druginfo@bccancer.bc.ca</a>
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	Ext 8003	
OSCAR Help Desk .....	1-888-355-0355 .....	<a href="mailto:oscar@bccancer.bc.ca">oscar@bccancer.bc.ca</a>
	Fax (604) 708-2051	
Undesignated Drug Application office.....	Ext 6277.....	<a href="mailto:undesignated@bccancer.bc.ca">undesignated@bccancer.bc.ca</a>
	Fax (604) 708-2026	
Update Editor.....	Ext 2288.....	<a href="mailto:mdelemos@bccancer.bc.ca">mdelemos@bccancer.bc.ca</a>
Centre for the Southern Interior (CCSI) .....	(250) 712-3900 .....	Toll-Free 1-(888) 563-7773
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