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EDITOR'S CHOICE

HIGHLIGHTS OF CHANGES IN PROTOCOLS, PRE-PRINTED ORDERS AND PATIENT HANDOUTS

New Treatment Policies There are several changes related to the revised treatment policies from the July issue of the Update:

1. **Genitourinary**: sunitinib, sorafenib and temsirolimus for renal cell carcinoma.
2. **Sarcoma**: sunitinib for gastrointestinal stromal tumour (GIST).
3. **Gastrointestinal**: revised eligibility for irinotecan- and oxaliplatin-based combination chemotherapy for metastatic colorectal cancer.

See [list of changes on page 4](#) for more details on the affected protocols, pre-printed orders and patient handouts.

Cryotherapy The gastrointestinal tumour group has also changed their recommendations for the use of cryotherapy (ice chips) for prevention of fluorouracil-induced stomatitis. Asking patients to suck ice chips during their fluorouracil infusions has been shown to reduce stomatitis by up to 50%, but this has only been studied in the setting of single-agent bolus fluorouracil given over 5 consecutive days (e.g., GIFUFA). Cryotherapy is expected to be less effective when fluorouracil is given in combination with longer acting agents; breast cancer patients, for example, do not receive cryotherapy as part of the CEF protocol. Therefore, cryotherapy will remain recommended for protocols using single-agent bolus fluorouracil, but will be optional for combination protocols.

In summary, cryotherapy is **recommended** for all patients treated with GIFUFA, GIGAI, GIPAJFF or GIRFF, and may be **considered** if patients experience stomatitis with GIAJFL, GIAVFL, UGIFFIRB or GIFOLFIRI. Please note that cryotherapy should **never** be used for oxaliplatin-based protocols, as exposure to cold may exacerbate pharygo-laryngeal dysesthesias.

CANCER MANAGEMENT GUIDELINES

The Genitourinary Cancers section has been updated:

- Prostate cancer: PSA screening patient pamphlet
 - www.bccancer.bc.ca/HPI/CancerManagementGuidelines/Genitourinary/Prostate/PSAScreening/default.htm
 - www.bccancer.bc.ca/HPI/CancerManagementGuidelines/Genitourinary/Prostate/PSAScreening/PatientInformation.htm
- Kidney cancer:
 - predisposing factors/prevention
www.bccancer.bc.ca/HPI/CancerManagementGuidelines/Genitourinary/Kidney/start.htm
 - staging diagram www.bccancer.bc.ca/HPI/CancerManagementGuidelines/Genitourinary/Kidney/staging.htm

CANCER DRUG MANUAL

Cyproterone, Flutamide, Nilutamide Monographs and Handouts have been completely revised. Expert review was provided by Dr. Judy Sutherland (Genitourinary Tumour Group). Highlighted changes include:

- expanded special precaution and side effects table sections
- addition of hepatic dysfunction paragraph
- deletion of potential loss of blood glucose control from the flutamide handout (removed as causality not linked to flutamide)
- removal of cyproterone injection handout (not a BC Cancer Agency benefit drug)

Etoposide PO and IV Handouts have had minor formatting changes for consistency with similar handouts.

Temsirolimus Interim Monograph has been developed. Interim monographs contain basic drug information, as well as preparation and administration instructions. More information on the use of temsirolimus in renal cell carcinoma may be found in the July 2007 issue of the [Systemic Therapy Update](#).

Chemotherapy Preparation and Stability Chart has had one addition and one correction. Temsirolimus has been added to the chart. A typo has been corrected in the expiry of etoposide vials (VEPESID®, Bristol-Myers Squibb). It now correctly reads “14 d” instead of “14 h”.

VEPESID® is supplied as multi-dose vials which comply with United States Pharmacopoeia (USP) antimicrobial effectiveness testing for products containing preservatives. The current USP does not assign an expiry for such vials; it only gives criteria for acceptable microbial counts over a 28-day testing period. Therefore, assuming physico-chemical stability, the BCCA Pharmacy Policy II-20 allows a maximum expiry of 14 days for VEPESID® and other multi-dose vials after puncture.

ONLINE APPLICATION TO THE BC CANCER AGENCY’S COMPASSIONATE ACCESS PROGRAM

The [BCCA Compassionate Access Program](#) (CAP) (previously known as the Undesignated Drug Request Process) is now a secure online web-based system (<https://cap.phsa.ca>), which can be viewed/accessed only through computers that reside within one of the six provincial health authorities. Home or private office access is not available at this time.

The new program is designed to replace the current paper-based system, through which physicians across the province can submit and check the status of their requests, as well as receive outcome notifications via email. Tumour Group designates and Systemic Therapy Program designates review and enter their decisions online as well. Nurses and dispensing hospital pharmacists across the province will be able to view the outcome online.

This system is maintained and updated by the CAP Office (cap@bccancer.bc.ca). All new users (physicians, nurses and pharmacists) will need to call the CAP office to register: Tel (604) 877-6000 x 6277 (Monday to Friday from 8:00AM-4:00PM).

The outdated paper-based system will be phased out over the next two months, at which point we will no longer be accepting faxed submissions.

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USING BLISTER PACKED CARDS FOR DISPENSING CAPECITABINE AND TEMOZOLOMIDE

The four BCCA regional cancer centre pharmacies will now dispense capecitabine tablets and temozolomide capsules in seven-day, cold-sealed blister cards. This pharmacy directive was approved by the agency's Provincial Pharmacy Professional Practice Council to help improve patient compliance and decrease the potential for harm with these oral chemotherapy regimens.

Oral chemotherapy, when taken inappropriately, has the potential to cause serious harm to a patient. The dosing of both capecitabine and temozolomide often requires that multiple strengths of the drug be taken at one time to get the proper dose. This alone can be confusing for patients. Many oncology patients also have other risk factors for self-medication errors, such as multiple medication regimens, advanced age, cognitive impairment, and language barriers. For these reasons, it was decided that these two drugs would be dispensed in blister packed cards. Although lomustine often requires multiple strengths for a given dose, it is given as a single dose per cycle and therefore blister cards will not be used for this drug.

Only one medication is packaged in a blister card and the amount in one blister represents a single dose of the medication. The quantity dispensed will generally be enough for one cycle, unless the protocol requires more frequent assessment of blood laboratory values. For example:

- The [GIAJCAP](#) protocol requires 14 days of capecitabine, with lab tests required before each cycle, so 14 days of medication will be dispensed in two blister cards.
- The [CNAJTMZ](#) protocol requires weekly lab tests when temozolomide is given concomitantly with radiation therapy, so only 7 days of medication will be dispensed. The next 7 days will not be dispensed until the lab report has been reviewed.

The quantity dispensed will also be sufficient to provide for long weekends and holidays.

A pilot study showed that most patients found this method of packaging helpful and that the increase in workload for the pharmacy staff was acceptable. The pharmacists also found that communication of the dosing regimen to patients was simplified and that understanding by patients was increased. Recognizing that some patients may be better served by traditional packaging, the decision to dispense in blister cards remains at the discretion of the pharmacist.

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LIST OF NEW AND REVISED PROTOCOLS, PRE-PRINTED ORDERS AND PATIENT HANDOUTS

The **BC Cancer Agency Protocol Summaries, Provincial Pre-Printed Orders (PPPOs) and Patient Handouts** are revised periodically. New and revised protocols, PPPOs and patient handouts for this month are listed below. Protocol codes for treatments requiring “Compassionate Access Program” approval are prefixed with the letter **U**.

NEW PROTOCOLS, PPPOs AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED):

CODE	Protocol	PPPO	Patient Handout	Protocol Title
BRAJDAC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>(replacing BRAJTAC)</i> Adjuvant Therapy for Breast Cancer using Cyclophosphamide, Doxorubicin and Docetaxel
UBRAJDCT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Adjuvant Therapy for Breast Cancer Using Docetaxel, Carboplatin, and Trastuzumab
GOOVLDOX	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Treatment of Relapsed/Progressing Epithelial Ovarian, Primary Peritoneal, or Fallopian Tube Carcinoma, Using Pegylated Liposomal Doxorubicin
UGUSORAF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Palliative Therapy for Renal Cell Carcinoma Using Sorafenib (NEXAVAR®)
UGUSUNI	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Palliative Therapy for Renal Cell Carcinoma Using Sunitinib (SUTENT®)
USAAVGS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Second Line Treatment of Advanced C-kit Positive Gastrointestinal Stromal Cell Tumours (GIST's) After Imatinib Using Sunitinib (SUTENT®)

REVISED PROTOCOLS, PPPOs AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED):

CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
BRAJFEC	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>uses section revised</i>	Adjuvant Therapy for Breast Cancer Using Fluorouracil, Epirubicin and Cyclophosphamide
BRAJTAC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>replaced by BRAJDAC</i>	Adjuvant Therapy for Breast Cancer using Cyclophosphamide, Doxorubicin and Docetaxel
BRAVPAM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>clodronate infusion time revised</i>	Treatment of Acute Bone Pain Secondary to Breast Cancer Metastases using Pamidronate
GIAJFL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>use of ice chips revised</i>	Adjuvant Therapy of Colon Cancer using Fluorouracil Injection and Infusion and Folinic Acid (Leucovorin) Infusion
GIAVFL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>use of ice chips revised</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using 5-Fluorouracil Injection and Infusion and Folinic Acid (Leucovorin) Infusion
UGICAPIRI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>eligibility revised</i>	First Line Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan and Capecitabine in Patients Unsuitable for GIFOLFIRI

CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
UGICAPOX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>eligibility revised</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, and Capecitabine
UGICIRB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>eligibility revised</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Bevacizumab and Capecitabine
UGICOXB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>eligibility revised</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, Bevacizumab and Capecitabine
UGIFFIRB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>eligibility revised, use of ice chips revised</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Fluorouracil, Folinic Acid (Leucovorin) and Bevacizumab
UGIFFOXB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>eligibility revised</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, 5-Fluorouracil, Folinic Acid (Leucovorin) and Bevacizumab
GIFOLFIRI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>eligibility revised, use of ice chips revised</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Fluorouracil and Folinic Acid (Leucovorin)
UGIFOLFOX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>eligibility revised</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, 5-Fluorouracil and Folinic Acid (Leucovorin)
UGIIRFUFA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>deleted</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer using Irinotecan, Fluorouracil and Folinic Acid (Leucovorin)
GOOVLDOX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>drug dilution clarified</i>	Treatment of Relapsed/Progressing Epithelial Ovarian, Primary Peritoneal, or Fallopian Tube Carcinoma, Using Pegylated Liposomal Doxorubicin
UGUTEM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>clarification of non-PVC equipment, labs, light protection</i>	Therapy for Advanced Renal Cancer Using Temsirolimus
UGUSUNI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>liver function tests and blood pressure monitoring clarified in protocol, liver function tests clarified and alternative dosing added to PPPO</i>	Palliative Therapy for Renal Cell Carcinoma Using Sunitinib (SUTENT®)
LUAVPEM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>vitamin B12 dosing interval corrected</i>	Second-Line Treatment Of Advanced Non-Small Cell Lung Cancer (NSCLC) With Pemetrexed
LUMMPPEM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>vitamin B12 dosing interval corrected</i>	Treatment of Malignant Mesothelioma with Platinum and Pemetrexed
LYECV	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>deleted</i>	Consolidation for Lymphoma Using Etoposide, Cyclophosphamide and Vincristine

CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
LYFLUDR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>hepatitis B reactivation consult revised and precaution on gastrointestinal obstruction or perforation added</i>	Treatment of Chronic Lymphocytic Leukemia or Prolymphocytic Leukemia with Fludarabine and Rituximab
LYPALL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>gemcitabine dosing revised</i>	Lymphoma Palliative Chemotherapy

PROVINCIAL SYSTEMIC THERAPY PROGRAM POLICIES

Revision for Oral Oncology Drug Delivery Process The BC Cancer Agency Systemic Therapy Policy on the Cancer Treatment Delivery Process ([Policy III-10](#)) has been revised.

CONTINUING EDUCATION

Canadian Association of Nurses in Oncology (CANO) Annual Conference will be held on 28-31 October, 2007 at the Hyatt Regency Hotel, Vancouver, BC. The theme for this year is *"Using Hearts, Minds and Voices, Oncology Nurses Influencing Cancer Care"*. Conference information and registration forms are available on the CANO website at www.cano-acio.org. Early bird registration deadline is 17 August, 2007.

National Oncology Pharmacy Symposium (NOPS) 2007 will be held by the Canadian Association of Pharmacy in Oncology on **26-28 October, 2007** at the Marriott Harbourfront Hotel in Halifax, Nova Scotia. The theme for this year is *"Oncology Pharmacy in Your Community"*. Conference information and registration is available on www.peopleware.net/index.cfm?siteCode=2431j&. Early bird registration deadline is 14 September, 2007.

BC Cancer Agency Annual Cancer Conference 2007 Mark your calendar! This year's conference will be held on **29 November – 1 December**, at the Westin Bayshore Resort & Marina in Vancouver. The theme of the 2007 conference is *"Technology and Innovation – Bench to Bedside"*.

Stay tuned for more information about the [conference](#).

WEBSITE RESOURCES

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

REIMBURSEMENT AND FORMS: BENEFIT DRUG LIST, CLASS II, COMPASSIONATE ACCESS PROGRAM (UNDESIGNATED INDICATION)	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Forms
CANCER DRUG MANUAL	www.bccancer.bc.ca/cdm
CANCER MANAGEMENT GUIDELINES	www.bccancer.bc.ca/CaMgmtGuidelines
CANCER CHEMOTHERAPY PROTOCOLS	www.bccancer.bc.ca/ChemoProtocols
CANCER CHEMOTHERAPY PRE-PRINTED ORDERS	www.bccancer.bc.ca/ChemoProtocols under the index page of each tumour site
SYSTEMIC THERAPY PROGRAM POLICIES	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Policies
UNCONVENTIONAL CANCER THERAPIES MANUAL	under Patient/Public Info, Unconventional Therapies

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VANCOUVER ISLAND CENTRE (VICC)	(250) 519-5500	Toll-Free 1-(800) 670-3322