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FAX request form and IN TOUCH phone list are provided if additional information is needed.

HIGHLIGHT OF PROTOCOL CHANGES

Breast A new protocol, BRAJFEC (alternatively known as FEC100), has been implemented. This protocol is designed for patients who have poorly tolerated the preferred treatment, BRAJCEF. BRAJFEC involves the use of the same drugs as BRAJCEF but with different dosing regimens.

BENEFIT DRUG LIST

The current Benefit Drug List, Class II forms and Undesignated Indication application forms are available on the BC Cancer Agency website (www.bccancer.bc.ca) under Health Professionals Info, Chemotherapy Protocols, Frequently Used Forms.

LIST OF NEW AND REVISED PROTOCOLS

INDEX to BC Cancer Agency Protocol Summaries revised monthly (includes tumour group, protocol code, indication, drugs, last revision date and version). Protocol codes for treatments requiring “Undesignated Indication” approval prior to use are prefixed with the letter U.

- **BRAJFEC** new: Adjuvant therapy for breast cancer using fluorouracil, epirubicin and cyclophosphamide
- **CNCCNU** revised (title and eligibility revised): Treatment of recurrent malignant brain tumors
- **CNTEMOZ** revised (title revised): Therapy for malignant brain tumours using temozolomide
- **LYGDP** revised (CBC test clarified): Treatment of lymphoma with gemcitabine, dexamethasone and cisplatin

Protocols are available on the BC Cancer Agency website (www.bccancer.bc.ca) under Health Professionals Info, Chemotherapy Protocols.

CANCER MANAGEMENT MANUAL

Colorectal Cancer Palliative management of colon cancer (section 5.5) of rectal cancer (section 6.5) have been revised to reflect the recent introduction of new chemotherapy regimens for this patient population.

The Cancer Management Manual is available on the BC Cancer Agency website (www.bccancer.bc.ca) under Health Professionals Info, Cancer Management Guidelines.

PRE-PRINTED ORDER UPDATE

Pre-printed orders should always be checked with the most current BC Cancer Agency protocol summaries. The BC Cancer Agency Vancouver Centre has prepared chemotherapy pre-printed orders, which can be used as a guide for reference. An index to the orders can be obtained by Fax-back.

- **BRAJCEF-G** revised (premedications instructions): Adjuvant therapy for breast cancer using cyclophosphamide, epirubicin and fluorouracil
- **BRAVDOC** revised (docetaxel dilution volume and administration rate): Palliative therapy for metastatic breast cancer using docetaxel (Taxotere®)
- **BRAVTR** revised (replacing UBRAVTR): Palliative therapy for metastatic breast cancer using trastuzumab (Herceptin®)
- **BRAVTRNAV** Revised (bookings for every 3 weeks): palliative therapy for metastatic breast cancer using trastuzumab (Herceptin®) and vinorelbine
- **CNCCV** revised (different strengths of capsules added): Adjuvant lomustine, cisplatin and vincristine in adult high-risk medulloblastoma or other primitive neuro-ectodermal tumour (PNET)
- **CNTEMOZ** revised (indications): First line therapy for malignant brain tumours using temozolomide
- **GIFUFA** revised (dosing options for Fluorouracil): Palliative therapy of advanced colorectal cancer using leucovorin and fluorouracil
- **GIFFAD** revised (dosing options for Fluorouracil): Adjuvant therapy for stage III and high risk stage II colon cancer using leucovorin and fluorouracil
- **UGIFOLFOX** revised (appointment times, leucovorin dose): Palliative combination chemotherapy for metastatic colorectal cancer using oxaliplatin, 5-fluorouracil and folinic acid (leucovorin)
- **GIFUR2** revised (premedications instructions): Combined modality adjuvant therapy for high risk rectal carcinoma using fluorouracil, leucovorin, and radiation therapy
- **GIGAI** revised (premedications instructions): Combined modality adjuvant therapy for completely resected gastric adenocarcinoma using fluorouracil + folinic acid (leucovorin) + radiation therapy
- **GIIRINALT** revised (replaces UGIIRINALT as now Class II Status): Second-line treatment for fluorouracil-refractory metastatic colorectal cancer using irinotecan in high risk patients
- **GIRAI** revised (premedications instructions): adjuvant therapy for rectal carcinoma using fluorouracil + leucovorin + XRT
- **GIRLAIFF** revised (premedications instructions): Preoperative concurrent chemotherapy and radiotherapy and postoperative chemotherapy for locally-advanced (borderline resectable or unresectable) rectal adenocarcinoma
- **GUAVPG** revised (under the section "Indication for use of Gemcitabine (and Cisplatin) Class II Drug", now reads "For advanced urothelial carcinoma"): Palliative therapy for urothelial carcinoma using cisplatin and gemcitabine
- **GUBCV** revised (premedications instructions): Therapy for transitional cell cancers using carboplatin-vinblastine
- **HNDE** new: Recurrent and metastatic nasopharyngeal cancer using cisplatin and etoposide
- **LUDOC** revised (infusion rate): Second-line treatment for advanced non-small cell lung cancer (NSCLC) with docetaxel (Taxotere®)
- **LUPAVESE** revised (antiemetic instructions and Etoposide reaction instructions): Treatment for extensive stage small cell lung cancer (SCLC) with cisplatin, doxorubicin, vincristine and etoposide (PAVE)
- **LUPAVESL** revised (antiemetic instructions and etoposide reaction instructions): Concurrent EP and thoracic radiotherapy for limited stage SCLC using cisplatin, doxorubicin, vincristine and etoposide
- **LUPG** new: Treatment of malignant mesothelioma with cisplatin and gemcitabine
- **LYCHOP** revised (cyclophosphamide preparation instructions): Treatment of lymphoma with doxorubicin, cyclophosphamide, vincristine and prednisone (CHOP)
- **LYRITUX** revised (under the treatment section, added "For All Cycles: Treatment not to start after 1300 unless physician is in the building during entire time of dosage increases and until patient is at stable rate."): Treatment of lymphoma with single agent rituximab

PATIENT EDUCATION

Breast Cancer Chemotherapy Information

Information handouts on a number of treatment protocols that have been specifically developed for patients are now available on the BC Cancer Agency website (www.bccancer.bc.ca) under Health Professionals Info, Chemotherapy Protocols, Information for the Patient.

Natural Health Products and Breast Cancer

A patient information handout has been developed by the BCCA Breast Tumour Group. This is now available on the BC Cancer Agency website (www.bccancer.bc.ca) under Health Professionals Info, Cancer Management Guidelines, Breast Tumour, Patient Resources.

FOCUS ON OXALIPLATIN-BASED TREATMENT FOR COLORECTAL CANCER

UGIFOLFOX is the BCCA protocol indicated for palliative combination chemotherapy in metastatic colorectal cancer using oxaliplatin, 5-fluorouracil and folinic acid (leucovorin). Oxaliplatin reimbursement requires undesignated approval from BCCA. The product is made by Sanofi Synthelabo, and is available only through Health Canada's Special Access Program. It may take up to two weeks for the drug to arrive in B.C. after approval from Health Canada has been obtained.

Oxaliplatin is an alkylating agent, belonging to a new class of platinum agents. It is not generally cross-resistant to either cisplatin or carboplatin, and has been shown to be synergistic with fluorouracil and the active metabolite of irinotecan, SN-38. The NCIC CO13 trial is currently looking at a comparison of a combination of treatments involving oxaliplatin, irinotecan and fluorouracil.

Dosing Regimen

The UGIFOLFOX protocol uses Oxaliplatin at a dose of 100 mg/m². Although doses of 85 mg/m² have been used, the highest response rate has been observed with 100 mg/m². Fluorouracil is dosed at 2400 mg/m², with an escalation to 3000 mg/m² at cycle 3, if the patient has experienced less than or equal to Grade 2 toxicity. Effective December 1, 2002, the dose of folinic acid was increased from 200 mg/m² to 400 mg/m². This was done to

standardize the BCCA treatment to the European protocol, FOLFOX6, now the standard FOLFOX regimen in Europe. Note that folinic acid is available in Canada as a racemic mixture of D- and L-isomers (Leucovorin). The L-isomer is deemed to be responsible for the biological activity and may have a more favourable profile of physical compatibility with other drugs. L-isomer only folinic acid is available in France (Elvorine®) and the UK (Isovorin®).

Research in Europe is looking at increasing the dose of oxaliplatin even further. The FOLFOX7 protocol is being used in a phase II study of high dose intensity oxaliplatin (130 mg/m²) combined with a lower dose of Fluorouracil (2400 mg/m² with no dose escalation). Initial results indicate this regimen is highly active, with good tolerability in pre-treated patients resistant to Folinic Acid and Fluorouracil, in metastatic colorectal cancer.

Administration of Oxaliplatin

Of particular interest in this protocol is the question of concurrent administration of oxaliplatin and folinic acid. The administration options at this time are to administer the two drugs sequentially, to administer them concurrently through a peripheral line, or to administer them concurrently through a central venous line (e.g., PICC). Currently, the protocol indicates that oxaliplatin and folinic acid may be infused over the same 2-hour period. It is key that the two drugs mix minimally in the IV tubing. The most cost-effective way of doing this is to connect a second "primary" line to the lowest side port of the true primary IV. You can then infuse one drug through each of these primary lines as a secondary medication. A Y-connector, placed directly before the IV site, can be used to achieve the same goal but involves extra expense. These drugs should not be combined in the same infusion bag. Oxaliplatin is not compatible with normal saline or other alkaline solutions; therefore folinic acid is diluted using D5W, and lines should not be flushed with saline.

Toxicities

Peripheral sensory neuropathy is a dose-limiting side effect of oxaliplatin, with symptoms including sensory ataxia, and dysesthesia of the limbs, mouth, throat and larynx. This side effect may be

worsened on exposure to cold, and patients are counseled to avoid cold drinks and exposure to cold air, especially on the day of oxaliplatin treatment. Dose modifications for neurologic toxicity are outlined in the protocol.

Other dose-limiting side effects for this protocol include hematologic toxicities (myelosuppression), and non-hematologic, non-neurologic toxicities (diarrhea and mucositis). Oxaliplatin as a single agent causes only a 4% occurrence in mucositis, but this increases to a 42% occurrence when combined with 5FU and folinic acid. An additive effect is also seen in diarrhea, when as a single agent oxaliplatin causes a 41% occurrence, which is increased to 58% when combined with 5FU and folinic acid. Dose modifications for these side effects are outlined in the protocol.

References:

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- B.C. Cancer Agency Gastrointestinal Tumour Group. BCCA protocol summary for palliative combination chemotherapy for metastatic colorectal cancer using oxaliplatin, 5-fluorouracil and folinic acid (leucovorin) (UGIFOLFOX). Vancouver, British Columbia: BC Cancer Agency; 1 December 2002.
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- Personal communication. S Walisser, BSc(Pharm), Professional Practice Leader, BCCA, 31 October 2002.
- Personal communication. D Meyer, RN, Clinical Resource Nurse, Vancouver Island Health Authority, 25 September 2002.
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- Milano G, Renee N. Analysis of the stability of 5-fluorouracil (new French preparation)-folinic acid admixtures. *Bull Cancer (Paris)* 1995;82(3):189-95.
- Lokiec F, Amirault P, Bonnans H, et al. Stability of 5-fluorouracil-folinic acid mixture: Influence of

concentrations, container and form of folinic acid. *Bull Cancer (Paris)* 1999;86(11):946-54.

- Chamorey E, Milano G. Place du LV5FU2 et de l'irinotecan dans le cancer du côlon métastatique. *Compatibilité physico-chimique de Campto® et d'Elvorine®. Thérapeutique et pratique hospitalières* 2000;11(56):2-7.

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CANCER DRUG MANUAL

The Cancer Drug Manual is available on the BC Cancer Agency website www.bccancer.bc.ca/cdm/. Patient information handouts for cancer drugs are available on the BC Cancer Agency website (www.bccancer.bc.ca) under Health Professionals Info, Drug Database, Drug Index (Patient).

COMMUNITIES ONCOLOGY NETWORK

Chemotherapy Nurse Certification
Congratulations to the following RNs who have completed BCCA Chemotherapy Certification in 2002.

Community Cancer Centre Nurses

Bonita Cahill (Burnaby)
Janice McDonald (Kamloops)
Leighanne McElgunn (New Westminster)

Community Cancer Service Nurses

Karen Oliver (Port Alberni)
Brenda DuVuyst (Dawson Creek)

Regional Cancer Centre Nurses

Agnes Wiewiora (VC)
Terri Carapita (VC)
Elizabeth Huber (VC)
Laura Preston (FVC)
Michelle Moore (VC)
Arda Leete (VC)
Kati Debelic (VC)

Wendy Ennion (VC)

Community Hospital Nurses

Liz Chamberlin (Williams Lake)

Linda Hicks (Williams Lake)

Darlene Peterson (Abbotsford)

Chemotherapy Courses 2003

4 courses have been scheduled for 2003. The 2 classroom days for each of these courses are:

February 16, 17

June 16, 17

September 22, 23

November 17, 18

Please call Judy Oliver at (604) 8776098, L. 2639 or Email joliver@bccancer.bc.ca for further information about these courses.

Nursing Section on BCCA Website At the Partners in Oncology Conference in November, we announced plans to create a nursing section within the BCCA website. Plans are moving along and starting January 13, 2003, you will find the website up and running. We have identified 3 main areas for our website:

- Resources for practice
- Communication
- Education

Our first priority is to make our Nursing References available on-line and this might take a little time. In the meantime, look for the listing of the oncology nursing educational events that we will be offering in the coming year!

Submitted by

Judy Oliver, RN, BScN, MEd

Education Resource Nurse

BCCA

**PROVINCIAL SYSTEMIC THERAPY
PROGRAM POLICIES**

BC Cancer Agency Systemic Therapy Policies are available on the BC Cancer Agency website (www.bccancer.bc.ca) under Health Professionals Info, Chemotherapy Protocols, Policies and Procedures.

LIBRARY/CANCER INFORMATION CENTRE

Unconventional Cancer Therapies Manual

is available on the BC Cancer Agency website www.bccancer.bc.ca under Patient/Public Info, Unconventional Therapies. The manual consists of 46 short monographs on the more commonly used unconventional cancer therapies (e.g., Essiac, vitamins, teas, shark cartilage) and includes tips for the patient and family on how unconventional therapies can be evaluated. For each therapy the manual provides proponent/advocate claims, as well as evidence-based evaluation/critique quotations from the literature.

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Drug Information	Ext 6275	robrien@bccancer.bc.ca
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Centre for the Southern Interior (CCSI)	(250) 712-3900	Toll-Free 1-(888)-563-7773
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REGIONAL CANCER CENTRE ACCESS

BULLETIN UPDATES		LOCATION	
Cancer Drug Manual		H:\everyone\systemic\chemo\cancer drug manual monographs	
Pre-Printed Orders		H:\everyone\systemic\chemo\Orders\VCC	
BRAJCEF-G	GIFUFA	GIRAI	LUPAVESE
BRAVDOC	GIFFAD	GIRLAIFF	LUPAVESL
BRAVTR	UGIFOLFOX	GUAVPG	LUPG
BRAVTRNAV	GIFUR2	GUBCV	LYCHOP
CNCCV	GIGAI	HNDE	LYRITUX
CNTEMOZ	GIIRINALT	LUDOC	
Protocol Summaries		H:\everyone\systemic\chemo\Protocol\tumour site"	
Index of Protocol Summaries		Index_NT or Index_W6	
BRAJFEC	CNCCU	CNTEMOZ	LYGDP
Patient Education Handout		H:\everyone\systemic\chemo\Pt Education	
Provincial Systemic Therapy Policies		H:\everyone\systemic\chemo\policies	
Reimbursement		H:\everyone\systemic\chemo\Reimburs	
Benefit Drug List (1 Dec 02)	BenefitList.doc	Filgrastim Usage Form (Oct 02) GCSF form.doc	
Class 2 Form (1 Dec 02)	Class2.doc	Undesignated Indication Form (Nov 02) Undesig.doc	

For easy access, double-click your systemic chemo icon.

We appreciate your comments. Write us at bulletin@bccancer.bc.ca

BC CANCER AGENCY SYSTEMIC THERAPY UPDATE FAX REQUEST FORM

FAX (604) 877-0585

bulletin@bccancer.bc.ca

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Patient Education Handout (also available on our website www.bccancer.bc.ca)				
Pre-printed Orders:				
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Protocol Summaries: (also available on our website www.bccancer.bc.ca)				
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<input type="checkbox"/> CNCCU		<input type="checkbox"/> LYGDP		
<input type="checkbox"/> Index: Protocol Summaries (current month)				
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