BC Cancer Agency

Systemic Therapy Update

Volume 8, Number 1 *for health professionals who care for cancer patients* January 2005
Website access at http://www.bccancer.bc.ca/STUpdate/

INSIDE THIS ISSUE

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

EDITOR'S CHOICE

HIGHLIGHTS OF PROTOCOL REVISIONS

The **Lung Tumour Group** has two revised protocols this month for the treatment of malignant mesothelioma. The main revision is the addition of **carboplatin** as an alternative to **cisplatin** to either **pemetrexed (LUMMPPEM**) or **gemcitabine** (**LUMMPG**). The addition of carboplatin into these protocols is to provide an alternative platinum for patients in whom cisplatin is contraindicated because of potential nephrotoxicity. Note that the pemetrexed protocol code has been changed from LUCISPEM to LUMMPPEM to reflect the inclusion of both platinum agents.

The **BMT/Leukemia Group** has recently revised the **BMTMM0301** protocol for multiple myeloma. The first change is that the administration of melphalan will be on day -1 instead of day -2. Review of published data from other major myeloma treatment centers demonstrates the safety of administering the melphalan on day -1. Furthermore, pharmacokinetic data indicates that melphalan is metabolized well within 24 hours after its administration. The advantage of this change is the reduction in the days of neutropenia and hospital stay. The second change is that the dose modification for renal failure of melphalan from 200mg/m2 to 140mg/m2 will be done if the creatinine clearance is less than 50 mL/min instead of 60 mL/min. Melphalan spontaneously hydrolyzes in the plasma and renal metabolism is minimal. The advantage of lowering the creatinine threshold is that more patients will be allowed to receive an optimal dose of melphalan. The creatinine clearance can either be measured or calculated. If both are available the higher value should be used in dose calculation.

All **docetaxel-based protocols** have been revised to allow the option of infusing the drug with or without upward titration of infusion rate. The original titration of infusion rate was based on the experience of high incidence of hypersensitivity reactions when Docetaxel was an investigational drug. This incidence has been greatly reduced with appropriate premedications and currently slow titration of infusion rate is not routinely needed. See under List of New and Revised Protocols for the complete list of protocols affected.

CANCER DRUG MANUAL

Limited Revision of BCG and Docetaxel Monographs The **BCG** monograph has been revised to mainly clarify the availability of products of different strains and precautions prior to BCG use (corticosteroid use, PPD skin test) as well as the lack of interaction between intravesical BCG and urethral lubricants.

The **docetaxel** monograph has been revised to reflect the current change in practice of infusion time (see Editor's Choice for more details).

Revised Patient Handouts on Cancer Drugs The patient information handouts for drugs which are used for lymphomas and haematological malignancies have been revised. These agents may be used as continuous daily dosing to control leukemias of either lymphoid or myeloid origins. As such, caution on the anticipated myelosuppression differs from that with myelosuppressive drugs in solid tumours. The following drugs have been revised:

- busulfan
- chlorambucil
- cytarabine
- hydroxyurea
- methotrexate (oral)
- thioguanine

The Cancer Drug Manual is available on the BC Cancer Agency website www.bccancer.bc.ca/cdm/.

PATIENT EDUCATION

Revised Patient Handouts on Cancer Drugs The patient information handouts for drugs which are mainly used for lymphomas and haematological malignancies have been revised. See under Cancer Drug Manual for more details.

Patient information handouts for cancer drugs are available on the BC Cancer Agency website (www.bccancer.bc.ca/DrugDatabasePt/) under Health Professionals Info, Cancer Drug Manual, Drug Information for the Patient. For treatment protocol specific information, go to the BC Cancer Agency website (www.bccancer.bc.ca) under Health Professionals Info, Chemotherapy Protocols, Information for the Patient.

FOCUS ON CHEMOTHERAPY INDUCED DIARRHEA

Diarrhea is a serious adverse reaction that can occur in patients receiving chemotherapy. Dr. Amil Shah of the B.C. Cancer Agency Gastrointestinal Tumour Group has recently presented the results of two multi-centre studies to evaluate the impact of chemotherapy induced diarrhea (CID) at the 2004 ASCO. The abstracts for the studies are available on the ASCO website (www.asco.org) and in the post-ASCO supplement of the Journal of Clinical Oncology (abstracts 6087 (1) and 6111 (2)). The two retrospective cohort studies demonstrated that CID:

- Occurs after the first cycles more than 50% of the time
- Often leads to suboptimal treatment (delays, dose reductions, changes in chemotherapy agents, and discontinuation of chemotherapy)
- Frequently leads to hospitalizations
  - Can result in deaths
  - Is a costly adverse effect:
    - The mean cost of illness is $2,559 per patient(1)
    - The mean cost of hospitalization is $8,230 per patient(2)

The results of the two cohort studies above reinforce recent findings from an independent panel that reviewed two NCI-sponsored studies that were suspended early in 2001. The two studies were the Cancer and Leukemia Group B protocol C89803 and the North Center Cancer Treatment Group protocol N9741(3). They both had a high rate of early deaths in the arms using irinotecan with fluorouracil and leucovorin for the treatment of colorectal cancer. The independent panel found that some of the deaths were the result of a GI syndrome that involved diarrhea along with other symptoms such as nausea, vomiting, abdominal cramping and anorexia. This syndrome was often associated with dehydration, electrolyte abnormalities, neutropenia and fever.

It is essential that patients be monitored for signs of CID when being treated with irinotecan and/or fluorouracil or any other chemotherapy regimens that are commonly associated with diarrhea. Identifying and treating the symptoms early can prevent progression to more serious symptoms such as dehydration and electrolyte disturbances that can lead to hospitalizations and even deaths. They should be monitored weekly for at least the first cycle. The BC Cancer Agency recommendations on the management of CID can be found on the BCCA website:

- Medical Management www.bccancer.bc.ca/HPI/CancerManagementGuidelines/SupportiveCare/Chemotherapy-Induced+Diarrhea.htm(4)
- Nutritional Management www.bccancer.bc.ca/HPI/NutritionalCare/SMG/default.htm(5)

References:
1. Dranitsaris G, Maroun J, Shah A. Severe chemotherapy induced diarrhea (CID) in patients with colorectal cancer: A cost of illness analysis. J Clin Oncol (Meeting Abstracts) 2004;22(14_suppl):6087-.
2. Shah A, Maroun J, Dranitsaris G. The cost of hospitalization secondary to severe chemotherapy induced diarrhea (CID) in patients with colorectal cancer. J Clin Oncol (Meeting Abstracts) 2004;22(14_suppl):6111-.
3. Rothenberg ML, Meropol NJ, Poplin EA, Van Cutsem E, Wadler S. Mortality associated with irinotecan plus bolus fluorouracil/leucovorin: summary findings of an independent panel. J Clin Oncol 2001;19(18):3801-7.
4. B.C. Cancer Agency. BCCA Guidelines for Management of Chemotherapy-induced Diarrhea. Vancouver, British Columbia; 2004. [cited from URL: http://www.bccancer.bc.ca/HPI/CancerManagementGuidelines/SupportiveCare/Chemotherapy-Induced+Diarrhea.htm.
5. B.C. Cancer Agency Nutrition Services. Nutritional Guidelines or Symptom Management: Diarrhea. Vancouver, British Columbia; 1998. [cited from URL: http://www.bccancer.bc.ca/HPI/NutritionalCare/SMG/default.htm.

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NURSING UPDATE

On-line Continuing Education Program of the Month:

"Hot Flashes in Cancer"
This continuing education program offered through ONS describes the pathophysiology of hot flashes in men and women, and discusses a range of strategies for managing hot flashes. It is available at http://www.cancersourcern.com/Nursing/CE/CECourse.cfm?courseid=141&contentid=22765 or through a link to Cancersource in the BCCA website under Nursing then Education.

Oncology Nurses Continue Networking
In response to discussion at the Partners in Cancer Care Conference in November 2004, we are generating an email list of nurses who are involved oncology care around BC. We hope that this strategy will give us more information about the questions you have about cancer patient care and will enable oncology nurses to make important connections and continue to share their knowledge and skill with others in the province.

If you attended the conference your name will be automatically added to the list. If you did *not* attend the conference and would like to be added to the list please leave a message at (604) 8776098, L. 2623. We will include information about suggested uses of the mailing list in the first email that goes out in early January 2005.

LIST OF NEW AND REVISED PROTOCOLS

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

- **BMTMM0301** revised (melphalan dosing day and dose adjustment for renal function): Conditioning therapy for autologous stem cell transplant using high dose melphalan in the treatment of multiple myeloma
- **BRAVCAD** revised (docetaxel infusion rate clarified): Palliative therapy for metastatic breast cancer using docetaxel and capecitabine
- **BRAVDOC** revised (docetaxel infusion rate clarified): Palliative therapy for metastatic breast cancer using docetaxel (Taxotere®)
- **BRAVDOC7** revised (docetaxel infusion rate clarified): Palliative therapy for metastatic breast cancer using weekly docetaxel (Taxotere®)
- **BRLAACD** revised (docetaxel infusion rate clarified): Treatment of locally advanced breast cancer using doxorubicin and cyclophosphamide followed by docetaxel (Taxotere®)
- **GIIR** revised (title and eligibility updated): First-or second-line palliative chemotherapy for metastatic colorectal cancer using irinotecan
- **GOCXCAD** revised (docetaxel infusion rate clarified): Treatment of advanced/recurrent non-small cell cancer of the cervix with carboplatin and docetaxel in ambulatory care settings
- **GOENDCAD** revised (docetaxel infusion rate clarified): Treatment of primarily advanced or recurrent endometrial cancer using carboplatin and docetaxel

- **GOOVCADM** revised (docetaxel infusion rate clarified): Primary treatment of invasive epithelial ovarian, fallopian tube and primary peritoneal cancer, with no visible residual tumour (moderate-high risk)
- **GOOVCADR** revised (docetaxel infusion rate clarified): Second line treatment using docetaxel and carboplatin for epithelial ovarian cancer relapsing after primary treatment
- **GOOVCADX** revised (docetaxel infusion rate clarified): Primary treatment of visible residual (extreme risk) invasive epithelial ovarian cancer
- **GOOVDOC** revised (docetaxel infusion rate clarified): Treatment of progressive, platinum-refractory epithelial ovarian carcinoma, primary peritoneal carcinoma or fallopian tube carcinoma using docetaxel
- **UGUNAJPG** new : Neo-adjuvant therapy for urothelial carcinoma using cisplatin and gemcitabine
- **GUPDOC** revised (docetaxel infusion rate clarified, eligibility revised, reference added): Palliative therapy for metastatic hormone refractory prostate cancer using docetaxel
- **LUCISDOC** revised (docetaxel infusion rate clarified): First-line treatment of advanced non-small cell lung cancer (NSCLC) with cisplatin and docetaxel
- **LUCISPEM** deleted (replaced by LUMMPPEM) : Treatment of malignant mesothelioma with cisplatin and pemetrexed (Alimta®)
- **LUCMT1** revised (typo corrected for post-hydration): Combined chemotherapy and radiation treatment for stage 3 non-small cell lung cancer
- **LUDOC** revised (docetaxel infusion rate clarified): Second-line treatment for advanced non-small cell lung cancer (NSCLC) with docetaxel (Taxotere®)
- **LUMMPG** revised (carboplatin added): Treatment of malignant mesothelioma with platinum and gemcitabine
- **LUMMPPEM** new (replacing LUCISPEM, carboplatin added): Treatment of malignant mesothelioma with platinum and pemetrexed (ALIMTA®)
- **LYGDP** revised (dosing of gemcitabine for renal impairment clarified): Treatment of lymphoma with gemcitabine, dexamethasone and cisplatin
- **ULYRITZ** new: Palliative therapy for lymphoma using radioimmunotherapy rituximab-priming for ibritumomab ^{90}Y (Zevalin®)

WEBSITE RESOURCES

Reimbursement and Forms: The current Benefit Drug List, Class II forms and Undesignated Indication Application forms are available on the BC Cancer Agency website under Health Professionals Info, Chemo-therapy Protocols, Frequently Used Forms (http://www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Forms.htm).

Cancer Management Guidelines: The Cancer Management Guidelines are available on the BC Cancer Agency website (http://www.bccancer.bc.ca/CaMgmtGuidelines/) under Health Professionals Info, Cancer Management Guidelines.

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

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

The Unconventional Cancer Therapies Manual is available on the BC Cancer Agency website www.bccancer.bc.ca under Patient/Public Info, Unconventional Therapies.

IN TOUCH	www.bccancer.bc.ca	bulletin@bccancer.bc.ca
BC Cancer Agency	(604)-877-6000	Toll-Free 1-(800)-663-3333
Communities Oncology Network	Ext 2744	jvenkate@bccancer.bc.ca
Education Resource Nurse	Ext 2638	nursinged@bccancer.bc.ca
Nursing Professional Practice	Ext 2623	ilundie@bccancer.bc.ca
Pharmacy Professional Practice	Ext 2247	gconcon@bccancer.bc.ca
Provincial Systemic Therapy Program	Ext 2247	gconcon@bccancer.bc.ca
Communities Oncology Network Pharmacist	Ext 6277	francish@bccancer.bc.ca
Drug Information	Ext 6275	druginfo@bccancer.bc.ca
Library / Cancer Information	Ext 2698	request@bccancer.bc.ca
Update Editor	Ext 2288	mdelemos@bccancer.bc.ca
Centre for the Southern Interior (CCSI)	(250) 712-3900	Toll-Free 1-(888)-563-7773
Fraser Valley Centre (FVCC)	(604)-930-2098	Toll-Free 1-(800)-523-2885
Vancouver Centre (VCC)	(604)-877-6000	Toll-Free 1-(800)-663-3333
Vancouver Island Centre (VICC)	(250) 519-5500	Toll-Free 1-(800)-670-3322

BC CANCER AGENCY SYSTEMIC THERAPY UPDATE REQUEST FORM

FAX (604) 877-0585
bulletin@bccancer.bc.ca

TO SUBSCRIBE: FAX OR EMAIL YOUR REQUEST OR CALL @ 877-6098 LOCAL 2247

FOR URGENT REQUESTS PLEASE CALL (604) 877-6098 LOCAL 2247
OR TOLL-FREE IN BC 1-800-663-3333 LOCAL 2247
PLEASE FEEL FREE TO MAKE COPIES FOR YOUR COLLEAGUES

I WOULD PREFER TO RECEIVE THIS INFORMATION VIA:

☐ E-mail	@
☐ Fax	( ) Attn:

UPDATES **Please ☑ Fax-Back information below**:

Most items have been hyperlinked for easy access

☐ All items for **January 2005 (Vol 8 № 1)**				
Cancer Drug Manual Monographs: (also available on our website www.bccancer.bc.ca)				
☐ BCG ☐ Docetaxel				
Patient Education Handout: (also available on our website www.bccancer.bc.ca)				
☐ busulfan	☐ chlorambucil	☐ cytarabine	☐ hydroxyurea	☐ methotrexate	☐ thioguanine
Protocol Summaries: (also available on our website www.bccancer.bc.ca)			Index of Protocol Summaries	
☐ BMTMM0301	☐ BRAVCAD	☐ BRAVDOC	☐ BRAVDOC7	☐ BRLAACD
☐ GIIR	☐ GOCXCAD	☐ GOENDCAD	☐ GOOVCADM	☐ GOOVCADR
☐ GOOVCADX	☐ GOOVDOC	☐ UGUNAJPG	☐ GUPDOC	☐ LUCISDOC
☐ LUCISPEM	☐ LUCMT1	☐ LUDOC	☐ LUMMPG	☐ LUMMPPEM
☐ LYGDP	☐ ULYRITZ			
Provincial Systemic Therapy Program Policies				
Reimbursement (also available on our website www.bccancer.bc.ca)				
☐ Benefit Drug List (01 January 2005)		☐ Class 2 Form (01 January 2005)		
Systemic Therapy Update Index (also available on our website www.bccancer.bc.ca)				
☐ Jan-Dec 2000	☐ Jan-Dec 2001	☐ Jan-Dec 2002	☐ Jan-Dec 2003	
☐ Jan-Jun 2004				