

# **Systemic Therapy Update**

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for health professionals who care for cancer patients 
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Available on website www.bccancer.bc.ca

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

#### **HIGHLIGHTS OF PROTOCOL CHANGES**

A new **Bone Marrow Transplant** protocol (BMTIVBUCY) has been introduced in this issue. This is a myeloablative conditioning therapy prior to haematopoietic stem cell transplantation for myeloid malignancies using IV busulfan and cyclophosphamide. Busulfan is commonly used as a component of conditioning regimens for hematopoietic stem cell transplantation. However, precise delivery of the oral formulation is compromised by erratic gastrointestinal absorption. The BMTIVBUCY protocol uses the formulation of busulfan, which has been shown to be well tolerated and to provide more predictable bioavailability.

#### **BENEFIT DRUG LIST**

- Busulfan IV for stem cell transplantation for myeloid malignancies
- Dexrazoxane (Class II) for pediatric patients with metastatic osteosarcoma treated on the CPG AOSTO212 study

These new indications are now added to the benefit list. Where applicable, a Class II form must be completed and submitted to the Provincial Systemic Therapy Program before the drug will be dispensed at a regional cancer centre or reimbursed to a community hospital.

Susan O'Reilly, MB, FRCPC Provincial Systemic Program Leader

The current Benefit Drug List, Class II forms and Undesignated Indication Application forms are available on the BC Cancer Agency website (<a href="https://www.bccancer.bc.ca">www.bccancer.bc.ca</a>) under Health Professionals Info, Chemotherapy Protocols, Frequently Used Forms

#### LIST OF NEW AND REVISED PROTOCOLS

INDEX to BC Cancer Agency Protocol Summaries revised monthly (include 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.

- BMTIVBUCY new: Myeloablative conditioning therapy prior to hematopoietic stem cell transplantation for myeloid malignancies using IV busulfan and cyclophosphamide
- LYCYCLO revised (prednisone addition clarified): therapy of lymphoma, Hodgkin's lymphoma, chronic lymphocytic leukemia or multiple myeloma using cyclophosphamide

■ **USAAVGI** revised (duration of treatment): Treatment of advanced c-kit positive gastrointestinal stromal cell tumours (GIST's) using imatinib (Gleevec®)

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

#### **CANCER MANAGEMENT GUIDELINES**

The Cancer Management Guidelines are 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.

- BRAVDOC7 new: Palliative therapy for metastatic breast cancer using docetaxel (Taxotere<sup>®</sup>)
- **BRAVTR** revised (appointment times): Palliative therapy for metastatic breast cancer using trastuzumab (Herceptin®)
- **BRAVTRAP** revised (appointment times): Palliative therapy for metastatic breast cancer using trastuzumab (Herceptin®) and paclitaxel (Taxol®) as first-line treatment for recurrent breast cancer refractory to anthracycline adjuvant chemotherapy
- BRAVTRNAV revised (appointment times):
   Palliative therapy for metastatic breast cancer using trastuzumab (Herceptin®) and vinorelbine
- **GOOVGEM** new: Palliative chemotherapy for re-treatment of ovarian, tubal, and peritoneal cancer using gemcitabine
- **GOOVTOP** revised (reference to use of gemcitabine and topotecan): Treatment of relapsed/progressive epithelial ovarian, fallopian tube or primary peritoneal cancer using topotecan
- **GOTDLR** revised (potassium chloride in hydration fluid, medication administration records): Therapy for low risk gestational trophoblastic neoplasia (GO 94 02) using methotrexate, leucovorin and actinomycin D

- GUSCPE revised (cisplatin and etoposide administration sequence): Therapy of genitourinary small cell tumours with a platin and etoposide
- GUVEIP revised (potassium chloride in hydration fluid): Nonseminoma consolidation/salvage protocol for germ cell cancer using vinblastine, cisplatin, ifosfamide and mesna
- GUVIP2 revised (potassium chloride in hydration fluid): Nonseminoma consolidation/salvage protocol (synonyms: GU-88-02) (using etoposide, cisplatin, ifosfamide, mesna)
- **LUALTL** revised (cisplatin and etoposide administration sequence): Therapy for limited stage SCLC using alternating CAV/EP plus early thoracic irradiation using cyclophosphamide, doxorubicin, vincristine, etoposide and cisplatin
- **LUPAVESE** revised (cisplatin and etoposide administration sequence): Treatment For extensive stage small cell lung cancer (SCLC) with cisplatin, doxorubicin, vincristine and etoposide (PAVE)
- **LUPAVESL** revised (cisplatin and etoposide administration sequence): Treatment For limited stage small cell lung cancer (SCLC) with cisplatin, doxorubicin, vincristine and etoposide (PAVE), and cisplatin and etoposide (EP) concurrent with early thoracic irradiation
- LUPE revised (cisplatin and etoposide administration sequence): Palliative therapy of selected solid tumours using cisplatin and etoposide
- **LUPESL** revised (cisplatin and etoposide administration sequence): Treatment for limited stage small cell lung cancer (SCLC) with etoposide and cisplatin (EP) and early thoracic irradiation
- LYCVP revised (prednisone administration):
   Treatment of advanced indolent lymphoma using cyclophosphamide, vincristine, prednisone (CVP)
- **LYCHOP** revised (prednisone administration): Treatment of lymphoma with doxorubicin, cyclophosphamide, vincristine and prednisone (CHOP)
- LYCHOP-R revised (prednisone administration): Treatment of lymphoma with

- doxorubicin, cyclophosphamide, vincristine, prednisone and rituximab (CHOP-R)
- LYCOPP revised (Cyclophosphamide preparation and appointments): Treatment of Hodgkin's lymphoma using cyclophosphamide, vincristine, and prednisone
- LYODBEP revised (prednisone administration):
   Treatment of Hodgkin's disease with vincristine, doxorubicin, bleomycin, etoposide and prednisone
- LYHDMTXP revised (medication administration records): Treatment of primary intracerebral lymphoma with high dose methotrexate
- LYHDMTXR revised (medication administration records): Treatment of leptomeningeal lymphoma or recurrent intracerebral lymphoma with high dose methotrexate
- LYSNCC revised (cyclophosphamide preparation, prednisone instructions and appointments): Treatment of Burkitt lymphoma with cyclophosphamide and methotrexate
- PUM revised (antiemetics): Monotherapy for metastatic carcinomas of unknown primary using mitomycin (Standard)
- **SAIME** new: Etoposide, ifosfamide-mesna for patients with newly diagnosed Ewing's sarcoma/peripheral neuroectodermal tumor (PNET) or rhabdomyosarcoma or advanced soft tissue or bony sarcomas

#### **PATIENT EDUCATION**

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

### FOCUS ON HEALTH CANADA SPECIAL ACCESS PROGRAMME (SAP)

The Special Access Programme (SAP) is a Canadian program designed to provide non-marketed drugs to practitioners for use in patients with serious or life-threatening conditions, when conventional therapies have failed, are unsuitable, or unavailable. These drugs would otherwise be

unavailable for use in Canada. Pharmaceuticals, biologics and radiopharmaceuticals not approved for sale in Canada are included under the SAP.

Drugs that have been obtained by the BCCA through SAP include alemtuzumab, amifostine, bexarotene, fulvestrant (Faslodex), foscarnet, hyaluronidase, lanreotide, mafostine, methadone IV, milfostine, oxaliplatin, pemetrexed, thalidomide and gefitinib (Iressa®).

#### **Ordering**

SAP drugs may come under the BCCA benefit list as either a Class II drug, or require undesignated approval. No SAP drug is currently identified as a Class I drug, although this may change in the future. Benefit status should be confirmed or undesignated approval obtained prior to requesting SAP approval from Health Canada. A Special Access Request (SAR) form is available on both the Health Canada web site or the BCCA website (under Health Professionals Info, Chemotherapy Protocols, Frequently Used Forms.) The SAR is faxed to Ottawa, where approval is then determined. Once approved, the drug may then be ordered from the manufacturer.

Each drug and each manufacturer may have different ordering processes. For example, when ordering oxaliplatin, a purchase order (PO) number must be attached to the SAR Form. Health Canada will forward its approval and the PO number to Sanofi, the manufacturer of oxaliplatin. Sanofi will then send the drug to the requesting pharmacy, quoting the PO number. However, a more complex process is involved when ordering thalidomide, which is manufactured by Celgene. In addition to the SAR form for Health Canada, a Thalidomide Request Form (TRF) together with a PO number must be sent to Celgene. Once approved by Health Canada, Celgene authorizes and releases only a one-month supply of thalidomide. Therefore, continued

treatment with thalidomide would require the physician repeat this entire ordering process each month (i.e., SAR and TRF faxed each month). These are just two examples of specific considerations for different drugs. It is beyond the scope of this article to cover the different ordering processes for all drugs currently used by the BCCA.

Payment for the drug is borne by the patient or the BCCA. SAP drugs are not automatically free of charge, as is often assumed. Cost is at the discretion of the manufacturer. This reaffirms the need to clarify benefit status prior to ordering, particularly for the CON sites, as reimbursement is not given by the BCCA retroactively.

#### Workload

Of interest, there has seen an increase in the workload associated with SAP drugs, in both the CON sites, as well as the regional cancer centres. In a comparison of the fiscal year of 2001-2002 with that of 2002-2003, there was a 392% increase in SA requests in the CON sites. At the regional cancer centres, an increase in SA requests ranged from 208% at the Centre for the Southern Interior, and 282% at the Vancouver Centre, to a 725% increase at the Vancouver Island Centre and a 1732% increase at the Fraser Valley Centre. This is partly attributed to the increased use of oxaliplatin, and to the increased number of drugs available for oncology treatment through the SAP.

Ouestions have arisen regarding the handling of drug when a patient moves from one city to another. For example, if a patient was approved for and received treatment with oxaliplatin at the Vancouver Island Centre, then moved to Fort St. John, what is the process for the patient to obtain drug for treatment in Fort St. John? Responsibility is usually passed from one community to another, via physician and pharmacy. The physician at the Vancouver Island Centre would transfer patient care to a physician in Fort St. John. The Fort St. John physician would then take responsibility for patient treatment and drug request, and the hospital pharmacy would be responsible for ordering the drug. On occasion, the physician in the initial centre (e.g., VIC) may consider retaining the responsibility of drug request, but indicate the drug be sent to the second pharmacy (e.g., Fort St. John). However, many physicians are reluctant to consider this process, as legally they are responsible for following the patient, and it would be difficult to do so, when physician and patient are located in

different communities. Occasionally, when a patient transfers from one community to another, there may be remaining drug left from previous treatments. Health Canada prefers not to transfer stock from one facility to another, although in rare circumstances, it may consider this on a case-by-case basis.

Please contact Health Canada or the manufacturer for details on specific drugs, or contact the pharmacy department of your regional cancer centre for guidance in this process.

Submitted by: Nancy Coady Pharmacy CON Educator BCCA – Vancouver Island Centre

#### SUPPORTIVE CARE: ASK THE PHARMACIST

#### **Long-Acting Opioid Analgesics**

Q: Are MS Contin 30 mg tablets interchangeable with M Eslon 30 mg tablets?

A: No. *sustained-release* products are automatically non-interchangeable until they have been reviewed by the Drug Advisory Committee. Comparative bioequivalence data has been reviewed for Alti-Morphone SR, MS Contin, pms-Morphine Sulphate SR, and ratio-morphine SR and the committee determined that these products should hе considered interchangeable. Comparative bioequivalence data does not appear to be available for M Eslon so it is necessary to consult with a physician if you wish to substitute M Eslon for other products.

Adapted from: College of Pharmacists of British Columbia Bulletin Vol 28 No. 2 March/April 2003.

Since not all long-acting preparations are interchangeable, it is best to refer to drugs by generic name (e.g., morphine long-acting 30 mg, rather than MS Contin 30 mg or M Eslon 30 mg). This practice also allows the pharmacist to dispense the **low cost alternative.** 

When several drugs contain identical active ingredients, PharmaCare provides coverage only for the lower priced drugs. A patient has the choice of obtaining either the low cost alternative, or the product that is eligible for partial coverage, and pays the difference between the two prices (e.g., M Eslon 30 mg capsule is a full benefit drug, whereas MS Contin 30 mg tablet is only partial benefit).

#### Terminology:

Long-acting preparations

Some products are labelled as SR (sustained release), LA (long-acting), CONTIN (CONTINuous release)

Short-acting

Products are usually not specifically labelled as short acting, although some have the designation IR (e.g. MS-IR morphine immediate release, Oxy-IR oxycodone immediate release).

Since there are several different names for the various forms of opioid preparations (see list below), it is safe practice to refer to a medication by generic name and duration of action, and to educate other health professionals and patients to do the same.

### Opioid Single Ingredient Preparations: Oral Tablets & Capsules

#### CODEINE

- Codeine Phosphate 15 mg, 30 mg tablets
- Codeine Monohydrate-Codeine Sulfate Trihydrate

Codeine Contin 50 mg, 100 mg, 150 mg, 200 mg tablets

#### HYDROMORPHONE HCL

- Dilaudid 1 mg, 2 mg, 4 mg, 8 mg tablets
- PMS-Hydromorphone 1 mg, 2 mg, 4 mg, 8 mg tablets
- Hydromorph Contin 3 mg, 6 mg, 12 mg, 18 mg, 24 mg, 30 mg capsules

#### **MORPHINE**

Morphine HCl

M.O.S. 10 mg, 20 mg, 40 mg, 60 mg tablets M.O.S.-SR 30 mg, 60 mg tablets

Morphine Sulfate

Kadian 10 mg, 20 mg, 50 mg, 100 mg capsules

M-Eslon 10 mg, 15 mg, 30 mg, 60 mg, 100 mg, 200 mg capsules

M.O.S. Sulfate 5 mg, 10 mg, 25 mg, 50 mg tablets

MS Contin15 mg, 30 mg, 60 mg, 100 mg, 200 mg tablets

MS IR 5 mg, 10 mg, 20 mg, 30 mg tablets

PMS-Morphine 15 mg, 30 mg, 60 mg SR tablets

Ratio-Morphine SR (Alti-Morphone SR) 15 mg, 30 mg, 60 mg tablets

Statex 5 mg, 10 mg, 25 mg, 50 mg tablets

#### OXYCODONE HCL

- Oxy-IR 5 mg, 10 mg, 20 mg tablets
- OxyContin 10 mg, 20 mg, 40 mg, 80 mg tablets
- Supeudol 5 mg, 10 mg tablets

#### Submitted by:

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BCCA – Vancouver Island Centre

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#### **CANCER DRUG MANUAL**

**Rituximab** monograph has been revised to clarify the stability following admixture. The diluted solution for infusion is stable for 24 hours refrigerated and *an additional 12 hours* at room temperature.

The Cancer Drug Manual is available on the BC Cancer Agency website <a href="https://www.bccancer.bc.ca/cdm/">www.bccancer.bc.ca/cdm/</a>.

### PROVINCIAL SYSTEMIC THERAPY PROGRAM POLICIES

BC Cancer Agency Systemic Therapy Policies are available on the BC Cancer Agency website (<a href="www.bccancer.bc.ca">www.bccancer.bc.ca</a>) under Health Professionals Info, Chemotherapy Protocols, Policies and Procedures.

#### **PROVINCIAL DRUG INFORMATION**

#### **New Provincial Drug Information Specialist**

We are pleased to announce that Dr. Saira Ebrahim has recently joined the BC Cancer Agency as a Drug Information Specialist for the Provincial Systemic Therapy Program. Saira will be working with Dr. Robin O'Brien to answer drug information requests from across the province. She will be working out of the Vancouver Centre. Her other responsibilities include updating and maintaining the BCCA Cancer Drug Manual.

Saira has received her Bachelor of Science in Pharmacy from the University of Manitoba and her PharmD from UBC. She did her residency at the Vancouver General Hospital where she had worked in various clinical areas including general medicine, bone marrow transplant and the home IV infusion program. Her education and experience will be a great addition to the Provincial Drug Information Service. Saira may be reached Monday to Friday at (604) 877-6098 ext 2247.

#### LIBRARY/CANCER INFORMATION CENTRE

**Unconventional Cancer Therapies Manual** is available on the BC Cancer Agency website <a href="https://www.bccancer.bc.ca">www.bccancer.bc.ca</a> 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.

#### **Editorial Review Board**

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Vancouver Island Centre (VICC)	(250) 519-5500	Toll-Free 1-(800)-670-3322

#### REGIONAL CANCER CENTRE ACCESS

BULLETIN UPDATES			LOCATION				
Cancer Drug Manual		H:\everyor	e\systemic\chemo\cancer drug manual monographs				
Pre-Printed Orders		H:\everyone\systemic\chemo\Orders\VCC					
BRAVDOC7	BRAVTR	RAVTR BRAVTF		BRAVTRNAV		PUM	
GOOVGEM	GOOVTOP		GOTDLR	GUSCPE			
GUVEIP	GUVIP2		LUALTL	LUPAVESE			
LUPAVESL	LUPE		LUPESL	LYCVP			
LYCHOP	LYCHOP-R		LYCOPP	LYODBEP			
LYHDMTXP	LYHDMTXR		LYSNCC	SAIME			
Protocol Summaries		H:\everyone\systemic\chemo\Protocol\"tumour site"					
Index of Protocol Sumi	maries		Inc		Index_NT	or Index_W6	
BMTIVBUCY	LYCYCLO		USAAVGI				
Patient Education Handout		H:\everyone\systemic\chemo\Pt Education		ion			
Provincial Systemic Therap	Therapy Policies H:\every		everyone\systemic\chemo\policies				
Reimbursement		H:\everyone\systemic\chemo\Reimburs					
Benefit Drug List (Jul 03)	BenefitList.doc		Class 2 Form (July 03) Class2.doc				

For easy access, double-click your systemic chemo icon. We appreciate your comments. Write us at <a href="mailto:bulletin@bccancer.bc.ca">bulletin@bccancer.bc.ca</a>

#### BC CANCER AGENCY SYSTEMIC THERAPY UPDATE FAX REQUEST FORM

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

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

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☐All items for July 2003								
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