Volume 12, Number 3 for health professionals who care for cancer patients March 2009

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

INSIDE THIS ISSUE

- Editor's Choice Highlights of Changes in Protocols, Pre-Printed Orders and Patient Handouts Lung: Revised Protocols;
 Gastrointestinal: New Patient Handout and Protocol; Leukemia/BMT and Lymphoma/Myeloma: New Thalidomide-Based Protocols; Head and Neck: Elimination of Unsafe Abbreviations from Protocols; Sarcoma: New Imatinib Protocol
- <u>Drug Update</u> Multiple Myeloma REVLIMID® Access Program (MMRAP), Safety of Erythropoiesis Stimulating Agents
- <u>Cancer Drug Manual</u> New: Aprepitant Handout; Revised: BCG, Bleomycin, Temozolomide Monographs
- List of New and Revised Protocols, Pre-Printed Orders and Patient Handouts: New: UGIAVTZCAP, UGICAPIRI, UGICAPOX, UGICIRB, UGICOXB, LUAVVIN, LULAPERT, LUMMVIN, LUOTPE, LUOTPERT, LUSCPE, LUSCPERT, SAAVGIDD Revised: UGICIRB, UGICOXB, UGIFFIRB, UGIFFOXB, GIRCRT, UGISORAF, HNAMIRT, HNAVGEM, HNAVPG, HNCAFRT, UHNCETRT, HNDE, HNFUFA, HNFUP, HNFURT, HNLANPRT, HNLAPRT, HNM, HNPE, HNPRT, HNTSH, LUAJCAT, LUAJNP, LUAJPC, LUAVCAT, LUAVNP, LUAVPC, LUAVPEM, LUNAVP, LUPE, LUVIN, UMYLENDEX, SAAVGI
- Website Resources

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

EDITOR'S CHOICE:

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

The **Lung Tumour Group** is currently revising and renaming a number of its protocols. The changes will clarify the indications of these treatment protocols as well as identify any use of combined modality (chemoradiation). The protocol codes follow the general principles:

		Examples
Tumour types	Non-small cell lung cancer	LUAJ for adjuvant
		LUAVfor advanced LULAfor locally advanced (the code does not specify histology)
	Small cell lung cancer	LUSC
	Mesothelioma	LUMM
	Thymoma and other thoracic malignancy	LUOT
Drugs used	Single-agent regimen: three-letter code to represent the drug, preferably the generic name	erlotinib = ERL, docetaxel = DOC, oral etoposide = POE
	Combination regimen: single-letter code for each agent, preferably the generic names	paclitaxel/carboplatin = PC
Chemoradiation	Add the "RT" suffix to indicate use of radiation	LUSCPERT

As a result, a number of protocols have been revised or replaced (see List of New and Revised protocols in this issue for more details):

Old codes New codes

LUPE Replaced by five protocols: LULAPERT, LUOTPE, LUOTPERT, LUSCPE, LUSCPERT

LUAJCAT LUAJPC

LUAVCAT LUAVPC

LUNAVP LUAVNP

LUVIN Replaced by two protocols: LUAVVIN, LUMMVIN

The **Gastrointestinal Tumour Group** has developed four new patient information handouts to match existing treatment protocols UGICAPIRI, UGICAPOX, UGICIRB and UGICOXB. In addition, the tumour group has introduced a new protocol with temozolomide and capecitabine (UGIAVTZCAP). This is a first or second line treatment for patients with low to intermediate grade metastatic neuroendocrine tumours (NET) of the pancreas and who are ineligible for the GIENDO2 protocol. A BC Cancer Agency Compassionate Access Program (CAP) request must be approved prior to treatment with UGIAVTZCAP. Preliminary report of a phase II study suggests an overall response rate of 71% in patients treated with temozolomide and capecitabine for progressive metastatic pancreatic NET.

The **Head and Neck Tumour Group** has replaced the abbreviations from a number of its protocols. These abbreviations have been identified to be frequently misinterpreted and involved in medication errors by Institute for Safe Medication Practices (ISMP) of Canada. This is part of an ongoing effort to eliminate these abbreviations from all BC Cancer Agency protocols PPPOs to meet the Accreditation Canada standard.

The **Sarcoma Tumour Gro**up has introduced a new first-line treatment protocol for advanced gastrointestinal stromal cell tumours (GIST) using 800 mg dosing of imatinib (SAAVGIDD). This protocol is for patients with advanced GIST with disease progression while on 400 mg/day dose or with exon-9 mutation.

DRUG UPDATE

Lenalidomide for Multiple Myeloma Celgene has re-opened the Multiple Myeloma REVLIMID® Access Program (MMRAP) as of 17 February to provide compassionate supply of lenalidomide to patients with multiple myeloma. Enrollment of new patients will be active until 1 April 2009. The BC Cancer Agency is working to secure subsequent funding for patients after that date. Further information will become available in due course.

Safety of Erythropoeisis-Stimulating Agents (ESAs) Health Canada has recently revised the prescribing information of ESAs (**epoetin alfa** [EPREX®], **darbepoetin alfa** [ARANESP®]) for patients with cancer. Similar changes have been made by the US Food and Drug Administration. The new prescribing information recommends that:

- ESAs should only be used to treat **anemia** due to **concomitant**, **myelosuppressive chemotherapy**. If appropriate, red blood cell transfusion is preferred to manage anemia in patients with a "*reasonable long life expectancy*" and who are receiving myelosuppressive chemotherapy.
- The lowest dose of ESAs needed to avoid transfusion should be used to lower the risk of serious cardiovascular and thrombovascular events. Therapy should not be started if hemoglobin is 100 g/L or

higher and it should be held when hemoglobin reaches 120 g/L. ESAs should be discontinued after completion of a chemotherapy course.

The decision to use ESAs should be based on discussions with the patient involving a benefit vs. risk assessment. This should take into account the specific clinical context, including the type of cancer and the disease stage, the degree of anemia, life expectancy, the environment in which the patient is being treated and known risks of transfusions and ESAs.

The current changes are based on the safety data from randomised controlled trials of ESAs in patients with breast, head and neck, lymphoid, cervical and non-small cell lung cancers. These show that increased mortality and more rapid tumour progression were associated with ESAs when dosed to target a hemoglobin level of 120 g/L or higher. In addition, a negative trend in survival was reported in randomized trials for neoadjuvant breast cancer treatment (the PREPARE trial) and cervical cancer treatment (GOG-191 study). Similar findings were reported with a Cochrane analysis using individual patient data at the Annual Meeting of the American Society of Hematology (ASH) in December 2008.

ESAs are not BCCA benefit drugs but are used by some cancer patients (also see April 2007 issue of the Systemic Update).

Submitted by: Victoria Kyritsis, MSc (Clin Pharm) Oncology Drug Information Specialist BC Cancer Agency Reviewed by:
Mário de Lemos, PharmD, MSc (Oncol)
Provincial Drug Information Coordinator
BC Cancer Agency
Barbara Melosky, MD
Medical Oncologist,
Vancouver Centre – BC Cancer Agency

CANCER DRUG MANUAL

Aprepitant Patient Handout has been developed. Expert review was provided by Dr. Paul Hoskins (medical oncologist, Vancouver Centre), Adeline Markarian (clinical pharmacist, Vancouver Centre), and Stephanie Soon (supportive care pharmacist, Vancouver Island Centre). Aprepitant is an oral antiemetic agent neurokinin-1 (NK1) receptor antagonists **Aprepitant (EMEND®)** is an oral antiemetic agent which is recommended in combination with a 5-HT3 antagonist and dexamethasone for patients receiving highly emetogenic chemotherapy in the BC Cancer Agency Guidelines for Prevention and Treatment of Chemotherapy-Induced Nausea and Vomiting in Adults (<u>SCNAUSEA</u>). The handout provides information on the potential side effects as well as dosing instructions and potential for drug interactions.

BCG Monograph has been revised to include phenazopyridine for the management of cystitis.

Bleomycin Monograph has been revised to correct a typo in the creatinine clearance formula of the Dosage Guidelines section.

Temozolomide Monograph has been revised to include two new strengths of capsules (140mg, 180mg).

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

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" (previously Undesignated Indication Request) approval are prefixed with the letter U.

NEW protocols, PPPOs and Patient Handouts (Affected Documents are Checked):

CODE	Protocol	PPPO	Patient Handout	Protocol Title
UGIAVTZCAP	V	V		Palliative Therapy of Metastatic Neuroendocrine Cancer using Temozolomide and Capecitabine
UGICAPIRI				Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan and Capecitabine in Patients Unsuitable for GIFOLFIRI
UGICAPOX			\square	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, and Capecitabine
UGICIRB			V	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Bevacizumab and Capecitabine
UGICOXB			V	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, Bevacizumab and Capecitabine
LUAVVIN	\square	\square		Treatment of Advanced Non-Small Cell Lung Cancer (NSCLC) with Vinorelbine in Elderly Patients
LULAPERT	V	V		Treatment of Locally Advanced Non-Small Cell Lung Cancer using Cisplatin and Etoposide with Radiation Therapy
LUMMVIN	\square			Treatment of Malignant Mesothelioma with Vinorelbine
LUOTPE	\square	\square		Treatment of Thymoma with Cisplatin and Etoposide
LUOTPERT	Ø	V		Treatment of Thymoma using Cisplatin and Etoposide with Radiation Therapy
LUSCPE	\square	V		Treatment of Extensive Stage Small Cell Lung Cancer (SCLC) with Cisplatin and Etoposide
LUSCPERT	V	V		Treatment of Limited Stage Small Cell Lung Cancer using Cisplatin and Etoposide with Radiation Therapy
SAAVGIDD	V	V		Treatment of Advanced c-kit positive Gastrointestinal Stromal Cell Tumours (GIST's) Using 800 mg Dosing of Imatinib (GLEEVEC®)

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

CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
UGICIRB	V	V		Electrolytes added to routine tests, Precautions revised, unsafe abbreviations replaced	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Bevacizumab and Capecitabine
UGICOXB		Ø		Electrolytes added to routine tests, Precautions revised, unsafe abbreviations replaced	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, Bevacizumab and Capecitabine
UGIFFIRB				Electrolytes added to routine tests, Precautions revised, unsafe abbreviations replaced	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Fluorouracil, Folinic Acid (Leucovorin) and Bevacizumab
UGIFFOXB	V	Ø		Electrolytes added to routine tests, Precautions revised, unsafe abbreviations replaced	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, 5-Fluorouracil, Folinic Acid (Leucovorin) and Bevacizumab
GIRCRT	V	Ø		Timing of second capecitabine dose revised, unsafe abbreviations replaced	Combined Modality Adjuvant Therapy for High Risk Rectal Carcinoma using Capecitabine and Radiation Therapy
UGISORAF	V			INR added to baseline Tests for Child-Pugh status	Therapy for Advanced Hepatocellular Carcinoma Using Sorafenib (NEXAVAR®)
HNAMIRT	V			Unsafe abbreviations replaced	Radioprotection in Head and Neck Radiation using Amifostine
HNAVGEM	V			Unsafe abbreviations replaced	Treatment of Loco-regionally Recurrent/Metastatic Nasopharyngeal Cancer not Amenable for Local Curative Therapy with Gemcitabine
HNAVPG	V			Unsafe abbreviations replaced	Treatment of Locoregionally Recurrent and/or Metastatic Nasopharyngeal Cancer with Cisplatin and Gemcitabine
HNCAFRT	V			Unsafe abbreviations replaced	Combined chemotherapy (carboplatin and fluorouracil) and radiation treatment for locally advanced squamous cell carcinoma of the head and neck
UHNCETRT	V			Unsafe abbreviations replaced	Combined Cetuximab and Radiation Treatment for Locally Advanced Squamous Cell Carcinoma of the Head and Neck
HNDE	V			Unsafe abbreviations replaced	Therapy for recurrent and metastatic nasopharyngeal cancer using Cisplatin and Etoposide
HNFUFA	V			Unsafe abbreviations replaced	5-Fluorouracil and Leucovorin for Recurrent Head and Neck Cancer

CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
HNFUP	Ø			Unsafe abbreviations replaced	Therapy for advanced head and neck cancer using Cisplatin and Fluorouracil
HNFURT	Ø			Unsafe abbreviations replaced	Combined Modality Therapy for Advanced Head and Neck Cancer using Mitomycin, Fluorouracil and Split Course Radiation Therapy
HNLANPRT	V			Unsafe abbreviations replaced	Treatment of Locally Advanced Nasopharyngeal Cancer with Concurrent Cisplatin and Radiation
HNLAPRT	V			Unsafe abbreviations replaced	Combined Chemotherapy (Cisplatin) and Radiation Treatment for Locally Advanced Squamous Cell Carcinoma of The Head and Neck
HNM				Unsafe abbreviations replaced	Head and Neck Cancer Using Methotrexate as Standard Therapy
HNPE	$\overline{\mathbf{A}}$			Unsafe abbreviations replaced	Intensive Cisplatin and Etoposide Chemotherapy for Recurrent and Metastatic Head and Neck Cancer
HNPRT				Unsafe abbreviations replaced	Advanced Head and Neck Cancer Using Cisplatin Before or During Radiation Therapy
HNTSH	V			Eligibility clarified	Radioiodine Imaging and Treatment in Patients with Thyroid Cancer using Thyrotropin Alpha
LUAJCAT	Ø	V		Protocol code and eligibility revised, sequence of paclitaxel administration clarified	Adjuvant carboplatin and paclitaxel following resection of non-small cell lung cancer
LUAJNP				Eligibility and Exclusions revised	Adjuvant cisplatin and vinorelbine following resection of non-small cell lung cancer
LUAJPC	Ø			Replacing LUAJCAT	Adjuvant carboplatin and paclitaxel following resection of non-small cell lung cancer
LUAVCAT	V	V		Protocol code and eligibility revised	First line treatment of advanced non-small cell lung cancer (NSCLC) with carboplatin and paclitaxel
LUAVNP	Ø	V		Replacing LUNAVP	Treatment for advanced non-small cell lung cancer (NSCLC) with cisplatin and vinorelbine
LUAVPC	V	Ø		Replacing LUAVCAT	First line treatment of advanced non-small cell lung cancer (NSCLC) with carboplatin and paclitaxel
LUAVPEM	Ø			Eligibility, premedications and dose modifications for renal function clarified	Second-Line Treatment Of Advanced Non- Small Cell Lung Cancer (NSCLC) With Pemetrexed

CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
LUNAVP	V	V		Protocol code and eligibility revised	Treatment for advanced non-small cell lung cancer (NSCLC) with cisplatin and vinorelbine
LUPE	V	Ø		Deleted (replaced by LULAPERT, LUOTPE, LUOTPERT, LUSCPE, LUSCPERT)	Palliative Therapy of Selected Solid Tumours using Cisplatin and Etoposide
LUVIN				Deleted (replaced by LUAVVIN, LUMMVIN)	Treatment of Advanced Non-Small Cell Lung Cancer (NSCLC) with Vinorelbine in Elderly Patients
UMYLENDEX	V			Tumour group clarified, precaution of skin rashes and reference added	Therapy of Multiple Myeloma Using Lenalidomide with Dexamethasone
SAAVGI	V			Reference to SAAVGIDD protocol added	Treatment of Advanced c-kit positive Gastrointestinal Stromal Cell Tumours (GIST's) Using Imatinib (GLEEVEC®)

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,	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Forms	
CLASS II, BC CANCER AGENCY COMPASSIONATE		
ACCESS PROGRAM (UNDESIGNATED INDICATION)		
CANCER DRUG MANUAL	www.bccancer.bc.ca/cdm	
CANCER MANAGEMENT GUIDELINES	www.bccancer.bc.ca/CaMgmtGuidelines	
CANCER CHEMOTHERAPY PROTOCOLS, PRE-PRINTED	www.bccancer.bc.ca/ChemoProtocols	
ORDERS AND PROTOCOL PATIENT HANDOUTS		
SYSTEMIC THERAPY PROGRAM POLICIES	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Policies	
SYSTEMIC THERAPY UPDATE	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/stupdate	
COMPLEMENTARY AND ALTERNATIVE CANCER THERAPIES	under Patient/Public Info, Complementary Therapies	

Editorial Review Board

Mário de Lemos, PharmD, MSc (Oncol) (Editor) Victoria Kyritsis, MSc (Clin Pharm) (Assistant Editor) Caroline Lohrisch, MD Johanna Den Duyf, MA Judy Oliver, BScN, MEd Beth Morrison, MLS Jaya Venkatesh, MHA, CMA Susan Walisser, BSc (Pharm)

In Touch	www.bccancer.bc.ca	bulletin@bccancer.bc.ca
BC CANCER AGENCY	(604) 877-6000	Toll-Free 1-(800) 663-3333
PROVINCIAL SYSTEMIC THERAPY PROGRAM	Ext 2738	
COMMUNITIES ONCOLOGY NETWORK	Ext 2744	jvenkate@bccancer.bc.ca
UPDATE EDITOR	Ext 2288	mdelemos@bccancer.bc.ca
COMMUNITIES ONCOLOGY NETWORK PHARMACIST	Ext 6277	laurelk@bccancer.bc.ca
COMMUNITIES ONCOLOGY NETWORK PHARMACY EDUCATORS		www.bccancer.bc.ca/RS/CommunitiesOncolog
		yNetwork/Educators/Pharmacists/
COMPASSIONATE ACCESS PROGRAM OFFICE		cap_bcca@bccancer.bc.ca
David Internation	Fax (604) 708-2026	du minto @ honorous honor
Drug Information	Ext 6275	druginfo@bccancer.bc.ca
EDUCATION RESOURCE NURSE		
NURSING PROFESSIONAL PRACTICE		
LIBRARY/CANCER INFORMATION	1-(888)-675-8001 Ext 8003	requests@bccancer.bc.ca
OSCAR HELP DESK	1-(888)-355-0355	oscar@bccancer.bc.ca
	Fax (604) 708-2051	
PHARMACY PROFESSIONAL PRACTICE	(250) 519.5574	jkippen@bccancer.bc.ca
ABBOTSFORD CENTRE (AC)	(604) 851-4710	Toll-free: 1-(877) 547-3777
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)		Toll-Free 1-(800) 663-3333
VANCOUVER ISLAND CENTRE (VICC)		Toll-Free 1-(800) 670-3322