Systemic Therapy Update

BC Cancer Agency
CARE + RESEARCH
An agency of the Provincial Health Services Authority

November 2012
Volume 15, Number 11

For Health Professionals Who Care For Cancer Patients

Inside This Issue:

EDITOR'S CHOICE

NEW PROGRAMS

The Provincial Systemic Therapy Program has approved the following new programs effective 01 November 2012:

Lymphoma:

- **Bendamustine for Relapsed Indolent Non-Hodgkin Lymphoma (NHL) and Mantle Cell Lymphoma**

EDITOR'S CHOICE

(ULYBEND) – While mantle cell lymphoma is more aggressive in nature than advanced indolent NHL (follicular lymphoma, marginal zone lymphoma and lymphoplasmacytic lymphoma), both conditions are considered incurable. Most patients ultimately develop disease that is refractory to standard therapy, with shorter duration of remissions following each successive treatment. Bendamustine is a unique alkylating agent that has been shown to be non-cross resistant to conventional alkylating agents and purine analogues.

Phase II trials of bendamustine in relapsed riTUXimab-refractory indolent NHL have yielded excellent response rates ranging from 77% to 84%, with a median duration of response ranging from 7 to 9 months. *[Friedberg et al. JCO 2008;26:204-210] [Kah et al. Cancer 2010;116:106-114]* Results from these trials far exceeded the expectations of outcomes obtained from other agents in this setting. Recently, a phase III trial involving patients with relapsed follicular, indolent or mantle cell lymphoma demonstrated significant prolongation of progression free survival (PFS) with bendamustine and riTUXimab compared to the standard treatment of fludarabine and riTUXimab (30 mo vs. 11 mo, HR 0.51 [95 % CI 0.34–0.67]). *[Rummel et al. Blood. 2010;116(21):856]*

Bendamustine is generally well tolerated with the primary toxicity being myelosuppression. When compared with other routinely used lymphoma regimens, the toxicity profile has been favourable with a much lower incidence of alopecia, infections, transfusions and hospitalizations. More information on bendamustine can be found in the Cancer Drug Manual section of the current Update issue.

Melanoma:

- **Ipilimumab for the Treatment of Advanced and Metastatic Melanoma After Prior Systemic Therapy (USMAVIPI)** – Ipilimumab is a recombinant, fully human monoclonal antibody that binds to and blocks human cytotoxic T lymphocyte-associated antigen 4 (CTLA-4). In a phase III trial, ipilimumab showed significant overall survival benefit (median survival 10.1 mo vs. 6.4 mo [HR 0.66, p=0.003]) in previously treated unresectable and metastatic melanoma patients compared to glycoprotein 100 (gp100) peptide vaccine, a cancer vaccine not currently considered the standard of care. *[Hodi et al. NEJM 2010;363:711-23]* Ipilimumab received the Health Canada Notice of Compliance in February 2012 for this patient population. It is primarily associated with immune-related toxicities, fatigue and gastrointestinal adverse effects. For more information on the pharmacology and toxicity of ipilimumab, please see the Cancer Drug Manual section of the current Update issue.

BC CANCER AGENCY ACCREDITATION UPDATE

The BC Cancer Agency is preparing for the next Accreditation Canada Survey scheduled for June 9th to 13th, 2013. The purpose of the accreditation survey is to continually improve the quality and safety of health services based on current research and evidence. To ensure ongoing compliance with the pre-existing accreditation Required Organizational Practices (ROPs) and standards since the last accreditation in June 2009, the BCCA has been conducting a series of audits and mock surveys at all cancer centres. The ROPs evaluated include medication reconciliation in the in-patient unit, transitions of patients to and from the BCCA, dangerous abbreviations, Patient Safety & Learning System reporting and trending, use of two identifiers (i.e. name and CareCard number) to confirm the patient's identify, storage of narcotics, heparin and concentrated electrolytes in patient care areas, and falls prevention in the in-patient unit.

In addition, the BCCA is implementing a number of new Accreditation Canada ROPs for the upcoming accreditation survey. These are summarized below.

EDITOR'S CHOICE

Prevention of Venous Thromboembolism:

ROP: The team identifies medical and surgical clients at risk of venous thromboembolism (deep vein thrombosis and pulmonary embolism) and provides appropriate thromboprophylaxis.
Venous thromboembolism (VTE) is a serious and common complication in hospitalized patients receiving cancer treatment. Evidence shows that the incidence of VTE can be substantially reduced by identifying patients at risk and providing appropriate, evidence-based thromboprophylaxis interventions during their health care admissions. In August 2011, the BCCA implemented a policy, a guideline and a set of pre-printed orders as part of the admission orders for all patients admitted to the BCCA Vancouver Centre in-patient unit. The goal is that all admitted patients would be routinely assessed for the risk of VTE. An audit of this ROP indicated 100% compliance over the past year.

Antimicrobial Stewardship:
ROP: The organization has a program for antimicrobial stewardship to optimize antimicrobial use.
The primary focus of an antimicrobial stewardship program is to optimize the use of antimicrobials to achieve the best patient outcomes, reduce the risk of infections, reduce or stabilize levels of antibiotic resistance and promote patient safety. A comprehensive, evidence-based antimicrobial stewardship program may include a number of interventions based on local antimicrobial use and available resources. Possible intervention include: prospective audit and feedback, formulary of targeted antimicrobials and approved indications, education, guidelines and clinical pathways, antimicrobial order forms, streamlining or de-escalation of therapy, dose optimization and parenteral to oral conversion. The BCCA is conducting a gap analysis to identify interventions that have already been implemented and those that would be beneficial to implement in order to improve patient outcomes. Top interventions identified from the gap analysis will be implemented over the next six months.

Pressure Ulcer Prevention:
ROP: The team assesses each patient's risk for developing a pressure ulcer and implements interventions to prevent pressure ulcer development.
Pressure ulcers can lead to increased length of hospital stay, health service costs and mortality. The BCCA has implemented the Braden Scale for predicting pressure sore risk in the in-patient unit at the BCCA Vancouver Centre. Best practice guidelines are currently being updated to include prevention and treatment strategies. The updated guidelines will be implemented this Fall.

Falls Prevention:
ROP: The team implements and evaluates a falls prevention strategy to minimize patient injury from falls.
Falls prevention programs may include, but are not limited to, staff training, risk assessments, balance and strength training, vision care, medication reviews, physical environment reviews, behavioural assessments and bed exit alarms. The BCCA implemented the Falls Prevention Program at the Vancouver Centre in-patient unit in 2009. Falls prevention in ambulatory care will be rolled out in all BCCA regional cancer centres (with the exception of Centre for the North) during the Patient Safety Week between October 29th and November 2nd, 2012. The Centre for the North is officially opening this week and will received appropriate in-services in the New Year.

Workplace Violence Prevention:
ROP: The organization implements a comprehensive strategy to prevent workplace violence.
Workplace violence can be common in the health care setting, more so than in many other workplaces. The BCCA will be asking staff to complete the PHSA Workplace Violence Prevention Modules 1 and 2 as part of a strategy to assist employees in defusing situations in which patients are escalating to aggressive behaviour.

PROVINCIAL SYSTEMIC THERAPY PROGRAM POLICIES

UPDATE ON SYSTEMIC THERAPY POLICIES RELATED TO HAZARDOUS DRUGS

Four Provincial Systemic Therapy Program Policies related to hazardous drugs have been revised. The term "hazardous drugs" is substituted for "cytotoxic drugs", and includes biohazardous agents. In addition, Closed System Drug Transfer Devices (CSDTD) are now used to prepare and administer hazardous drugs, except when incompatible or when use of such devices will not achieve a "closed" system. According to ASHP* and NIOSH**, a CSDTD *"mechanically prohibits the transfer of environmental contaminants into the system and the escape of the hazardous drug or vapour concentrations outside of the system"*.

Key changes or additions to the individual policies are highlighted below:

Administration of Hazardous Drugs by the Intrathecal Route via Lumbar Puncture or Ommaya Reservoir (ST Policy III-50):

- Intrathecal hazardous drugs must be administered by a physician

Hazardous Drug Safe Handling Standards (ST Policy V-10):

- Newly hired staff must receive education and training on hazardous drug spill management prior to the handling of hazardous drugs
- Information on the storage and transport of hazardous drugs (table 1) and personal protective equipment (table 2) is updated

Employee Health: Management of Risks Related to Hazardous Drugs (ST Policy V-20):

- Employees must be informed of the possible risks and necessary precautions when handling hazardous drugs
- In the event of an injury or hazardous drug spill, the employee must report the incident to the Workplace Health Call Centre at 1-866-922-9464

Hazardous Drug Spill Management (ST Policy V-30):

- Fit-testing for respirator masks is required annually as per WorkSafe BC requirements
- Safety goggles or face shields have now replaced safety glasses in spill kits
- Instructions for clean-up of spilled biohazardous drugs have been added

**ASHP – American Society of Health System Pharmacists*
***NIOSH – National Institute for Occupational Safety and Health*

COMMUNITIES ONCOLOGY NETWORK

CON PROTOCOL CODE PROJECT – LEVEL 2 AUDIT RESULTS

In the October 2012 issue of the Systemic Therapy Update, results of the levels 1 and 3 audits of the CON Protocol Code Project were presented. These audits evaluated the accuracy of OSCAR (Online System for Cancer drugs Adjudication and Reimbursement) claims submitted by the BC Communities Oncology Network (CON) sites. The goal of the project is to assist CON sites in achieving 100% accuracy in protocol code submissions by the start of the 2013-2014 fiscal year. The current issue aims to provide an update on the level 2 preliminary audit results. Final results will be presented at a later date.

Part of the level 2 audit focused on OSCAR submissions for combination drug treatments rather than single-agent treatments. A total of 7156 claim submissions were reviewed between the fiscal periods 1 and 6, 2012-2013; 44.7% of which were for multi-drug regimens and 53.9% were for single agents. Of the multi-drug regimens, only 12.4% presented with coding that were inconsistent with BCCA protocol codes. These results are very encouraging and indicate improvement in the consistency and completeness of protocol code submissions.

Coding inconsistencies identified included:

- **Use of Separate Protocol Codes When a Combined Protocol Code Exists**
  When multiple drugs exist within a single treatment protocol, they must be coded with this protocol code, even when protocol codes for the individual drugs exist
  i.e.) Weekly PACLitaxel – submit UBRAJACTW, not BRAJAC + UBRAJACTW

- **Trastuzumab Administered as a Single-Agent Following Chemotherapy**
  Continued use of single-agent trastuzumab after chemotherapy should be coded according to the treatment intent.
  i.e.) BRAJTR (adjuvant treatment), BRAVTR (advanced disease), and GIGAVTR following UGIGAVCFT or UGIGAVCCT

- **Oral Steroid Medications Used in Combination with Chemotherapy Treatments**
  OSCAR claims for oral steroids should only be submitted when they are part of an actual cancer treatment, and should be coded according to the particular treatment protocol (i.e. prednisone as part of UMYMPBOR). OSCAR submissions will not be accepted for supportive care indications (i.e. SCNAUSEA).

- **Non-Steroidal Anti-Androgen (NSAA) Drugs (Bicalutamide, Flutamide, or Nilutamide) Given in Combination with an LHRH Agonist (Goserelin, Buserelin, or Leuprolide)**
  The NSAA drugs should be coded as GUPNSAA while LHRH agonists should be coded as GUPLHRH. Please note that degarelix is a LHRH "antagonist", and should be coded as GUPLHRHA.

Other Reminders:

1. Please eliminate "hyphens", spaces or other punctuations in all protocol code submissions (i.e. LYCHOPR vs. LYCHOP-R). Any displaced or incorrect letter will result in a coding failure.

2. Aromatase inhibitors (letrozole, anastrozole & exemestane) in breast cancer patients should be coded according to the specific drug and the treatment intent (adjuvant – BRAJANAS, BRAJEXE, BRAJLET; advanced – BRAVANAS, BRAVEXE, BRAVLET). Note that there is no such protocol code as BRAI, but GOOVAI and GOOENDAI are official protocol codes for gynecologic malignancies.

Drug Update

Interaction of High-Dose Methotrexate with Proton Pump Inhibitors

A caution on the potential drug-drug interaction with proton pump inhibitors (PPIs) has been added to all high-dose methotrexate chemotherapy protocols. PPIs (i.e. rabeprazole, pantoprazole, omeprazole, esomeprazole, lansoprazole) are commonly used for the treatment of peptic ulcer disease. Concurrent use of PPIs and methotrexate has been associated with decreased elimination of methotrexate, leading to an increased risk of methotrexate toxicity. This is a particular concern for patients receiving high-dose methotrexate.[1-3] Therefore, discontinuation of PPIs should be considered 1 day prior to methotexate administration. If their use is required, patients should be closely monitored for methotrexate levels and signs of methotrexate toxicity. Please see Table 3 for all affected protocols.

References:
1. Joerger M, et al. Determinants of the elimination of methotrexate and 7-hydroxy-methotrexate following high-dose infusional therapy to cancer patients. Br J Clin Pharmacol 2005;62:71-80.
2. Suzuki K, et al. Co-administration of proton pump inhibitors delays elimination of plasma methotrexate in high-dose methotrexate therapy. Br J Clin Pharmacol 2009;67:44-9.
3. Bauter T, et al. Interaction between methotrexate and omeprazole in an adolescent with leukemia: a case-report. J Oncol Pharm Pract 2008;14:71.

Cancer Drug Manual

New Monographs and Patient Handouts

Ipilimumab Interim Monograph has been developed. Ipilimumab is a recombinant, fully human monoclonal antibody which binds to and blocks human cytotoxic T lymphocyte-associated antigen 4 (CTLA-4). Subsequent T-cell activation and proliferation results in lymphocyte infiltration into organ tissues and tumours, which is presumed to lead to tumour cell death. Ipilimumab is indicated for the treatment of unresectable or metastatic melanoma after prior systemic therapy.

Highlights from this document include:

- Immune-mediated adverse reactions can involve any organ system, and symptoms may be nonspecific. Fatalities have been reported.
- Most immune-mediated reactions occur during the induction phase, however late onset, occurring months after the last dose, has also been reported.
- Diarrhea, increased stool frequency, bloody stool, elevated liver function tests, rash, endocrinopathies and neuropathies must be considered immune-related.
- Management of severe reactions may include systemic high-dose corticosteroids and additional immunosuppressive therapy. Ipilimumab should be permanently discontinued in patients having severe immune-related reactions.

Vemurafenib Patient Handout has been completed. Vemurafenib is an oral BRAF kinase inhibitor selective for tumour cells expressing mutated BRAF V600 proteins. It is indicated for the treatment of BRAF V600 mutation-positive unresectable or metastatic melanoma at a recommended dose of 960 mg PO every 12 hours continuously. Please refer to the revised monograph section of the current Update issue for further details.

CANCER DRUG MANUAL

REVISED MONOGRAPHS AND PATIENT HANDOUTS

Highlights of key changes and/or updates to the Monographs and Patients Handouts are listed below:

Bendamustine Interim Monograph and the **Chemotherapy Stability and Preparation Chart** have been updated. Bendamustine is an alkylating agent and is active against both quiescent and dividing cells. Key changes to the monograph include:

- Updated information on the *Special Precautions* and *Supply and Storage* sections, and the *Side Effects* table
- Addition of an *Interactions* section

Bortezomib Patient Handout has been revised to include the subcutaneous route in the description.

Reovirus Serotype 3 – Dearing Strain (REOLYSIN®) Interim Monograph and the **Chemotherapy Stability and Preparation Chart** have been revised. Key updates include:

- Expansion on the *Special Precautions* section, including safe handling information
- Expansion on the *Side Effects* table

Vemurafenib interim monograph has been updated to the **Full Monograph**. Expert review was provided by Dr. Kerry Savage (Medical Oncologist, Melanoma Tumour Group) and Ms. Kate Yoo (Pharmacist, Melanoma Tumour Group). Key updates include providing detailed information on toxicities:

- Cutaneous squamous cell carcinoma is a common (18% to 26%) secondary skin malignancy; median time to onset is 7 to 8 weeks; regular dermatologic evaluations are indicated for early detection and removal
- New primary melanoma have also been reported (2%)
- Photosensitivity reactions may be severe (including painful blistering), but are preventable in most patients with the minimization of sun exposure and the use of sunscreens

NEW EDITORIAL BOARD MEMBERS

The Cancer Drug Manual Writing Team and Editorial Board would like to extend a warm welcome to the following new Editorial Board members:

- Dr. Angela Chan, Medical Oncologist, Fraser Valley Centre
- Dr. Dave Fenton, Medical Oncologist, Vancouver Island Centre
- Dr. Pippa Hawley, Team Leader – Pain and Symptom Management/Palliative Care, Vancouver Centre

BENEFIT DRUG LIST

NEW PROGRAMS

The following programs have been added to the Benefit Drug List effective 01 November 2012:

- **Bendamustine** (restricted funding) for relapsed indolent non-Hodgkin lymphoma and mantle cell

BENEFIT DRUG LIST

lymphoma (ULYBEND)
- **Ipilimumab** (restricted funding) for advanced and metastatic melanoma after prior systemic therapy (USMAVIPI)

REVISED PROGRAMS

The following programs have been reclassified on the Benefit Drug List to **Class I** effective 01 November 2012:

- All previous class II **DOCEtaxel-containing treatment programs** (please see Table 1 for all affected protocols)
  - Exception: DOCEtaxel regimens containing trastuzumab or capecitabine will remain as Class II
- All previous class II **Gemcitabine-containing treatment programs** (please see Table 2 for all affected protocols)

The following programs have been reclassified on the Benefit Drug List to **Class II** effective 01 November 2012:

- **Bevacizumab** with **Irinotecan, Fluorouracil** and **Leucovorin** for palliative treatment of metastatic colorectal cancer (GIFFIRB)
- **Capecitabine** and **Oxaliplatin** for the adjuvant treatment of stage III and stage IIB colon cancer (GIAJCAPOX)
- **Capecitabine** and **Oxaliplatin** for the adjuvant treatment of stage III rectal cancer (GIRAJCOX)
- **Cetuximab** and **Irinotecan** for the third line treatment of metastatic colorectal cancer (GIAVCETIR)
- **Panitumumab** for the third line treatment of metastatic colorectal cancer (GIAVPANI)

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, revised or deleted protocols, PPPOs and patient handouts for this month are listed below. Protocol codes for treatments requiring "Compassionate Access Program" (previously Undesignated Indications 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
UGIENACTRT	☐	☐	☑	Neoadjuvant Treatment of Esophageal and Gastroesophageal Carcinomas Using CARBOplatin, PACLitaxel and Radiation Therapy
UGIGAJCC	☐	☐	☑	Adjuvant Chemotherapy of Gastric Cancer Patients with D2 Resection (Node Negative) or Ineligible for Adjuvant Chemoradiation, Using CISplatin and Capecitabine
GIRAJCOX	☐	☐	☑	Adjuvant Combination Chemotherapy for Stage III Rectal Cancer Using Oxaliplatin and Capecitabine

NEW Protocols, PPPOs and Patient Handouts (AFFECTED DOCUMENTS ARE CHECKED):				
CODE	**Protocol**	**PPPO**	**Patient Handout**	**Protocol Title**
ULYBEND	☑	☑	☐	Treatment of Non-Hodgkin Lymphoma with Bendamustine
USMAVIPI	☑	☑	☑	Treatment of Unresectable or Metastatic Melanoma Using Ipilimumab
USMAVVEM	☐	☐	☑	Treatment of BRAF V600 Mutation-Positive Unresectable or Metastatic Melanoma Using Vemurafenib

REVISED PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED):					
CODE	**Protocol**	**PPPO**	**Patient Handout**	**Changes**	**Protocol Title**
BRAJDCARBT	☑	☑	☐	*Eligibility clarified*	Adjuvant Therapy for Breast Cancer Using DOCEtaxel, CARBOplatin, and Trastuzumab
UCNBEV	☐	☑	☐	*Creatinine values clarified*	Palliative Therapy for Recurrent Malignant Gliomas Using Bevacizumab With or Without Concurrent Etoposide or Lomustine
GIAJCAPOX	☑	☑	☑	*Eligibility and Protocol code updated*	Adjuvant Combination Chemotherapy for Stage III and Stage IIB Colon Cancer Using Oxaliplatin and Capecitabine
GIAVCETIR	☑	☑	☑	*Eligibility and Protocol code updated*	Third Line Treatment of Metastatic Colorectal Cancer Using Cetuximab in Combination with Irinotecan
GIAVPANI	☑	☑	☑	*Eligibility and Protocol code updated*	Palliative Third Line Treatment of Metastatic Colorectal Cancer Using Panitumumab
UGICIRB	☑	☐	☐	*UGIFFIRB replaced by GIFFIRB in Eligibility and Exclusions sections*	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Bevacizumab and Capecitabine
GIFFIRB	☑	☑	☑	*Eligibility and Protocol code updated*	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Fluorouracil, Folinic Acid (Leucovorin) and Bevacizumab
GIRAJCOX	☑	☑	☐	*Eligibility and Protocol code updated*	Adjuvant Combination Chemotherapy for Stage III Rectal Cancer Using Oxaliplatin and Capecitabine

REVISED PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED):					
CODE	**Protocol**	**PPPO**	**Patient Handout**	**Changes**	**Protocol Title**
UGOOVDDCAT	☑	☑	☐	*Lab values and Dose Modifications clarified*	Treatment of Advanced Epithelial Ovarian, Primary Peritoneal, or Fallopian Tube Carcinoma Using CARBOplatin and Weekly PACLitaxel
GOOVTOP	☑	☐	☐	*Dose Modifications section clarified*	Treatment of Relapsed/Progressive Epithelial Ovarian, Fallopian Tube or Primary Peritoneal Cancer Using Topotecan
ULKCMLD	☐	☐	☑	*Minor typo corrected*	Treatment of Chronic Myeloid Leukemia and Ph+ Acute Lymphoblastic Leukemia Using Dasatinib
UMYBORPRE	☐	☑	☐	*Lab scheduling clarified*	Treatment of Multiple Myeloma using Bortezomib, Dexamethasone With or Without Cyclophosphamide as Induction Pre-Stem Cell Transplant
UMYBORREL	☑	☑	☐	*Dexamethasone dosing schedule clarified; lab test scheduling clarified*	Treatment of Relapsed Multiple Myeloma using Bortezomib, Dexamethasone With or Without Cyclophosphamide (Formerly UMYBORTEZ)
USMAVVEM	☑	☑	☐	*Minor formatting updated*	Treatment of BRAF V600 Mutation-Positive Unresectable or Metastatic Melanoma Using Vemurafenib

Table 1. The eligibility criteria have been updated for the following DOCEtaxel-containing chemotherapy protocols and PPPOs to indicate a change to Class I from Class II:

CODE	Protocol Title
BRAJDC	Adjuvant Therapy for Breast Cancer Using DOCEtaxel and Cyclophosphamide
BRAJFECD	Adjuvant Therapy for Breast Cancer Using Fluorouracil, Epirubicin and Cyclophosphamide and DOCEtaxel (Formerly UBRAJFECD)
BRAVDOC	Palliative Therapy for Metastatic Breast Cancer Using DOCEtaxel
BRAVDOC7	Palliative Therapy for Metastatic Breast Cancer Using Weekly DOCEtaxel
BRAVGEMD	Palliative Therapy for Metastatic Breast Cancer Using Gemcitabine and DOCEtaxel
BRLAACD	Treatment of Locally Advanced Breast Cancer Using DOXOrubicin and Cyclophosphamide Followed by DOCEtaxel
GOCXCAD	Treatment of Advanced/Recurrent Non-Small Cell Cancer of the Cervix with CARBOplatin and DOCEtaxel in Ambulatory Care Settings
GOENDCAD	Treatment of Primary Advanced or Recurrent Endometrial Cancer Using CARBOplatin and DOCEtaxel
GOOVCADM	Primary Treatment of Invasive Epithelial Ovarian, Fallopian Tube and Primary Peritoneal Cancer, with No Visible Residual Tumour (Moderate-High Risk) Using CARBOplatin and DOCEtaxel

CODE	Protocol Title
GOOVCADR	Second-Line Treatment Using DOCEtaxel and CARBOplatin for Epithelial Ovarian Cancer Relapsing After Primary Treatment
GOOVCADX	Primary Treatment of Visible Residual (Extreme Risk) Invasive Epithelial Ovarian Cancer Using CARBOplatin and DOCEtaxel
GOOVDOC	Treatment of Progressive, Platinum-Refractory Epithelial Ovarian Carcinoma, Primary Peritoneal Carcinoma or Fallopian Tube Carcinoma Using DOCEtaxel
GOSADG	Treatment of Uterine Sarcoma Cancer Using DOCEtaxel and Gemcitabine
GUPDOC	Palliative Therapy for Metastatic Hormone Refractory Prostate Cancer Using DOCEtaxel
LUAVDC	First-Line Treatment of Advanced Non-Small Cell Lung Cancer (NSCLC) with CISplatin and DOCEtaxel
LUAVDOC	Second-Line Treatment of Advanced Non-Small Cell Lung Cancer (NSCLC) with DOCEtaxel
SAAVGEMD	Second or Third Line Therapy for Soft Tissue Sarcomas Using Gemcitabine and DOCEtaxel

Table 2. The eligibility criteria have been updated for the following gemcitabine-containing chemotherapy protocols and PPPOs to indicate a change to Class I from Class II:

CODE	Protocol Title
BRAVGEM	Palliative Therapy for Metastatic Breast Cancer Using Gemcitabine
BRAVGEMD	Palliative Therapy for Metastatic Breast Cancer Using Gemcitabine and DOCEtaxel
BRAVGEMP	Palliative Therapy for Metastatic Breast Cancer Using CISplatin and Gemcitabine
BRAVGEMT	Palliative Therapy for Metastatic Breast Cancer Using Gemcitabine and PACLitaxel
GIAVPG	First-Line Palliative Chemotherapy for Advanced Gallbladder Cancer and Cholangiocarcinoma Using Gemcitabine and CISplatin
GIPAJGEM	Adjuvant Chemotherapy for Pancreatic Adenocarcinoma Using Gemcitabine
GIPGEM	Palliative Therapy for Pancreatic Adenocarcinoma, Gallbladder Cancer, and Cholangiocarcinoma Using Gemcitabine
GOOVCAG	Treatment of Advanced Ovarian Cancer in Patients Who have Progressed or Recurred Following First-Line Platinum-Based Treatment Using CARBOplatin and Gemcitabine
GOOVGEM	Palliative Chemotherapy for Re-Treatment of Ovarian, Tubal, and Peritoneal Cancer Using Gemcitabine
GOSADG	Treatment of Uterine Sarcoma Cancer Using DOCEtaxel and Gemcitabine
GUAVPG	Palliative Therapy for Urothelial Carcinoma Using CISplatin and Gemcitabine
GUNAJPG	Neo-Adjuvant Therapy for Urothelial Carcinoma Using CISplatin and Gemcitabine
HNNAVGEM	Treatment of Loco-Regionally Recurrent/Metastatic Nasopharyngeal Cancer Not Amenable For Local Curative Therapy with Gemcitabine
HNNAVPG	Treatment of Locoregionally Recurrent and/or Metastatic Nasopharyngeal Cancer with CISplatin and Gemcitabine
HNNLAPG	Induction Treatment of Locally Advanced Nasopharyngeal Cancer with CISplatin and Gemcitabine
LUAVPG	Treatment of Advanced Non-Small Cell Lung Cancer (NSCLC) with Platinum and Gemcitabine
LUMMPG	Treatment of Malignant Mesothelioma with Platinum and Gemcitabine
LYGDP	Treatment of Lymphoma with Gemcitabine, Dexamethasone and CISplatin (GDP)
LYPALL	Lymphoma Palliative Chemotherapy
SAAVGEMD	Second or Third-Line Therapy for Soft Tissue Sarcomas Using Gemcitabine and DOCEtaxel

Table 3. The following methotrexate-containing chemotherapy protocols have been updated with information on the possible drug-drug interaction with proton pump inhibitors under the *Precautions* section.

CODE	Protocol Title
LYCODOXMR	Treatment of Burkitt's Lymphoma and Leukemia (ALL-L3) with Cyclophosphamide, VinCRIStine, DOXOrubicin, Methotrexate, Leucovorin (CODOX-M) and RiTUXimab
LYHDMRP	Treatment of Primary Intracerebral Lymphoma with High Dose Methotrexate and RiTUXimab
LYHDMTXR	Treatment of Leptomeningeal Lymphoma or Recurrent Intracerebral Lymphoma with High Dose Methotrexate
LYHDMTXP	Treatment of Primary Intracerebral Lymphoma with High Dose Methotrexate
MOHDMTX	Meningeal Disease (Miscellaneous Tumour Origins) using High Dose Methotrexate with Leucovorin Rescue
SAHDMTX	Treatment of Osteosarcoma Using High Dose Methotrexate with Leucovorin Rescue

DELETED Protocols, PPPOs and Patient Handouts (AFFECTED DOCUMENTS ARE CHECKED):				
CODE	**Protocol**	**PPPO**	**Patient Handout**	**Protocol Title**
GUPKETO	☑	☐	☐	Short Term Hormonal Management for Metastatic Prostate Cancer Using High Dose Ketoconazole Therapy

Website Resources and Contact Information

Website Resources	www.bccancer.bc.ca
Reimbursement & Forms: Benefit Drug List, Class II, Compassionate Access Program	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, Pre-printed Orders, Protocol Patient Handouts	www.bccancer.bc.ca/ChemoProtocols
Systemic Therapy Program Policies	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Policies
Systemic Therapy Update	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/stupdate
CON Pharmacy Educators	http://www.bccancer.bc.ca/HPI/Pharmacy/ContactUs.htm

Contact Information	Phone	Fax	Email
Systemic Therapy Update Editor	604.877.6000 x 3028		sman3@bccancer.bc.ca
Provincial Systemic Therapy Program	604.877.707.5973		ldasilva2@bccancer.bc.ca
Communities Oncology Network (CON)	250.519.5501		jdenduyf@bccancer.bc.ca
Oncology Drug Information	604.877.6275		druginfo@bccancer.bc.ca
Education Resource Nurse	604.877.6000 x 2638		nursinged@bccancer.bc.ca
Library/Cancer Information	888.675.8001 x 8003		requests@bccancer.bc.ca
Pharmacy Professional Practice	250. 519.5574		jkippen@bccancer.bc.ca
Nursing Professional Practice	604.877.6000 x 2623		ilundie@bccancer.bc.ca
OSCAR	888.355.0355	604.708.2051	oscar@bccancer.bc.ca
Compassionate Access Program (CAP)	604.877.6277	604.708.2026	cap_bcca@bccancer.bc.ca
Pharmacy Chemotherapy Certification	250.712.3900 x 686741		rxchemocert@bccancer.bc.ca
BCCA-Abbotsford Centre	604.851.4710 Toll Free 877.547.3777		
BCCA-Sindi Ahluwalia Hawkins Centre for the Southern Interior	250.712.3900 Toll Free 888.563.7773		
BCCA-Fraser Valley Centre	604.930.2098 Toll Free 800.523.2885		
BCCA-Vancouver Centre	604.877.6000 Toll Free 800.663.3333		
BCCA-Vancouver Island Centre	250.519.5500 Toll Free 800.670.3322		

Editorial Review Board