

Systemic Therapy Update



BC Cancer Agency

CARE + RESEARCH

An agency of the Provincial Health Services Authority

July 2013

Volume 16, Number 7

For Health Professionals Who Care For Cancer Patients

Inside This Issue:

- **Editor's Choice** – Adjuvant Endocrine Therapy for Early Breast Cancer; Highlights of Changes in Protocols, PPOs and Patient Handouts: Removal of Calcium and Magnesium from all Oxaliplatin-Containing Chemotherapy Protocols and PPPOs
- **Provincial Systemic Therapy Policy** – Updates to BCCA Compassionate Access Program (CAP) Policy
- **Medication Safety Corner** – Updates to BCCA TALLman Lettering Pharmacy Directive
- **Drug Update** – Imatinib Dispensing; Thyrotropin-Alfa Shortage Resolved
- **List of New and Revised Protocols, Provincial Pre-Printed Orders and Patient Handouts** – New: UGOOVDDCAT; Revised: BRAJLET, BRAJTAM, GIAJFFOX, GIAVCETIR, GIFFIRB, GIFOLFIRI, GIFOLFOX, UGIFFOXB, GIRAJCOX, GIRAJFFOX, GOBEP, GOENDCAT, UGOOVDDCAT, GOOVLDX, GOOVPLDC, HNOTTSH, ULKMDSA ; Removal of Calcium Gluconate and Magnesium Sulfate from all Oxaliplatin-Containing Chemotherapy Protocols and PPPOs: GIAJCAPOX, GIAJFFOX, GIFOLFOX, GIRAJCOX, GIRAJFFOX, UGICAPOX, UGICOXB, UGIFFOXB, UGIFIRINOX; Diuretic Drug Interaction Removed from Irinotecan-Containing Patient Handouts: GIAVCETIR, UGICAPIRI, UGICIRB, GIFFIRB, UGIFIRINOX, GIFOLFIRI, GIGOLFIRI, GIIR, GIIRINALT
- **Website Resources and Contact Information**

EDITOR'S CHOICE

ADJUVANT ENDOCRINE THERAPY FOR EARLY BREAST CANCER

The Provincial Systemic Therapy Program has recently approved tamoxifen for up to 10 years in women with hormone receptor positive, stages 1 to 3 invasive breast cancer (BRAJTAM). Oncologists should evaluate the specific risks and benefits of continued tamoxifen beyond 5 years with their patients, and make individualized recommendations based on cancer recurrence risk, comorbidities and side effects. Please see the [June 2013](#) issue of the Systemic Therapy Update for further information on this newly approved program.

To guide selection of therapy, the following table summarizes the current BCCA approved endocrine treatment options in postmenopausal, hormone-receptor positive early breast cancer.

Table 1. BCCA approved endocrine treatment options in years 6 to 10 according to endocrine treatment given in the first 5 years for early breast cancer.

EDITOR'S CHOICE

Years 1 to 5	Years 6 to 10
Tamoxifen only	Discontinue, or Tamoxifen for up to another 5 yrs*, or <i>*Eligible if patients completed first 5 years of upfront tamoxifen within the last 12 months.</i> <i>*Most appropriate option for women who are still premenopausal after 5 years of adjuvant tamoxifen.</i> <i>*Can be considered for any postmenopausal patient with hormone receptor positive invasive breast cancer, including those who are intolerant to Aromatase Inhibitors (AIs).</i>
	Letrozole up to 5 yr** <i>**Can be considered for any postmenopausal patient with hormone receptor positive invasive breast cancer, but benefits are greatest among women with highest risk disease:</i> <ul style="list-style-type: none"> ▪ Node positive, or ▪ Large, high-grade, node-negative, or ▪ Locally advanced
AI only	Discontinue
Tamoxifen then AI	Discontinue
AI then Tamoxifen	Discontinue

The Breast Tumour Group recommends 8 to 10 years of total endocrine therapy, particularly in women with good general health, adequate tolerance of side effects, and higher risk for breast cancer recurrence. Tamoxifen for up to 10 years is the treatment standard for premenopausal women. For postmenopausal women who have completed 5 years of tamoxifen, options for extended therapy include up to another 5 years of therapy with either letrozole or tamoxifen. Based on the lack of supporting evidence, all other combinations or durations of endocrine therapy that are not listed in the table above are not currently funded by the BCCA, and will require Compassionate Access Program (CAP) approval.

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

Removal of Calcium and Magnesium from Oxaliplatin-Containing Protocols and PPPOs:

All oxaliplatin-containing chemotherapy protocols and PPPOs have been updated to remove the recommendations for the optional use of intravenous (IV) calcium gluconate and magnesium sulfate pre- and post-oxaliplatin infusion for the prevention of oxaliplatin-associated peripheral neuropathy. This practice change resulted from a randomized controlled trial that evaluated the rate of oxaliplatin-associated sensory neurotoxicity across 3 treatment arms: [Loprinzi et al. *J Clin Oncol* 2013;31:suppl; abstr 3501]

- 1) IV calcium and magnesium pre- and post-oxaliplatin
- 2) Placebo pre- and post-oxaliplatin
- 3) IV calcium and magnesium pre- and placebo post-oxaliplatin

The study found no statistically significant differences in cumulative sensory neurotoxicity between the three groups. Cumulative sensory neurotoxicity was measured using the sensory subscale of the EORTC QLQ-CIPN20 questionnaire.

PROVINCIAL SYSTEMIC THERAPY POLICY

UPDATES TO BCCA COMPASSIONATE ACCESS PROGRAM (CAP) POLICY

Highlights of changes to the [BCCA Compassionate Access Program \(CAP\) Policy \(III-45\)](#) include:

1. Clarification of clinical scenarios where the use of Class I drugs require a CAP application:
 - When a Class I drug is used *“in combination with other Class I drug(s) for which no BCCA protocol exists, unless each of the drugs being used is within the same tumour site and has the same default code (e.g. XXNOS)”*
 - *“Where there is limited information available to support a clinical review for appropriateness and safety”*
2. Modification to the appeal process:
 - In the past, appeals were routinely forwarded to a reviewer different from the one who had denied the original request. Under the revised policy, depending on the information received, the appeal (accompanied by new clinical information and/or literature evidence) may be reviewed by the same or a different Tumour Group designate, with the Provincial Systemic Therapy Program designate rendering the final decision.

MEDICATION SAFETY CORNER

UPDATES TO BCCA TALLMAN LETTERING PHARMACY DIRECTIVE

In 2011, the BCCA implemented the Provincial Pharmacy Directive *“Use of TALLman Lettering for Medication Nomenclature”* to help prevent errors stemming from look-alike/sound-alike drugs. The directive has been updated to reflect current recommendations from the Institute for Safe Medication Practices (ISMP) Canada and ISMP US.^{1,2}

Key updates include:

1. Expansion of the TALLman lettering list to include non-oncology drugs used at the BCCA (i.e. HYDROmorphine/morphine, metronIDAZOLE/metFORMIN)
2. Clarification of when the use of TALLman lettering is recommended
3. Reminder that medications not on the TALLman list should be expressed in lower case

BCCA staff may access this directive in the BCCA internal drive at: [H:\EVERYONE\Pharmacy\BCCA Pharmacy Directives\VI RiskManagement\VI-90 Medication Nomenclature](#). To learn more about the BCCA TALLman lettering initiative, please see the [March 2011](#) issue of the Systemic Therapy Update.

References:

1. ISMP Canada safety bulletin. November 11, 2010;10(8):1-4. Available at: www.ismp-canada.org/download/safetyBulletins
2. ISMP US: FDA and ISMP lists of look-alike drug names with recommended tall man letters. 2011. Available at: www.ismp.org/tools

DRUG UPDATE

IMATINIB DISPENSING

Several generic forms of imatinib have recently become available and are currently being evaluated. At this time, the Leukemia/BMT Program of BC recommends that ONLY the brand name formulation (GLEEVEC®) should be dispensed for imatinib prescriptions until further notice. BCCA will continue to reimburse the acquisition cost of GLEEVEC® by Novartis for approved indications on the Benefit Drug List. The BCCA will provide further notification if more information becomes available.

THYROTROPIN-ALFA SHORTAGE RESOLVED

The drug shortage of thyrotropin-alfa (THYROGEN®) has been resolved. Therefore, BCCA Compassionate Access Program (CAP) approval is no longer required for indications specified on the HNOTTSH chemotherapy protocol. Please be reminded that thyrotropin-alfa is not funded for long-term use in patients with no evidence of disease and very low risk of disease recurrence.

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
UGOOVDDCAT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Treatment Of Advanced Epithelial Ovarian, Primary Peritoneal, or Fallopian Tube Carcinoma Using CARBOplatin and Weekly PACLitaxel

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

CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
------	----------	------	-----------------	---------	----------------

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

CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
BRAJLET	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Treatment section clarified</i>	Adjuvant Letrozole for Breast Cancer
BRAJTAM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Eligibility section clarified</i>	Adjuvant Therapy for Breast Cancer using Tamoxifen
GIAJFFOX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Dose Modifications section clarified</i>	Adjuvant Combination Chemotherapy for Stage III and Stage IIB Colon Cancer Using Oxaliplatin, Fluorouracil and Folinic Acid (Leucovorin)
GIAVCETIR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Observation monitoring requirements clarified</i>	Third Line Treatment of Metastatic Colorectal Cancer Using Cetuximab in combination with Irinotecan
GIFFIRB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Eligibility criteria expanded</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Fluorouracil, Folinic Acid (Leucovorin) and Bevacizumab
GIFOLFIRI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Eligibility criteria expanded</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Fluorouracil and Folinic Acid (Leucovorin)
GIFOLFOX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Eligibility criteria expanded</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, Fluorouracil and Folinic Acid (Leucovorin)
UGIFFOXB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Eligibility criteria expanded</i>	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, Fluorouracil, Folinic Acid (Leucovorin) and Bevacizumab
GIRAJCOX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Starting dose in the Treatment section clarified</i>	Adjuvant Combination Chemotherapy for Stage III Rectal Cancer Using Oxaliplatin and Capecitabine
GIRAJFFOX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Starting dose in the Treatment section, and Dose Modifications section clarified</i>	Adjuvant Combination Chemotherapy for Stage III Rectal Cancer Using Oxaliplatin, Fluorouracil and Folinic Acid (Leucovorin)
GOBEP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Tests and Hydration sections clarified; Contact Physician updated</i>	Therapy of Non-Dysgerminomatous Ovarian Germ Cell Cancer Using Bleomycin, Etoposide and Cisplatin
GOENDCAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Tests section clarified to required baseline tumour markers only if clinically indicated</i>	Treatment of Primary Advanced or Recurrent Endometrial Cancer using CARBOplatin and PACLitaxel

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

CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
UGOOVDDCAT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Premedications section clarified</i>	Treatment of Advanced Epithelial Ovarian, Primary Peritoneal, or Fallopian Tube Carcinoma Using CARBOplatin and Weekly PACLitaxel
GOOVLDOX	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Class II Eligibility clarified</i>	Treatment of Relapsed/Progressing, Epithelial Ovarian, Primary Peritoneal or Fallopian Tube Carcinoma Using Pegylated Liposomal DOXOrubicin
GOOVLDC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Volume of diluent for doxorubicin clarified</i>	Second line treatment for Epithelial Ovarian Cancer Relapsing after primary treatment using Pegylated Liposomal DOXOrubicin (PLD) and CARBOplatin
HNOTTSH	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Eligibility section clarified</i>	Radioiodine Imaging in Patients with Thyroid Cancer using Thyrotropin Alpha
ULKMSA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Treatment cycles clarified</i>	Therapy of Myelodysplastic Syndrome using Azacitidine

ALL OXALIPLATIN-CONTAINING CHEMOTHERAPY PROTOCOLS AND PPPOs HAVE BEEN UPDATED TO REMOVE THE OPTIONAL USE OF CALCIUM GLUCONATE AND MAGNESIUM SULFATE PREVIOUSLY RECOMMENDED FOR OXALIPLATIN-ASSOCIATED NEUROTOXICITY:

CODE	Protocol Title
GIAJCAPOX	Adjuvant Combination Chemotherapy for Stage III and Stage IIB Colon Cancer Using Oxaliplatin and Capecitabine
GIAJFFOX	Adjuvant Combination Chemotherapy for Stage III and Stage IIB Colon Cancer Using Oxaliplatin, Fluorouracil and Folinic Acid (Leucovorin)
GIFOLFOX	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, Fluorouracil and Folinic Acid (Leucovorin)
GIRAJCOX	Adjuvant Combination Chemotherapy for Stage III Rectal Cancer Using Oxaliplatin and Capecitabine
GIRAJFFOX	Adjuvant Combination Chemotherapy for Stage III Rectal Cancer Using Oxaliplatin, Fluorouracil and Folinic Acid (Leucovorin)
UGICAPOX	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin and Capecitabine
UGICOXB	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, Bevacizumab and Capecitabine
UGIFFOXB	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, Fluorouracil, Folinic Acid (Leucovorin) and Bevacizumab
UGIFIRINOX	Palliative Combination Chemotherapy for Metastatic Pancreatic Adenocarcinoma Using Irinotecan, Oxaliplatin, Fluorouracil and Folinic Acid (Leucovorin)

ALL PATIENT HANDOUTS FOR THE FOLLOWING IRINOTECAN-CONTAINING CHEMOTHERAPY PROTOCOLS HAVE BEEN UPDATED TO REMOVE THE DRUG INTERACTION WITH DIURETICS AS THIS IS AN ADDITIVE SIDE EFFECT RATHER THAN A DRUG INTERACTION:

CODE	Protocol Title
GI AVCETIR	Third Line Treatment of Metastatic Colorectal Cancer Using Cetuximab in combination with Irinotecan
UGICAPIRI	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan and Capecitabine in Patients Unsuited for GIFOLFIRI
UGICIRB	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Bevacizumab and Capecitabine
GI FFIRB	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Fluorouracil, Folinic Acid (Leucovorin) and Bevacizumab
UGIFIRINOX	Palliative Combination Chemotherapy for Metastatic Pancreatic Adenocarcinoma Using Irinotecan, Oxaliplatin, Fluorouracil and Folinic Acid (Leucovorin)
GI FOLFIRI	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Fluorouracil and Folinic Acid (Leucovorin)
GI GFOLFIRI	Palliative Combination Chemotherapy for Metastatic Gastric or Esophageal Adenocarcinoma Using Irinotecan, Fluorouracil and Folinic Acid (Leucovorin)
GI IR	First- or Second-Line Palliative Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan
GI IRINALT	Second-Line Treatment for Fluorouracil Refractory Metastatic Colorectal Cancer Using Weekly Scheduled Irinotecan

WEBSITE RESOURCES AND CONTACT INFORMATION

WEBSITE RESOURCES	www.bccancer.bc.ca
Systemic Therapy Update	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/stupdate
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
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 673028		sally.waignein@bccancer.bc.ca
Provincial Systemic Therapy Program	250.712.3900 x 686620		mberk@bccancer.bc.ca
Communities Oncology Network (CON)	250.519.5616		jdenduyf@bccancer.bc.ca
To update the contact information of any CON sites, please contact:			bulletin@bccancer.bc.ca
Oncology Drug Information	604.877.6275		druginfo@bccancer.bc.ca
Education Resource Nurse	604.877.6000 x 672638		nursinged@bccancer.bc.ca
Library/Cancer Information	604.675.8003 Toll Free 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 672623		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-Centre for the North	250.645.7300 Toll Free 888.775.7300		
BCCA-Fraser Valley Centre	604.930.2098 Toll Free 800.523.2885		
BCCA-Sindi Ahluwalia Hawkins Centre for the Southern Interior	250.712.3900 Toll Free 888.563.7773		
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

Sally Waignein, PharmD (Editor)
 Mário de Lemos, PharmD, MSc (Oncol)
 Caroline Lohrisch, MD
 Beth Morrison, MLS

Lindsay Schwartz, RN, MScA
 Jaya Venkatesh, MHA, CMA
 Susan Walisser, BSc (Pharm)