# Systemic Therapy Update



July 2016 Volume 19, Number 7

### For Health Professionals Who Care For Cancer Patients

#### **Inside This Issue:**

- Editor's Choice New Programs: Adjuvant Ovarian Suppression and Aromatase Inhibitor for Premenopausal Women with High-Risk Early Breast Cancer (BRAJLHRHAI), Adjuvant Raltitrexed with Oxaliplatin for Node-Positive Colorectal Cancer (UGIAJRALOX), Neoadjuvant Denosumab for Non-Metastatic Operable Giant Cell Tumour of the Bone (USANADENO)
- Provincial Systemic Therapy Program Revised Policies:
   Systemic Therapy Treatment Delivery Process (III-10),
   Physician Coverage for Medical Emergencies During Delivery of Selected Chemotherapy Drugs (III-60)
- Cancer Drug Manual New: Daratumumab (Interim)

- Benefit Drug List New: BRAJLHRHAI, UGIAJRALOX, USANADENO; Revised: Class II to Class I – BRAVCLOD, BRAVEVEX, BRAVPAM, GIAVCETIR, GIAVPANI, GOOVLDOX, GOOVPLDC, GUEVER, GUPNSAA, KSLDO, LUAVERL, LUAVMTNE, MYPAM; Delisted: UBRAJLHRHA
- List of New and Revised Protocols, Provincial Pre-Printed
  Orders and Patient Handouts New: BRAJLHRHAI,
  UGIAJRALOX, USANADENO; Revised: GIAJCAPOX, GIAVPANI,
  GICAPOX, GICOXB, GIRAJCOX, GUPDOCADT, GUPNSAA,
  UHNLACETRT, ULUAVCRIZ, ULUAVCRIZF, LULACATRT;
  Deleted: UBRAJLHRHA
- Website Resources and Contact Information

#### **EDITOR'S CHOICE**

#### **New Programs**

The BCCA Provincial Systemic Therapy Program has approved the following new programs effective 1 July 2016:

#### **Breast**:

Ovarian Suppression and Aromatase Inhibitor in Premenopausal Women with High-Risk Early Breast Cancer (BRAJLHRHAI) – Previously, the standard hormonal maneuver for premenopausal women with high-risk early breast cancer was tamoxifen alone for 5 to 10 years. Treatment with a luteinizing hormone-releasing hormone (LHRH) agonist and an aromatase inhibitor (AI) was only approved for premenopausal women with a contraindication to tamoxifen (previously UBRAJLHRHA). The BCCA has now approved an LHRH agonist with an AI for up to 5 years as a standard treatment option for premenopausal women with high-risk early breast cancer after adjuvant/neoadjuvant chemotherapy. Women 35 years of age or younger who decline chemotherapy are also eligible to receive this treatment. Tamoxifen alone remains an option for patients with relatively low-risk disease. Please note that the new BRAJLHRHAI treatment protocol replaces the previous UBRAJLHRHA treatment protocol.

Approval of this new treatment program was based on two randomized controlled trials - SOFT and TEXT.<sup>1-2</sup> Combined analysis of these two trials showed superior disease free survival at 5 years for ovarian suppression with an AI (90.1%) versus ovarian suppression with tamoxifen (88%) or tamoxifen alone (86%).

#### **EDITOR'S CHOICE**

Patients who had received adjuvant chemotherapy experienced an even greater magnitude of benefit from the LHRH agonist/Al combination. No overall survival benefit was seen at 5 years; however, few deaths have occurred and survival estimates are not yet mature. In regards to toxicity, the LHRH agonist/Al combination therapy was associated with increased rates of arthralgia, vaginal dryness, sexual dysfunction, menopausal symptoms and depression. Patients who cannot tolerate the combination therapy can be considered for single-agent tamoxifen so long as they have no contraindications.

#### References:

- 1. Francis PA, Regan MM, Fleming GF, et. al. Adjuvant ovarian suppression in premenopausal breast cancer. N Eng J Med 2015;372:436-446.
- 2. Pagani O, Regan MM, Walley BA, et al. Adjuvant exemestane with ovarian suppression in premenopausal breast cancer. N Engl J Med 2014:371:107-118

#### **Gastrointestinal:**

Adjuvant Therapy with Raltitrexed and Oxaliplatin in Node-Positive Colorectal Cancer (UGIAJRALOX) –

Fluorouracil (5-FU) with or without oxaliplatin is the cornerstone adjuvant treatment of colorectal cancer. However, when patients are unable to tolerate 5-FU, they are unable to complete their prescribed adjuvant therapy. The BCCA has now approved raltitrexed in combination with oxaliplatin in the adjuvant setting for patients with node-positive colorectal cancer who are unable to tolerate 5-FU or capecitabine. Historically, raltitrexed has been used in the metastatic setting in patients who are unable to tolerate 5-FU or capecitabine due to its favorable toxicity profile and equivalent efficacy compared to 5-FU. Since there is limited data for raltitrexed in the adjuvant setting, this treatment should be used under the supervision of a BCCA or CON medical oncologist. A BCCA CAP approval is required.

#### Sarcoma:

Neoadjuvant Denosumab for Non-Metastatic Operable Giant Cell Tumour (GCT) of the Bone

**(USANADENO)** – Neoadjuvant denosumab is now approved at the BCCA for patients with large operable GCT and recurrent GCT where surgery may not be curative. Tumours that respond to denosumab may require less extensive surgery to maintain joint function or general functionality. Approval of this treatment program is based on an open-label, single-arm, phase 2 study that evaluated denosumab in 37 patients with recurrent or unresectable GCT. In this study, 86% of patients had an objective response (defined as  $\geq$  90% elimination of giant cells on histologic evaluation or lack of tumour progression on radiographic evaluation at 25 weeks), reduced pain, and improved functional status. Denosumab-associated symptomatic hypocalcemia (e.g. muscle spasms, irritability) may occur, and may be prevented by calcium and vitamin D supplementation. A BCCA CAP approval is required.

#### References

1. Thomas D, Henshaw R, Skubitz K, et al. Denosumab in patients with giant-cell tumour of bone: an open-label, phase 2 study. Lancet Oncol 2010:11:275-280.

#### PROVINCIAL SYSTEMIC THERAPY PROGRAM

#### **REVISED POLICIES**

The BCCA Provincial Systemic Therapy Program has revised the following policies effective 1 July 2016. Key updates to each policy are highlighted below.

#### **PROVINCIAL SYSTEMIC THERAPY PROGRAM**

Systemic Therapy Treatment Delivery Process: (Policy III-10)

The term "Patient Treatment Record" has been replaced by "physician's order"

Physician Coverage for Medical Emergencies During Delivery of Selected Chemotherapy Drugs: (Policy III-60)

- Observation time for obinutuzumab clarified (post-infusion observation not needed)
- Brand names added to trastuzumab (HERCEPTIN®) and trastuzumab emtansine (KADCYLA®) to minimize confusion

#### **CANCER DRUG MANUAL**

#### **New Monographs and Patient Handouts**

The **Daratumumab Interim Monograph** has been developed. Daratumumab is a human IgG1 monoclonal antibody which binds to the transmembrane glycoprotein CD38, inhibiting the growth of CD38-expressing tumour cells. Daratumumab is not a BCCA Benefit Drug.

Infusion-related reactions are reported in about half of the treated patients. Most reactions occur with the first infusion, but can be reported with any infusion. To minimize the risk for such reactions, premedications using corticosteroids, antipyretics, and antihistamines are recommended prior to each infusion, and the rate of infusion should be incrementally increased for each cycle. In the event that the patient experiences any grade of infusion-related reactions, the infusion should be promptly interrupted and symptoms managed accordingly. Other toxicities associated with daratumumab include myelosuppression, fatigue, cough, dyspnea, and upper respiratory tract infections.

#### **BENEFIT DRUG LIST**

#### **New Programs**

The following programs have been added to the BCCA Benefit Drug List effective 1 July 2016:

Protocol Title	Protocol Code	Benefit Status
Adjuvant Ovarian Suppression and Aromatase Inhibitor in Premenopausal Women with High-Risk Early Stage Breast Cancer	BRAJLHRHAI	Class I
Adjuvant Combination Chemotherapy for Node-Positive Colon Cancer Using Oxaliplatin and Raltitrexed in Patients Intolerant to Fluorouracil or Capecitabine	UGIAJRALOX	Restricted

# Denosumab for Neoadjuvant Use in Patients with Non-Metastatic Operable Giant Cell Tumour of the Bone BENEFIT DRUG LIST USANADENO Restricted

# **REVISED PROGRAMS**

The following programs have been reclassified from **Class II** to **Class I** status on the BCCA <u>Benefit Drug List</u> effective 1 July 2016:

Protocol Code	Protocol Title
BRAVCLOD	Therapy of Bone Metastases in Breast Cancer Using Oral Clodronate
BRAVEVEX	Therapy for Advanced Breast Cancer Using Everolimus and Exemestane
BRAVPAM	Treatment of Acute Bone Pain Secondary to Breast Cancer Metastases Using Pamidronate or IV Clodronate
GIAVCETIR	Third-Line Treatment of Metastatic Colorectal Cancer Using Cetuximab in Combination with Irinotecan
GIAVPANI	Palliative Third-Line Treatment of Metastatic Colorectal Cancer Using PANitumumab
GOOVLDOX	Treatment of Relapsed/Progressing Epithelial Ovarian, Primary Peritoneal, or Fallopian Tube Carcinoma Using DOXOrubicin Liposomal (Pegylated)
GOOVPLDC	Second-Line Treatment Using Pegylated Liposomal DOXOrubicin (PLD) and CARBOplatin for Epithelial Ovarian Cancer Relapsing After Primary Treatment
GUEVER	Therapy for Advanced Renal Cancer Using Everolimus
GUPNSAA	Non-Steroidal Treatment of Prostate Cancer
KSLDO	Therapy of Kaposi's Sarcoma Using Pegylated Liposomal DOXOrubicin (CAELYX®)
LUAVERL	Second- or Third-Line Treatment of Advanced Non-Small Cell Lung Cancer (NSCLC) with Erlotinib
LUAVMTNE	Maintenance Therapy of Advanced Non-Small Cell Lung Cancer (NSCLC) with Erlotinib After First-Line Chemotherapy
МҮРАМ	Treatment of Multiple Myeloma with Pamidronate

#### **DELISTED PROGRAMS**

The following program has been removed from the BCCA Benefit Drug List effective 1 July 2016:

Protocol Title	Protocol Code
Neoadjuvant or Adjuvant Therapy for Breast Cancer Using an LHRH Agonist and an Aromatase Inhibitor	UBRAJLHRHA (Replaced by BRAJLHRHAI)

# 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 treatment requiring BCCA Compassionate Access Program approval are prefixed with the letter "U".

NEW PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED)				
CODE	Protocol	PPPO	Patient Handout	Protocol Title
BRAJLHRHAI		$\overline{\checkmark}$		Adjuvant Ovarian Suppression and Aromatase Inhibitor in Premenopausal Women with High-Risk Early Stage Breast Cancer
UGIAJRALOX	V	V	$\square$	Adjuvant Combination Chemotherapy for Node-Positive Colon Cancer Using Oxaliplatin and Raltitrexed in Patients Intolerant to Fluorouracil or Capecitabine
USANADENO	V	$\overline{\checkmark}$		Denosumab for Neoadjuvant Use in Patients with Non-Metastatic Operable Giant Cell Tumour of the Bone

REVISED PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED)					
CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
GIAJCAPOX			<b>7</b>	Seizure warning added to Emergency section; warfarin interaction removed from Medication Interactions section	Adjuvant Combination Chemotherapy for Stage III and Stage IIB Colon Cancer Using Oxaliplatin and Capecitabine
GIAVPANI		V		TALLman lettering formatted, hyperlink to lab services updated	Palliative Third-Line Treatment of Metastatic Colorectal Cancer Using PANitumumab
GICAPOX			$\square$	Seizure warning added to Emergency section; warfarin interaction removed from Medication Interactions section	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin and Capecitabine
GICOXB			$\square$	Seizure warning added to Emergency section; warfarin interaction removed from Medication Interactions section	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, Bevacizumab and Capecitabine
GIRAJCOX			$\square$	Seizure warning added to Emergency section; warfarin interaction removed from Medication Interactions section	Adjuvant Combination Chemotherapy for Stage III Rectal Cancer Using Oxaliplatin and Capecitabine
GUPDOCADT	$\square$			TALLman lettering formatted	First-Line Treatment of Castration- Sensitive Metastatic Prostate Cancer Using DOCEtaxel and Androgen Deprivation Therapy

REVISED PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED)					
CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
GUPNSAA	Ø	$\square$		TALLman lettering formatted, hyperlink to Cancer Management Guidelines updated	Non-Steroidal Treatment of Prostate Cancer
UHNLACETRT		Ø		Check box for Day minus 7 cetuximab dose removed	Combined Cetuximab and Radiation Treatment for Locally Advanced Squamous Cell Carcinoma of the Head and Neck
ULUAVCRIZ				Eligibility clarified	Second-Line Treatment of ALK-Positive Advanced Non-Small Cell Lung Cancer (NSCLC) with Crizotinib
ULUAVCRIZF				Eligibility clarified	First-Line Treatment of ALK-Positive Advanced Non-Small Cell Lung Cancer (NSCLC) with Crizotinib
LULACATRT				Premedications clarified	Treatment of Locally Advanced Non- Small Cell Lung Cancer (NSCLC) Using CARBOplatin and PACLitaxel with Radiation Therapy

DELETED PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED)					
CODE Protocol PPPO Patient Handout Protocol Title					
UBRAJLHRHA	V	V		Neoadjuvant and Adjuvant Therapy for Breast Cancer Using an LHRH Agonist and an Aromatase Inhibitor (Replaced by BRAJLHRHAI)	

Website Resources and Contact Information				
WEBSITE RESOURCES	WWW.BCCANCER.BC.CA			
Systemic Therapy Update	www.bccancer.bc.ca/health-professionals/professional-resources/systemic-therapy/systemic-therapy-update			
Reimbursement & Forms: Benefit Drug List, Class II, Compassionate Access Program	www.bccancer.bc.ca/health-professionals/professional-resources/systemic-therapy			
Cancer Drug Manual	www.bccancer.bc.ca/health-professionals/professional-resources/cancer-drug-manual			
Cancer Management Guidelines	www.bccancer.bc.ca/health-professionals/professional-resources/cancer-management-guidelines			
Cancer Chemotherapy Protocols, Pre-Printed Orders, Protocol Patient Handouts	www.bccancer.bc.ca/health-professionals/professional-resources/chemotherapy-protocols			
Systemic Therapy Program Policies	www.bccancer.bc.ca/health-professionals/professional-resources/systemic-therapy			
CON Pharmacy Educators www.bccancer.bc.ca/health-professionals/professional-resources/pharmacy				

CONTACT INFORMATION	Phone	FAX	EMAIL
Systemic Therapy Update Editor			bulletin@bccancer.bc.ca
Provincial Systemic Therapy Program	604-877-6000 x 672247		mlin@bccancer.bc.ca
To update contact information of any CON sites, ple	ase 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	604-877-6000 x 672247		mlin@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)
Mario de Lemos, PharmD, MSc (Oncol)
Caroline Lorisch, MD
Robert Crisp, BScPT, MBA

Lorraine Leitz, MLS Ava Hatcher, RN, BN CONc Rob Watt, BSc(Pharm)