

For Health Professionals Who Care For Cancer Patients

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EDITOR’S CHOICE

NEW PROGRAMS

Effective 01 October 2019, the BC Cancer Provincial Systemic Therapy Program has approved the following treatment program:

Breast:

Ribociclib and Aromatase Inhibitor With or Without LHRH Agonist in Advanced Breast Cancer (UBRAVRIBAI)

The BC Cancer Breast Tumour Group is introducing ribociclib as an alternative agent to palbociclib for patients with advanced, hormone receptor-positive breast cancer. Ribociclib is an oral inhibitor of cyclin-dependent kinases associated with increased cellular proliferation and endocrine resistance in breast cancer. Funding for ribociclib is available for postmenopausal women and men in combination with an aromatase inhibitor (AI); women requiring chemically-induced menopause with an LHRH agonist are eligible. Note that patients are funded to receive treatment with one of ribociclib (UBRAVRIBAI), palbociclib (UBRAVPALAI), or everolimus plus exemestane (UBRAVEVEX), but not the sequential use of these regimens. BC Cancer Compassionate Access Program (CAP) approval is required.

Compared to endocrine therapy alone, addition of ribociclib is associated with significantly longer overall survival (OS) (OS at 42 months, 70.2% vs. 46.0%, p=0.00973).¹ The most common serious toxicities include neutropenia (77.3%), leukopenia (34.9%), and anemia (22.4%).² Grade 3 to 4 hepatobiliary toxicity (11%) and QT interval prolongation (1.8%) have been reported. Ribociclib should be used with caution in patients receiving or initiating concurrent therapy with other QT-prolonging medications.

References:

1. Im S-A, Lu Y-S, Bardia A, et al. Overall survival with ribociclib plus endocrine therapy in breast cancer. N Engl J Med 2019;381:307-316. DOI: 10.1056/NEJMoa1903765.
2. Im S-A, Lu Y-S, Bardia A, et al. Overall survival with ribociclib plus endocrine therapy in breast cancer. N Engl J Med 2019;381:307-316. Supplementary Appendix. Available from: https://www.nejm.org/doi/suppl/10.1056/NEJMoa1903765/suppl_file/nejmoa1903765_appendix.pdf

DRUG UPDATES

BEVACIZUMAB BIOSIMILARS

Effective 01 November 2019, the BC Cancer Provincial Systemic Therapy Program will implement the use of biosimilar bevacizumab in all BC Cancer bevacizumab-containing protocols. Both biosimilars, Zirabev® and Mvasi®, are eligible for reimbursement. BC Cancer regional centres will stock Zirabev® as the designated biosimilar.

The following outlines key funding details:

- Patients starting on bevacizumab on or after November 1st will be funded for biosimilar bevacizumab only. Requests for the use of Avastin® on or after 01 November 2019 will require submission through the BC Cancer Compassionate Access Program (CAP).
- Patients who started treatment with the reference biologic, Avastin®, prior to November 1st, may continue to receive it for the duration of treatment. Clinicians may choose to switch patients currently receiving bevacizumab to the biosimilar, after discussion with the patient.
- Patients who have had a treatment interruption may continue to receive their original brand of bevacizumab if re-starting the same protocol.

More information about biosimilar drugs is available on the BC Cancer website, located in the [Biosimilar Drugs](#) section.

DRUG SHORTAGES

The following are updates of drug supply shortages in BC. Further details about the shortages and their recommended treatment alternatives can be found in the associated briefing notes and/or email communications previously circulated to BC Cancer and the Community Oncology Network (CON).

Hydroxyurea:

(Adapted from BC Cancer Briefing Note 12Sept2019)

The current shortage of hydroxyurea capsules is expected to last until November 2019. There are variable supplies remaining at BC Cancer centres and CON sites. The total quantity dispensed should be reduced to ensure that there is sufficient drug for all patients. Hydroxyurea is used in the treatment of various myeloid and lymphoid neoplasms, including polycythemia vera, essential thrombocythemia, myelofibrosis, and acute myeloid leukemia. Alternative treatment recommendations include peginterferon alfa-2a, ruxolitinib, and anagrelide, oral etoposide and 6-mercaptopurine.

Resolved:

- Dexrazoxane

MEDICAL PATIENT ASSISTANCE PROGRAMS

The listing of oncology medical patient assistance programs offered by pharmaceutical companies has been updated and can be found at: www.bccancer.bc.ca/mpap.*

*Located on the BC Cancer Systemic Therapy website under Health Professionals > Systemic Therapy > Reimbursement & Forms

BENEFIT DRUG LIST

NEW PROGRAMS

Effective 01 October 2019, the following treatment program has been added to the BC Cancer [Benefit Drug List](#):

Protocol Title	Protocol Code	Benefit Status
Therapy of Advanced Breast Cancer using Ribociclib and Aromatase Inhibitor With or Without LHRH Agonist	UBRAVRIBAI	Restricted

CANCER DRUG MANUAL

REVISED MONOGRAPHS AND PATIENT HANDOUTS

Highlights of key changes and/or updates to the Monographs, Patient Handouts and Chemotherapy Preparation and Stability Chart are listed below:

Filgrastim Monograph:

- *Cautions* – deleted outdated information related to biosimilar formulations
- *Supply and Storage* – updated wording related to biosimilar formulations

Ribociclib Monograph:

- *Dosage Guidelines* – added new protocol and bolded/italicized BC Cancer standard dosing

SYSTEMIC THERAPY UPDATE EDITORIAL BOARD

MEMBERSHIP UPDATES

Dr. Sally Waignein (Provincial Pharmacy Education Coordinator) will be stepping down as **Editor** of the **Systemic Therapy Update** due to her increasing responsibilities with the University of British Columbia. Sally joined the Editorial Board in 2011 and has served as the editor since 2012. While she will remain on the Editorial Board, she will transition her editor's responsibilities to **Dr. Anne Dar Santos** (Oncology Drug Information Specialist, Provincial Pharmacy). Anne joined the Editorial Board in May 2019 as Assistant Editor. Her new editorship role will compliment her involvement with the Cancer Drug Manual and its Editorial Board.

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

BC Cancer 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 BC Cancer 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
UBRAVRIBAI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Therapy of Advanced Breast Cancer using Ribociclib and Aromatase Inhibitor With or Without LHRH Agonist

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

CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
UBRAJTTW	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Treatment clarified</i>	Adjuvant Therapy for Breast Cancer using Weekly Paclitaxel and Trastuzumab (HERCEPTIN)
BRAVEVEX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Eligibility updated</i>	Therapy for Advanced Breast Cancer using Everolimus and Exemestane
UBRAVPALAI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Eligibility updated</i>	Therapy of Advanced Breast Cancer using Palbociclib and Aromatase Inhibitor With or Without LHRH Agonist
GUBEP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Etoposide infusion volume, duration and filter clarified</i>	Curative Therapy for Germ Cell Cancer using Bleomycin, Etoposide and Cisplatin
UGUPABI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Tests updated</i>	Palliative Therapy for Metastatic Castration-Resistant Prostate Cancer using Abiraterone and Prednisone
UGUPENZ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Institutional name and logo updated; Tests revised</i>	Palliative Therapy for Metastatic Castration-Resistant Prostate Cancer using Enzalutamide
HNAVFUFA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Minimum cycles removed; Eligibility and monitoring revised</i>	Fluorouracil and Leucovorin for Recurrent Head and Neck Cancer (Squamous Cell Carcinoma)
HNNAVFUFA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Minimum cycles removed; Eligibility and monitoring revised</i>	Treatment of Recurrent or Metastatic Nasopharyngeal Cancer with Fluorouracil and Leucovorin

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

CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title
ULKBLIN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Eligibility updated</i>	Treatment of Philadelphia Chromosome-Negative Refractory or Relapsed Pre-B-Cell Acute Lymphoblastic Leukemia with Blinatumomab
ULKINOZ	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Eligibility, Exclusions, Supportive Medications, Precautions and References updated</i>	Treatment of Relapsed or Refractory Pre-B Cell Acute Lymphoblastic Leukemia with Inotuzumab Ozogamicin
LYCHOPRMTX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Hydration fluid revised</i>	Central Nervous System Prophylaxis with High-Dose Methotrexate, CHOP and Rituximab in Diffuse Large B-Cell Lymphoma
LYCODOXMR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Tests and signature requirement clarified</i>	Treatment of Burkitt Lymphoma and Leukemia (ALL-L3) with Cyclophosphamide, Vincristine, Doxorubicin, Methotrexate, Leucovorin (CODOX-M) and Rituximab
LYIVACR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Tests and signature requirement clarified</i>	Treatment of Burkitt Lymphoma and Leukemia (ALL-L3) with Ifosfamide, Mesna, Etoposide, Cytarabine (IVAC) and Rituximab
ULYVENETO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>Tests and treatment start date revised; PPPOs: Return appointments updated; Allopurinol prescription added</i>	Treatment of Relapsed/Refractory Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma using Venetoclax
UMYCARLD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Treatment duration clarified</i>	Therapy of Multiple Myeloma using Carfilzomib, Lenalidomide with Dexamethasone
SAIME	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Dose Modifications clarified</i>	Etoposide, Ifosfamide-Mesna (SAIME) for Use in Sarcomas
SAVACM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Dose Modifications clarified</i>	Treatment of Sarcomas with Pelvic Primaries or Chemotherapy-Induced Hematuria using Vincristine, Doxorubicin, Cyclophosphamide and Mesna
SAVDCM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Dose Modifications clarified</i>	Adjuvant Therapy for Rhabdomyosarcoma using Vincristine, Dactinomycin, Cyclophosphamide and Mesna

WEBSITE RESOURCES AND CONTACT INFORMATION

CONTACT INFORMATION	PHONE	FAX	EMAIL
Systemic Therapy Update Editor	604-877-6000 x 672649		bulletin@bccancer.bc.ca
Provincial Systemic Therapy Program	604-877-6000 x 672247		mclin@bccancer.bc.ca
To update contact information of any CON sites, please contact:			bulletin@bccancer.bc.ca
Oncology Drug Information	604-877-6275		druginfo@bccancer.bc.ca
Nurse Educators	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		mclin@bccancer.bc.ca
Provincial Professional Practice Nursing			BCCancerPPNAdmin@ehcnet.phsa.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 Oncology Certification	250-712-3900 x 686820		rxchemocert@bccancer.bc.ca
BC Cancer – Abbotsford	604-851-4710 Toll Free 877-547-3777		
BC Cancer – Kelowna	250-712-3900 Toll Free 888-563-7773		
BC Cancer – Prince George	250-645-7300 Toll Free 855-775-7300		
BC Cancer – Surrey	604-930-2098 Toll Free 800-523-2885		
BC Cancer – Vancouver	604-877-6000 Toll Free 800-663-3333		
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