

Systemic Therapy Update

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For Health Professionals Who Care For Cancer Patients

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Revised: BRAJZOL2, BRAJZOL5, BRAVGEMP, BRAVTW, BRAVZOL, GIAJCAPOX, GIAVCAP, GIAVCETIR, GIAVDOC, GICIRB, GIENACTRT, GIFFIRB, UGIFFIRPAN, GIFFOXB, GIFIRINOX, UGIFFOXPAN, GIGAVCOXT, GIGAVFFOXT, GIGFLODOC, GIGFOLFIRI, UGILAN, GIPGEMABR, GIRINFRT, UGISORAF, UGOOVOLAPM, UGUAVNIV, UGUAVNIV4, UGUAXIT, GUBMITO, GUBPWRT, GUEVER, UGUPAZO, UGUPCABA, UGUSORAF, UGUSUNI, GUTEM, ULKBLIN, LUAVCRIZ, LUAVPEM, LUAVPMTN, , LYCARTOP, ULYROMI, MYBORMTN, MYBORPRE, MYBORREL, UMYDARBD, MYMPBOR, SAAVI3, SCIMMUNE USMAVFIPI, USMAVIPI, USMAVPEM; Acetaminophen Dose Change: LYBENDR, LYCHLRR, LYCHOPR, LYCHOPRMTX, LYCLLBENDR, LYCLLCHLR, LYCLLCVPR, LYCLLFBR, LYCLLFLUDR, LYCODOXMR, LYCVPR, LYFCR, LYFLUDR, LYGDPR, LYHDMRP, ULYIDELAR, LYIVACR, ULYOBBEND, ULYOBCHLOR, ULYRICE, LYRITUX, ULYRITZ, LYRMTN, ULYSILTUX; Carboplatin Dose Change: GOCXCAD, GOCXCAT, GOCXCATB, GOENDCAD, GOENDCAT, GOOVCADM, GOOVCADR, GOOVCADX, GOOVCARB, GOOVCATM, GOOVCATR, GOOVCATX

Website Resources and Contact Information

EDITOR'S CHOICE

New Programs

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

Skin/Melanoma:

Avelumab for Metastatic Merkel Cell Carcinoma (USMMCCAVE) – The BC Cancer Skin/Melanoma Tumour Group is introducing avelumab, a PD-L1 checkpoint inhibitor, for patients with advanced Merkel cell carcinoma whose disease has progressed after first-line chemotherapy. In a single-arm, phase II trial (JAVELIN), avelumab resulted in a 32% objective response rate and a median overall survival of 11.3 months at a median follow-up of 10.4 months.¹ The most common adverse events reported were fatigue (24%) and infusion-related reactions (17%), all of which were grades 1 to 2. There was no meaningful deterioration in quality of life during avelumab treatment. In order to reduce the risk of infusion-related reactions, the USMMCCAVE protocol requires premedications with acetaminophen and diphenhydramine

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for the first 4 doses; these can be continued as needed for subsequent cycles. This new treatment will fill an unmet need as there was no previous standard second-line treatment for this rare and aggressive form of skin cancer.

Genitourinary:

Ipilimumab and Nivolumab for Metastatic or Advanced Renal Cell Carcinoma (UGUAVIPNI) – The BC Cancer Genitourinary Tumour Group is introducing combination checkpoint inhibition with ipilimumab (CTLA-4 inhibitor) and nivolumab (PD-1 inhibitor) as a first-line treatment option for patients with metastatic or advanced renal cell carcinoma of intermediate or poor risk. In a phase III trial comparing this combination to sunitinib, combination checkpoint inhibition was associated with increased overall survival (median not reached vs. 26.0 mo, HR 0.63, p<0.001) and response rate (42% vs. 27%, p<0.001) at a median follow-up of 25.2 months.² Combination therapy resulted in higher rates of grades 3 to 4 adverse events as expected (21.6% vs. 12.0%). Management of immune-related adverse events will follow the SCIMMUNE protocol.

Intravesical Gemcitabine for Superficial Bladder Cancer (GUBGEM) – The BC Cancer Genitourinary Tumour Group is introducing intravesical gemcitabine for bacillus Calmette-Guérin (BCG)-refractory, intermediate- to high-risk non-muscle invasive bladder cancer following transurethral bladder resection. In a prospective, randomized phase II trial of patients with high-risk, non-muscle invasive bladder cancer that has failed one prior course of BCG therapy, intravesical gemcitabine was associated with decreased disease recurrence compared to repeated administration of intravesical BCG (52.5% vs. 87.5%, p=0.02) and improved 2-year recurrence-free survival (19% vs. 3%, p<0.008).³

Lung:

Alectinib for ALK-Positive Non-Small Cell Lung Cancer (ULUAVALE) – The BC Cancer Lung Tumour Group is introducing alectinib for locally advanced and metastatic NSCLC with anaplastic lymphoma kinase (ALK) mutations. Alectinib is a tyrosine kinase inhibitor with activity against ALK mutations. In a phase III randomized controlled trial (ALEX) comparing alectinib and crizotinib in the first-line setting, alectinib was associated with improved progression-free survival (mPFS 25.7 mo vs. 10.4 months, HR 0.50, 95% CI 0.36-0.70) and objective response rates (82.9% vs. 75.5%, p=0.09).⁴ Alectinib was also better tolerated and resulted in improved quality of life compared to crizotinib.

Lymphoma:

Mechlorethamine Topical Gel for Mycosis Fungoides-Type Cutaneous T-Cell Lymphoma (LYMECHLOR) – A new BC Cancer Chemotherapy Protocol and Pre-Printed Order is now available for this treatment. Application to the BC Cancer Compassionate Access Program (CAP) is not required. Effective immediately, a European supply of mechlorethamine topical gel (marketed as **chlormethine hydrochloride [LEDAGA®]**) is available via the Health Canada Special Access Programme (SAP). Note that mechlorethamine is synonymous with chlormethine hydrochloride as they are the <u>SAME</u> product. For further information about this product, please see the <u>April 2019</u> issue of the Systemic Therapy Update and the Cancer Drug Manual announcement below.

References:

1. Kaufman HL, Russell J, Hamid O, et al. Avelumab in patients with chemotherapy-refractory metastatic Merkel cell carcinoma: a multicentre, single-group, open-label, phase 2 trial. Lancet Oncol 2016;17:1374-1385.

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- 2. Motzer RJ, Tannir NM, McDermott DF, et al. Nivolumab plus ipilimumab versus sunitinib in advanced renal-cell carcinoma. N Engl J Med 2018-378:1277-90.
- 3. DiLorenzo G, Perdona S, Damiano R et al. Gemcitabine versus Bacille Calmette-Guerin after initial Bacille Calmette-Guerin Failure in Non-Muscle-Invasive Bladder Cancer. Cancer 2010;116:1893-1900.
- 4. Peters S, Camidge R, Shaw A, et al. Alectinib versus crizotinib in untreated ALK-positive non-small cell lung cancer. N Engl J Med 2017; 377:829-838.

New Measles Vaccine Guidelines

Effective immediately, the <u>BC Cancer Measles Vaccine Guidelines</u> are available on the Supportive Care Component of the Cancer Management Guidelines website. These guidelines are intended to provide cancer patients guidance on when they can safely receive the combined measles, mumps and rubella (MMR) vaccine, which is a live, attenuated vaccine.

Highlights of these Guidelines include:

- Lymphoma Patients:
 - Should <u>NOT</u> receive the MMR vaccine until at least 6 months after treatment discontinuation, at which time this should be discussed with the medical oncologist or hematologist
- Non-Lymphoma Patients:
 - Receiving active treatment with cytotoxic chemotherapy, targeted therapy or immunotherapy
 should generally not receive the MMR vaccine during and until 3 months after treatment
 discontinuation
 - Receiving active treatment with hormonal therapy (e.g. tamoxifen, anti-androgens) may receive the MMR vaccine
 - On surveillance may receive the MMR vaccine as long as 3 months have elapsed since their last treatment with cytotoxic chemotherapy, targeted therapy or immunotherapy
- Household Contacts (e.g. families, care providers):
 - No special precautions are required after MMR immunization of household contacts regardless of whether they have a post-vaccine rash

PROVINCIAL SYSTEMIC THERAPY PROGRAM UPDATE

New Education Initiative For Drug Programs Under Consideration

The BC Cancer Provincial Systemic Therapy Program (PSTP) is launching a new education initiative to provide Education Bulletins to educate health care staff on new treatment programs planned for implementation at BC Cancer in the near future. The goal of this initiative is to support clinical staff to provide safe and competent patient care during the administration, distribution and management of new and complex treatment programs. Each Education Bulletin will include drug(s)/treatment program(s) expected to be launched in the near future to allow adequate time for clinical staff to become familiar with these treatments prior to encountering them in practice. They may also include drug treatments that may be delivered to patients prior to formal listing through manufacturer patient support programs or clinical trials. Each Education Bulletin will include details about the new drug(s)/treatment program, the approved indication(s), how they are administered, and their common

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adverse effects.

Implementation of the Education Bulletin will be rolled out in several phases to the health care staff, with the initial phase targeting the Nursing discipline. PSTP will distribute the Education Bulletins via email in advance of the expected formal launch date; they will also be posted on the BC Cancer Systemic Therapy website in the near future so they can be easily accessible to all staff delivering systemic therapy around the province. Please stay tuned for an announcement on the Systemic Therapy Update once the website becomes available.

REVISED PROVINCIAL SYSTEMIC THERAPY PROGRAM POLICIES

Policy III-40 – Systemic Therapy Treatments:

- Funding review process diagram (Appendix II) updated
- Reformatted

<u>Policy III-50</u> – Administration of High Alert Medications by the Intrathecal Route via Lumbar Puncture or Ommaya Reservoir

<u>Policy III-60</u> – Drug Reaction Management – Physician Coverage During Delivery of Selected Systemic Therapy Drugs:

Avelumab and siltuximab added

DRUG UPDATE

BC PHARMACARE COVERAGE FOR STANDARDIZED MAGIC MOUTHWASH

Effective 01 May 2019, a standardized Magic Mouthwash formula will be covered as a BC PharmaCare Special Authority benefit product under the practitioner exemption program. As such, patients should not have to wait for Special Authority approval when filling the prescription.

Magic Mouthwash is a multi-ingredient mouth rinse to relieve pain associated with oral mucositis. Current guidelines do not provide recommendations for a single preferred formulation.^{1,2,3} A survey across all BC Cancer centres identified a variety of formulations being prescribed, with similar but varying names, ingredients and directions for use. In preparation for Clinical and Systems Transformation (CST), a standardized Magic Mouthwash formulation (see below) was selected based on best available evidence for efficacy and safety, as well as expert opinion by BC Cancer clinicians.^{4,5,6,7}

DRUG UPDATE

BC Cancer Magic Mouthwash	
diphenhydrAMINE liquid (12.5 mg/5 mL) hydrocortisone injection (100 mg/2 mL) nystatin suspension (100,000 units/mL) Add distilled water to make final volume as	300 mL 2 mL 100 mL 1000 mL
Directions: 20 mL swish and spit q4-6h prn 20 mL swish and swallow q4-6h prn Pharmacare Special Authority Benefit PIN: 2	2123334

Diphenhydramine and hydrocortisone reduce pain and inflammation, and nystatin is an antifungal agent included to prevent oral thrush associated with hydrocortisone.

How should BC Cancer Magic Mouthwash be implemented into current practice?

Effective May 1st, pre-printed prescription pads with the standardized Magic Mouthwash formulation will be available to prescribers at all BC Cancer regional centres.

The following resources have also been created and posted on the BC Cancer <u>Supportive Care</u> <u>Chemotherapy Protocols</u> website:

- Treatment of Oral Mucositis using BC Cancer Magic Mouthwash (SCMMW) Protocol
- BC Cancer Magic Mouth Prescription TEMPLATES contains BC Cancer logo and regional centre contact information (for BC Cancer prescribers)
- BC Cancer Magic Mouth Prescription SAMPLE without BC Cancer logo (for prescribers in the Communities Oncology Network)
- Frequently Asked Questions (FAQ) document provides further information about implementation of this standardized Magic Mouthwash formulation

How to ensure prescribed Magic Mouthwash is covered by BC PharmaCare?

BC PharmaCare has assigned a Benefit Product Identification Number (PIN) – 22123334 specifically for the above standardized formulation. This PIN is included on all pre-printed prescription pads described above. If clinicians are transcribing the order directly on a new prescription pad, it must include the PIN in order for the treatment to be eligible for Special Authority coverage under practitioner exemption.

Which prescribers will receive practitioner exemption from BC PharmaCare?

BC PharmaCare has coordinated with BC Cancer to ensure prescribers who currently have Special Authority exemption for ondansetron to automatically receive practitioner exemption for the BC Cancer Magic Mouthwash. All inquiries (about PharmaCare coverage or others) can be directed to Provincial Pharmacy Drug Information at <u>druginfo@bccancer.bc.ca</u>.

DRUG UPDATE

References:

- 1. Lalla RV, Bowen J, Barasch A, et al. MASCC/ISOO clinical practice guidelines for the management of mucositis secondary to cancer therapy. Cancer 2014; 120(10): 1453-61
- 2. Bensinger W, Schubert M, Ang K, et al. NCCN Task force report: prevention and management of mucositis in cancer care. JNCCN 2008;6: Supplement 1.
- 3. Peterson DE, Bensadoun RJ, Roila F. Management of oral and gastrointestinal mucositis: ESMO clinical recommendations. Ann Oncol 2009. 20: Supplement 4.
- 4. Personal Communication. Dr. C Ho, BC Cancer Medical Oncologist [Email]. Aug 1, 2018.
- 5. Personal Communication. Dr. F. Wong, BC Cancer Radiation Oncologist. [Email]. Aug 2, 2018.
- 6. Personal Communication. Dr. P. Hawley, BC Cancer Palliative Medicine Specialist. [Email]. July 31, 2018.
- 7. Personal Communication. Dr. A. Hovan, BC Cancer Dentistry. Sept 19, 2018.

BENEFIT DRUG LIST

New Programs

Effective 01 May 2019, the following treatment programs have been added to the BC Cancer <u>Benefit Drug</u> <u>List</u>:

Protocol Title	Protocol Code	Benefit Status
Treatment of Metastatic or Advanced Renal Cell Carcinoma using Ipilimumab and Nivolumab	UGUAVIPNI	Restricted
Intravesical Therapy for Superficial Bladder Cancer using Gemcitabine	GUBGEM	Class I
Treatment of ALK-Positive Advanced Non-Small Cell Lung Cancer with Alectinib	ULUAVALE	Restricted
Topical Mechlorethamine in Cutaneous T-Cell Lymphoma	LYMECHLOR	Class I
Second-Line Treatment of Recurrent or Metastatic Merkel Cell Carcinoma using Avelumab	USMMCCAVE	Restricted

REVISED PROGRAMS

Effective 01 May 2019, the following treatment program has been revised to the BC Cancer <u>Benefit Drug</u> <u>List</u>:

Protocol Title	Protocol Code	Benefit Status
Maintenance Therapy of Advanced Non-Small Cell Lung Cancer (NSCLC) with Pemetrexed	LUAVPMTN	Class I (Previously Restricted)

CANCER DRUG MANUAL

New Monographs and Patient Handouts

Effective 01 May 2019, the following drugs have been added to the <u>Cancer Drug Manual</u> Drug Index.

Mechlorethamine Interim Monograph and **Patient Handout** have been developed. Mechlorethamine is an alkylating drug used for the topical treatment of mycosis fungoides-type cutaneous T-cell lymphoma. It is applied in a thin film once daily to affected areas of the skin.

Highlights from these documents include:

- Mechlorethamine comes in an alcohol-based gel formulation and is, therefore, flammable; smoking
 or exposure to flames should be avoided until applied product has fully dried
- Caution should be exercised against accidental exposure (e.g., of unaffected areas, caregivers, infants/children, etc.); thoroughly wash areas of accidental exposure with soap and water for at least 15 minutes
- Contact with mucous membranes, especially the eyes, should be immediately irrigated with water for at least 15 minutes and may require emergency care as burns, ulceration, severe pain, blurred vision and blindness can occur.

Mechlorethamine is on the **Auxiliary Label List** and the **Hazardous Drug List**. Please see the Editor's Choice section above for further information about the new mechlorethamine-containing BC Cancer Protocol and Pre-Printed Order.

Apalutamide Monograph and **Patient Handout** have been developed with expert review provided by Dr. Daniel Khalaf (medical oncologist) and Victoria Kletas (pharmacist) of the BC Cancer Genitourinary Tumour Group. Apalutamide is an orally administered non-steroidal antiandrogen and lacks androgen receptor agonist activity. It is used in combination with medical or surgical castration for the treatment of non-metastatic castration-resistant prostate cancer. The usual dose is 240 mg PO once daily to be taken continuously. Please note that apalutamide is <u>NOT</u> funded by BC Cancer. The accompanying Monograph and Patient Handout are made available for reference only.

Highlights of these documents include:

- Falls and fractures have been reported
- Hypothyroidism has been reported; apalutamide may also reduce the efficacy of levothyroxine induction of UDP-glucuronosyl transferase (UGT)
- Rash may occur in approximately 25% of patients; corticosteroids, antihistamines and dose modifications (i.e. reduction, interruption or discontinuation) may be required
- Rare, but serious, adverse events include ischemic heart disease, cardiac failure and seizures

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 (CPSC) are listed below:

Bevacizumab Handout:

 See Your Doctor or Get Emergency Help – revised bullet for abdominal pain to include other nonspecific signs of bowel perforation

Daratumumab Monograph:

- Cautions and Side Effects added warning about hepatitis B reactivation
- Solution Preparation and Compatibility added acceptable concentration range for compounding intravenous solutions

Mitoxantrone Monograph:

- Cautions updated information about cumulative dosing
- Dosing updated suggested maximum cumulative dose

LIST OF 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	NEW PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED)					
CODE	Protocol	I PPPO Patient Handout Protocol Title				
UGUAVIPNI	V	\checkmark	V	Treatment of Metastatic or Advanced Renal Cell Carcinoma using Ipilimumab and Nivolumab		
GUBGEM	V	\checkmark	V	Intravesical Therapy for Superficial Bladder Cancer using Gemcitabine		
GUBMITO		\checkmark		Intravesical Therapy for Invasive Cell Bladder Cancer using Mitomycin		
ULUAVALE	\checkmark	\checkmark	\checkmark	Treatment of ALK-Positive Advanced Non-Small Cell Lung Cancer with Alectinib		
LYMECHLOR	\checkmark	\checkmark	V	Topical Mechlorethamine in Cutaneous T-Cell Lymphoma		

New Protocols, PPPOs and Patient Handouts (Affected Documents are Checked)

CODE	Protocol	РРРО	Patient Handout Protocol Title	
SCMMW	\checkmark			Treatment of Oral Mucositis using BC Cancer Magic Mouthwash
USMMCCAVE	\checkmark	\checkmark	\checkmark	Second-Line Treatment of Recurrent or Metastatic Merkel Cell Carcinoma using Avelumab

REVISED PROTOC	REVISED PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED)					
CODE	Protocol	РРРО	Patient Handout	Changes	Protocol Title	
BRAJZOL2		V		Dosing clarified	Adjuvant Treatment of Post-Menopausal Women using 3-Monthly Zoledronic Acid	
BRAJZOL5		\checkmark		Dosing clarified	Adjuvant Treatment of Post-Menopausal Women using 6-Monthly Zoledronic Acid	
BRAVGEMP	Ø	Ø		Treatment duration, tests, Institutional name and Logo updated	Palliative Therapy for Metastatic Breast Cancer using Cisplatin and Gemcitabine	
BRAVTW	V			Treatment duration updated	Palliative Therapy for Metastatic Breast Cancer using Weekly Paclitaxel (3 Weeks Out of 4 Weeks Schedule)	
BRAVZOL		V		Dosing clarified	Treatment of Acute Bone Pain Secondary to Breast Cancer Metastases using IV Zoledronic Acid	
GIAJCAPOX	V			Eligibility and oxaliplatin cutoff updated	Adjuvant Combination Chemotherapy for Stage III and Stage IIB Colon Cancer using Oxaliplatin and Capecitabine	
GIAVCAP	V			Treatment duration, Tests and Institutional name updated	Palliative Therapy of Advanced Colorectal Cancer using Capecitabine	
GIAVCETIR	V			Treatment duration updated	Third-Line Treatment of Metastatic Colorectal Cancer using Cetuximab in Combination with Irinotecan	
GIAVDOC	V			D5W option for docetaxel under treatment section deleted	Palliative Treatment of Metastatic Esophagogastric Adenocarcinoma with Docetaxel	

REVISED PROTOC	Revised Protocols, PPPOs and Patient Handouts (Affected Documents are Checked)					
CODE	Protocol	РРРО	Patient Handout	Changes	Protocol Title	
GICIRB	V			Eligibility clarified, treatment duration updated	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer using Irinotecan, Bevacizumab and Capecitabine	
GIENACTRT	V	V	V	Typo corrected, Tests, Premedications, Institutional name and Logo, Contact Physician updated	Neoadjuvant Treatment of Esophageal and Gastroesophageal Carcinomas using Carboplatin, Paclitaxel and Radiation Therapy	
GIFFIRB	V			Eligibility clarified, treatment duration updated	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer using Irinotecan, Fluorouracil, Leucovorin, and Bevacizumab	
UGIFFIRPAN	V	V		Typo corrected and priming instructions clarified	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer using Irinotecan, Fluorouracil, Leucovorin and Panitumumab	
GIFFOXB	V			Eligibility clarified, treatment duration updated	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer using Oxaliplatin, Fluorouracil, Leucovorin and Bevacizumab	
GIFIRINOX	V			Eligibility clarified, Treatment duration updated	Palliative Combination Chemotherapy for Advanced Pancreatic Adenocarcinoma using Irinotecan, Oxaliplatin, Fluorouracil and Leucovorin	
UGIFFOXPAN	V			Oxaliplatin cutoff dose updated	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer using Oxaliplatin, Fluorouracil, Leucovorin, and Panitumumab	
GIGAVCOXT				Priming solution for the mediations updated	Palliative Treatment of Metastatic or Locally Advanced Gastric, Gastroesophageal Junction, or Esophageal Adenocarcinoma using Capecitabine, Oxaliplatin, and Trastuzumab (HERCEPTIN)	
GIGAVFFOXT		V		Priming solution for the mediations updated	Palliative Treatment of Metastatic or Locally Advanced HER-2 Positive Gastric, Gastroesophageal Junction, or Esophageal Adenocarcinoma using Oxaliplatin, Fluorouracil, Leucovorin, and Trastuzumab	
GIGFLODOC	V	V		Typo in the date for protocol revision corrected, oxaliplatin cutoff dose updated, and D5W option for docetaxel deleted under treatment section	Perioperative Treatment of Resectable Adenocarcinoma of the Stomach, Gastroesophageal Junction or Lower 1/3 Esophagus using Docetaxel, Oxaliplatin, Infusional Fluorouracil, and Leucovorin	

REVISED PROTOC	Revised Protocols, PPPOs and Patient Handouts (Affected Documents are Checked)					
CODE	Protocol	РРРО	Patient Handout	Changes	Protocol Title	
GIGFOLFIRI	Ø			Treatment duration updated	Second-Line Palliative Combination Chemotherapy for Metastatic Gastric or Esophageal Adenocarcinoma using Irinotecan, Fluorouracil and Leucovorin	
UGILAN		V		Added separate line under Treatment to accommodate for lanreotide dose modification	Symptomatic Management of Functional Carcinoid and Neuroendocrine Tumors of the GI Tract using Lanreotide (SOMATULINE AUTOGEL)	
GIPGEMABR	V			Treatment duration updated	First-Line Treatment of Locally Advanced and Metastatic Pancreatic Cancer with Paclitaxel-Nab (ABRAXANE) and Gemcitabine	
GIRINFRT	V	V		Treatment cycle clarified	Combined Modality Adjuvant Therapy for High- Risk Rectal Carcinoma using Capecitabine, Infusional Fluorouracil and Radiation Therapy	
UGISORAF		\checkmark		Administration route added	Therapy for Advanced Hepatocellular Carcinoma using Sorafenib	
UGOOVOLAPM	V	V		Treatment cycle and dispensing quantity clarified	Maintenance Treatment of Relapsed, BRCA- Mutated, Platinum-Sensitive and Responsive Epithelial Ovarian Cancer using Olaparib	
UGUAVNIV	V	\checkmark		Eligibility updated, Tests updated	Treatment of Metastatic or Advanced Renal Cell Carcinoma using Nivolumab	
UGUAVNIV4		V		Eligibility updated, Tests updated	Treatment of Metastatic or Advanced Renal Cell Carcinoma using 4-Weekly Nivolumab	
UGUAXIT	V	\checkmark		Eligibility, Tests, Institutional name updated	Therapy for Metastatic Renal Cell Carcinoma using Axitinib	
GUBMITO	V			Eligibility and Logo updated	Intravesical Therapy for Invasive Cell Bladder Cancer using Mitomycin	
GUBPWRT		\checkmark		Typo corrected	Treatment of Locally Advanced Bladder Cancer with Weekly Cisplatin and Concurrent Radiation	
GUEVER	V	V	V	Eligibility, Tests, Institutional name updated	Therapy for Advanced Renal Cancer using Everolimus	
UGUPAZO	V	V	V	Eligibility, Tests, Institutional name updated	Palliative Therapy for Renal Cell Carcinoma using Pazopanib	

REVISED PROTOC	Revised Protocols, PPPOs and Patient Handouts (Affected Documents are Checked)					
CODE	Protocol	РРРО	Patient Handout	Changes	Protocol Title	
UGUPCABA	V	V		Administration and Tests clarified, Institutional name and Logo updated	Palliative Therapy for Metastatic Castration- Resistant Prostate Cancer using Cabazitaxel and Prednisone	
UGUSORAF	V	V	V	Eligibility, Tests, Institutional name updated	Palliative Therapy for Renal Cell Carcinoma using Sorafenib	
UGUSUNI	V	\checkmark	V	Eligibility, Tests, Institutional name updated	Palliative Therapy for Renal Cell Carcinoma using Sunitinib	
GUTEM	V			Eligibility updated	Therapy for Advanced Renal Cancer using Temsirolimus	
ULKBLIN	V			Eligibility revised	Treatment of Philadelphia Chromosome Negative Refractory or Relapsed Pre-B-Cell Acute Lymphoblastic Leukemia with Blinatumomab	
LUAVCRIZ	V			Eligibility revised	Second-Line Treatment of ALK-Positive Advanced Non-Small Cell Lung Cancer (NSCLC) with Crizotinib	
LUAVPEM	V			Exclusions clarified	Second-Line Chemotherapy of Advanced Non- Small Cell Lung Cancer (NSCLC) With Pemetrexed	
LUAVPMTN	V	\checkmark	V	Eligibility and Protocol Code revised	Maintenance Therapy of Advanced Non-Small Cell Lung Cancer with Pemetrexed	
LYCARTOP	V			Eligibility, Contact Physician and Institutional name revised	Topical Carmustine in Cutaneous T-Cell Lymphoma	
ULYROMI		V		Administration route added	Treatment of Relapsed or Refractory Peripheral T-Cell Lymphoma (PTCL) with Romidepsin	
MYBORMTN	V			Dose clarified	Maintenance Therapy of Multiple Myeloma using Bortezomib for Patients with the High-Risk Chromosome Abnormality	
MYBORPRE	V			Dose clarified, Treatment duration updated	Treatment of Multiple Myeloma using Bortezomib, Dexamethasone with or without Cyclophosphamide as Induction Pre-Stem Cell Transplant	
MYBORREL	V			Dose clarified	Treatment of Relapsed Multiple Myeloma using Bortezomib, Dexamethasone With or Without Cyclophosphamide	

REVISED PROTOC	REVISED PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED)					
CODE	Protocol	РРРО	Patient Handout	Changes	Protocol Title	
UMYDARBD	V	V		Dose clarified	Treatment of Relapsed and Refractory Multiple Myeloma with Daratumumab in Combination with Bortezomib and Dexamethasone With or Without Cyclophosphamide	
MYMPBOR	V			Dose clarified	Treatment of Multiple Myeloma using Melphalan, Prednisone and Weekly Bortezomib With the Option of Substituting Cyclophosphamide for Melphalan	
SAAVI3	V			Activated and revision dates added	3-Day Ifosfamide for use in Patients with Advanced Soft Tissue Sarcoma	
SCIMMUNE			V	Treatment summary and Instructions clarified	Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitors Immunotherapy	
USMAVFIPI	V	V	V	Infusion administration, Tests and Premedications clarified, Institutional name and Logo updated	First-Line Treatment of Unresectable or Metastatic Melanoma using Ipilimumab	
USMAVIPI	ন	Ø	V	Infusion administration, Tests and Premedications clarified, Institutional name and Logo updated	Treatment of Unresectable or Metastatic Melanoma using Ipilimumab	
USMAVPEM	V	V		Test and Premedications clarified	Treatment of Unresectable or Metastatic Melanoma using Pembrolizumab	

The **Acetaminophen Dose** has been changed from 1000 mg to 975 mg in the following BC Cancer Lymphoma protocols and pre-printed orders:

CODE	Protocol Title
LYBENDR	Treatment of Non-Hodgkin Lymphoma with Bendamustine and Rituximab
LYCHLRR	Treatment of Indolent B-cell Lymphoma Chlorambucil and Rituximab
LYCHOPR	Treatment of Lymphoma with Doxorubicin, Cyclophosphamide, Vincristine, Prednisone and Rituximab
LYCHOPRMTX	Central Nervous System Prophylaxis with High-Dose Methotrexate, CHOP and Rituximab in Diffuse Large B-Cell Lymphoma
LYCLLBENDR	Treatment of Relapsed/Refractory Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma with Bendamustine and Rituximab
LYCLLCHLR	Treatment of Chronic Lymphocytic Leukemia with Chlorambucil and Rituximab
LYCLLCVPR	Treatment of Relapsed Chronic Lymphocytic Leukemia using Cyclophosphamide, Vincristine, Prednisone and Rituximab
LYCLLFBR	Treatment of Previously Untreated Chronic Lymphocytic Leukemia with Bendamustine and Rituximab
LYCLLFLUDR	Treatment of Chronic Lymphocytic Leukemia or Prolymphocytic Leukemia with Fludarabine and Rituximab
LYCODOXMR	Treatment of Burkitt Lymphoma and Leukemia with Cyclophosphamide, Vincristine, Doxorubicin, Methotrexate, Leucovorin (CODOX-M) and Rituximab
LYCVPR	Treatment of Advanced Indolent Lymphoma using Cyclophosphamide, Vincristine, Prednisone and Rituximab
LYFCR	Treatment of Chronic Lymphocytic Leukemia or Prolymphocytic Leukemia with Fludarabine, Cyclophosphamide and Rituximab
LYFLUDR	Treatment of Relapsed Indolent Lymphoma with Fludarabine and Rituximab
LYGDPR	Treatment of Lymphoma with Gemcitabine, Dexamethasone and Cisplatin with Rituximab
LYHDMRP	Treatment of Primary Intracerebral Lymphoma with High Dose Methotrexate and Rituximab
ULYIDELAR	Treatment of Relapsed/Refractory Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma using Idelalisib and Rituximab
LYIVACR	Treatment of Burkitt Lymphoma and Leukemia (ALL-L3) with Ifosfamide, Mesna, Etoposide, Cytarabine and Rituximab
ULYOBBEND	Treatment of Rituximab-refractory Follicular Lymphoma (FL) with Obinutuzumab in combination with Bendamustine
ULYOBCHLOR	Treatment of Previously Untreated Chronic Lymphocytic Leukemia (CLL) or Small Lymphocytic Lymphoma with Obinutuzumab and Chlorambucil
ULYRICE	Treatment of Relapsed or Refractory Advanced Stage Aggressive B-Cell Non-Hodgkin's Lymphoma with Ifosfamide, Carboplatin, Etoposide and Rituximab

CODE	Protocol Title
LYRITUX	Treatment of Lymphoma with Single Agent Rituximab
ULYRITZ	Palliative Therapy For Lymphoma using Radioimmunotherapy: Rituximab-Priming for Ibritumomab 90Y
LYRMTN	Maintenance Rituximab for Indolent Lymphoma
ULYSILTUX	Treatment of Multicentric Castleman's Disease (MCD) Negative for Human Immunodeficiency Virus and Human Herpes Virus-8 using Siltuximab

The **Carboplatin Dose Modifications** section has been revised (to remove the option for dose escalation to 120%) in the following BC Cancer Gynecologic Oncology protocols:

CODE	Protocol Title		
GOCXCAD	Primary Treatment of Advanced/Recurrent Non-Small Cell Cancer of the Cervix with Carboplatin and Docetaxel in Ambulatory Care Settings		
GOCXCAT	Primary Treatment of Advanced/Recurrent Non-Small Cell Cancer of the Cervix with Carboplatin and Paclitaxel in Ambulatory Care Settings		
GOCXCATB	Primary Treatment of Metastatic or Recurrent Cancer of the Cervix with Bevacizumab, Carboplatin and Paclitaxel		
GOENDCAD	Treatment of Primary Advanced or Recurrent Endometrial Cancer using Carboplatin and Docetaxel		
GOENDCAT	Treatment of Primary Advanced or Recurrent Endometrial Cancer using Carboplatin and Paclitaxel		
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		
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		
GOOVCARB	First- or Second-Line Therapy for Invasive Epithelial Ovarian Cancer using Single-Agent Carboplatin		
GOOVCATM	Primary Treatment of No Visible Residual (Moderate-High Risk) Invasive Epithelial Ovarian, Fallopian Tube and Primary Peritoneal Cancer using Carboplatin and Paclitaxel		
GOOVCATR	Second-Line Treatment of Invasive Epithelial Ovarian, Fallopian Tube or Peritoneal Cancer Relapsing after Primary Treatment using Paclitaxel and Carboplatin		
GOOVCATX	Primary Treatment of Visible Residual (Extreme Risk) Invasive Epithelial Ovarian, Fallopian Tube or Peritoneal Cancer using Carboplatin and Paclitaxel		

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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		mlin@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-Prince George (Centre for the North)	250-645-7300 Toll Free 888-775-7300		
BC Cancer-Surrey	604-930-2098 Toll Free 800-523-2885		
BC Cancer-Kelowna	250-712-3900 Toll Free 888-563-7773		
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