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BC Cancer Tumour Group Specific Prioritization and Mitigation Recommendations during COVID-19 Pandemic

Developed by BC Cancer Tumour Groups
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Abbreviations

ADT	Androgen Deprivation Therapy
API	Androgen Pathway Inhibitor
ARR	Absolute Risk Reduction
BSC	Best Supportive Care
CLL	Chronic Lymphocytic Leukemia
CNS	Central Nervous System
CT	Chemotherapy
DCIS	Ductal Carcinoma In Situ
DHIT	Double-Hit Lymphoma
DIBH	Deep Inspiration Breath Hold
DLBCL	Diffuse Large B-Cell Lymphoma
EOC	Epithelial Ovarian Carcinoma
ER	Estrogen Receptor
ET	Endocrine Therapy
FN	Febrile Neutropenia
FU	Follow Up
HNSCC	Head and Neck Squamous Cell Carcinoma
GBM	Glioblastoma
GCT	Germ Cell Tumour
GI	Gastrointestinal
GTN	Gestational Trophoblastic Neoplasm
GU	Genitourinary
HCC	Hepatocellular Carcinoma
HER2	Human Epidermal Growth Factor Receptor 2
IMRT	Intensity Modulated Radiotherapy
IGCCCG	International Germ Cell Cancer Collaborative Group

IR	Interventional Radiology
mCRPC	Metastatic Castration-Resistant Prostate Cancer
MCL	Mantle Cell Lymphoma
MO	Medical Oncologist
NET	Neuroendocrine Tumour
NHL	Non-Hodgkin Lymphoma
NLPHL	Nodular Lymphocyte Predominant Hodgkin Lymphoma
NPC	Nasopharyngeal Carcinoma
NSCLC	Non-Small Cell Lung Carcinoma
OAR	Organs At Risk
OS	Overall Survival
PFS	Progression Free Survival
PMBCL	Primary Mediastinal Large B-Cell Lymphoma
PR	Progesterone Receptor
PRRT	Peptide Receptor Radionuclide Therapy
PTCL	Peripheral T-Cell Lymphoma
RO	Radiation Oncologist
RT	Radiation Therapy
SABR	Stereotactic Ablative Body Radiotherapy
SCC	Squamous Cell Carcinoma
SCLC	Small Cell Lung Cancer
SPB	Solitary Plasmacytoma of Bone
SSA	Somatostatin Analogue
ST	Systemic Therapy
TKI	Tyrosine Kinase Inhibitors

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1.0 Preamble

The purpose of the following tables (divided for systemic therapy and radiotherapy) are:

1) To provide tumour group recommendation on prioritization level appropriate alterations in treatment for each indication if a centre needs to start restricting access to particular priority phases outlined in the BC Cancer Prioritization Framework. These recommendations are meant to serve as a guidance document.

2) To provide tumour group recommendations on radiotherapy fractionations and techniques, and systemic therapy regimens that are the most efficient possible (in terms of complexity, time requirements and number of patients visits), and least likely to precipitate increased need for medical care within all priority phases during the pandemic.

BC Cancer Prioritization Framework

The prioritization framework prioritizes indications according to the urgency of the particular indication, and the relative benefit of the treatment of that indication with Radiotherapy or systemic therapy. Prioritization level 1 having more urgency or benefit, and prioritization level 6 having the lowest urgency or benefit.

Prioritization Level	External Beam Radiation*	IV Systemic Therapy
1	• Emergencies: cord compressions, life threatening bleeding, circulatory or respiratory obstruction.	• Emergencies: chemo-sensitive malignancy causing or at high risk of organ function compromise (e.g. airway obstruction, spinal cord compression, bowel obstruction, severe debilitating symptoms, severe potentially reversible metabolic derangement)
2	• Curative intent RT for: ○ Squamous cell cancer of the Head & Neck, Cervix, Anus or Esophagus	• Limited or extensive stage small cell carcinoma • Curative intent treatment for germ cell cancers and lymphoma

	○ Aggressive and intermediate grade Lymphoma ○ Bladder cancer ○ Small cell cancers ○ Neoadjuvant RT for rectal cancer with a 5 day regimen ○ Pediatric cases • Palliative RT for intractable symptom from cancer in patient with > 6 week life expectancy	• Neoadjuvant treatment where there is high likelihood of enabling surgical cure and high level evidence supporting that treatment (e.g. locally advanced breast cancer) • Patients eligible for dual modality treatment with curative intent (e.g. squamous cell cancer of the head & neck, cervix cancer, bladder, and lung cancer)
3	• Other curative-intent RT in whom there is clinical or radiographic evidence of gross tumour present that is not otherwise specified • Neoadjuvant RT for sarcoma, locally advanced breast and rectal cancer with a 25 day regimen • Adjuvant or prophylactic RT for indications associated with a survival benefit • Curative RT for good prognosis gliomas • Palliative RT for indications not otherwise specified in patient with > 6 week life expectancy	• Palliative therapy for patients who have moderate to severe symptoms • Patients being considered for adjuvant treatment where the absolute reduction in risk is ≥ 10%.
4	• Curative intent RT to the low and intermediate risk Prostate cancer or high risk localized prostate cancer responding to Androgen Deprivation. • Adjuvant RT indications that are not associated with a survival benefit (e.g. DCIS of the breast) • Benign CNS lesions (pituitary, meningioma (other than optic meningiomas) • Palliative RT for poor prognosis gliomas/glioblastomas • Prophylactic palliative RT for asymptomatic	• Palliative therapy for patients that have no or minimal symptoms • Patients being considered for adjuvant treatment where the absolute risk reduction is less than 10% but greater than 2%

	lesions • RT for low grade lymphoma • SABR for asymptomatic oligometastatic disease • Palliative RT for brain metastases in cases where there is a systemic options with potential CNS control • Non-melanoma skin cancer • Palliative RT for symptom from cancer that are currently reasonably controlled with other methods	
5	• Very Low risk prostate cancer • Adjuvant RT for low risk DCIS • Palliative RT near end of life (<6 weeks survival) • Non-threatening meningiomas • Patients in whom treatments other than radiation are options to replace or defer radiation (e.g. hormonal therapy in selective patients with prostate cancer or with low risk luminal A breast cancer or women over 70 years of age with low risk breast cancer).	• Palliative therapy where there is minimal expected benefit from patient factors (e.g. those with poor performance status ≥3) and/or for whom the benefits of systemic therapy are minimal (e.g. response rate <10%, median PFS/OS benefits <2 months) • Patients being considered for adjuvant treatment with an absolute risk reduction of less than 2% (e.g. adjuvant bisphosphonates) • Patients who are on palliative intent therapy and have been on the same regimen for > 6 months will be considered for treatment interruption or lengthening the interval between treatments
6	• Elective non-malignant cases. • Heterotopic bone • Hyperplastic soft tissue lesions: peyronie's disease, Dupuytren's contracture) • Minimal risk acoustic neuromas, • Arteriovenous malformations	• Not Applicable

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2.0 Breast Cancer

2.1 Systemic Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for Use when Prioritization Level Activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Breast	Metastatic- with emergent indications (see comments)	1	Chemotherapy	Consider multi-agent CT regimen given q3 week: BRAVPTRAD; BRAVPTRAT; BRAVGEMP; BRAVGEMT And/or RT	Most effective in HER2+ or ER-/PR-/HER2- subtypes Consider RT	**For Emergencies:** Causing or at high risk of organ function/ compromise (e.g. airway obstruction, bowel obstruction, severe potentially reversible metabolic derangement)
Breast	Adjuvant	2	Neoadjuvant and adjuvant chemotherapy	Neoadjuvant chemotherapy only. No new starts of adjuvant chemotherapy.	For all ER+/HER2- stage II-III breast cancers start on neoadjuvant hormonal therapy (except weak ER+/PR-/HER2-)	Neoadjuvant chemotherapy only given for HER2+; ER-/PR- /HER2-; or weakly ER+/PR-/HER2-
Breast	Adjuvant	3	BRAJTR	Adjuvant trastuzumab for 6 months total only		Based on PERSEPHONE data
Breast	Adjuvant	3	Adjuvant	Adjuvant	For tumours felt to be	For adjuvant

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for Use when Prioritization Level Activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			chemotherapy for Stage I-III	chemotherapy for Stage IIB-III only	chemo-sensitive and T3 and/or node positive	chemotherapy where absolute risk reduction (ARR) for relapse free survival is ≥10%
Breast	Metastatic- Non-emergent (see comment in row 1 above)	3	1st – 3rd line chemotherapy for MBC	Only regimens permissible: BRAVPTRAD; BRAVPTRAT; UBRAVKAD; BRAVABR; BRAVGEMP; BRAVAC	1st and 2nd line i.v. treatment for HER2+ MBC only. 1st line i.v. treatment for ER-/PR-/HER2- MBC only. 1st line i.v. treatment for ER+/HER2- MBC for visceral crisis only. Consider omitting gemcitabine in BRAVGEMP.	Use Capecitabine in all other instances. Use hormonal therapies +/- targeted therapy as much as possible.
Breast	Metastatic Non-emergent (see comment in row 1 above)	3	Maintenance trastuzumab +/- pertuzumab	BRAVTR to be given every 6 - 8 weeks (includes the pertuzumab if given). OR consider		In ER+/HER2+ add maintenance hormonal therapy if not already started.

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for Use when Prioritization Level Activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
				holding treatment		
Breast	Metastatic Non-emergent (see comment in row 1 above)	4	≥4th line chemotherapy for MBC	Stop: BRAVA7; BRAVDOC7; BRAVTW; BRAVERIB; BRAVGEM; BRAVGEMD; BRAVGEMP; BRAVGEMT; BRAVNAV;	No new ≥4th line i.v. chemotherapy for MBC. For 1st – 3rd line regimens: Switch to q3 week regimens if possible. May consider BRAVTW over q3weekly regimens based on balance of neutropenic risk and other factors.	Only for new starts.
Breast	Adjuvant	5	Adjuvant bisphosphonates	Stop all current and new adjuvant i.v. bisphosphonates	Consider oral bisphosphonates (e.g. alendronate*)	Consider implementing in phase 1 or prioritization.
Breast	Metastatic	5	Metastatic bisphosphonates: BRAVPAM BRAVZOL	Stop all current and new i.v. bisphosphonates and switch to oral bisphosphonate	Oral Clodronate or hold on bisphosphonates until Pandemic resolved	Consider implementing in phase 1 of prioritization. Can still use iv regimens for hypercalcemia.
Breast	Metastatic	5	LHRH	Switch q4 week		Consider

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for Use when Prioritization Level Activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			Pre-menopausal MBC	LHRH to q 12 week LHRH		implementing in phase 1 of prioritization now.
Breast	Adjuvant	5	LHRH Pre-menopausal early breast cancer	Switch q4 week LHRH to q 12 week LHRH		Consider implementing now if possible.

Footnotes:

Abbreviations: CT: chemotherapy; RT: radiotherapy; ET: endocrine therapy

* Alendronate is not covered by BC Cancer for this indication

2.2 Radiation Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used (Current Standard)	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Breast	Mass causing brachial plexopathy	1	Simple palliative technique. Palliative dose per RO discretion.	No deferral	Lowest number of fractions for palliation, Consider: 20 Gy/5#	- If neurologic symptoms with arm weakness should start within 48hs of presentation -If no neurologic

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used (Current Standard)	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						symptoms and pain only could be delayed 1 week
Breast	Fungating breast mass	2	Simple palliative technique Palliative dose per RO discretion	No deferral Palliative mastectomy if feasible.	Lowest number of fractions for palliation, Consider 20Gy/5	-Reasonable to delay 1-2 weeks depending on patient symptoms - could consider mastectomy if tumour resectable
Breast	-T3-4N0, T1-4 N+, triple negative, HER2+, margin+ (with no re-excision) -T1-3N0 patients with recommended chemo (even if patient declines chemo)	3	40Gy-42.5Gy/16# or 50Gy/25# or 50.4Gy/28# **Technique**: can include: Tangent, 4FLD, IMRT, DIBH, prone (other heart sparing techniques)	CT or ET	**Fractionation:** -Hypofractionation should be used for all clinically appropriate patients. Acceptable doses: 40-42.5Gy/15-16# -Limit use of boost -consider for: close/ +margins, triple negative and age <50 years **Techniques** -Uses the simplest planning technique to achieve standard target and OAR constraints	-Reasonable to delay RT up to 16 weeks after surgery (with no chemo) and 8 weeks after chemo -If hormone receptor positive, and RT is delayed, ideally patients would be started on ET -Consider: RO could initiate ET for lower risk patients, for higher risk prefer MO involvement

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used (Current Standard)	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
					-Omit DIBH when appropriate -Decrease OAR contours to minimum needed to evaluate plan safety	
Breast	-T1-2N0, ER+, PR+, HER2- age <65 -Luminal A-like (ER+ and PR+ and HER2-) and age ≥65, and T1-2N0, and NOT offered or declines endocrine therapy -High risk DCIS	4	**Fractionation:** 40Gy-42.5Gy/16# or 50Gy/25# or 50.4Gy/28# **Technique**: can include: Tangent, 4FLD, IMRT, DIBH, prone (other heart sparing techniques)	ET	**Fractionation:** -Hypofractionation should be used for all clinically appropriate patients. Acceptable doses: 40-42.5Gy/15-16# -Limit use of boost -consider for: multiple close/+margins -Where nodal RT not planned, consider using accelerated hypofractionation per the FAST FORWARD trial (26Gy/5#)** **Techniques** -Uses the simplest planning technique to achieve standard target	-Reasonable to delay RT start up to 20 weeks after surgery -Ideally patients would be on ET as appropriate -RO could initiate endocrine therapy for low risk patients

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used (Current Standard)	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
					and OAR constraints -Omit DIBH when appropriate -Decrease OAR contours to minimum needed to evaluate plan safety	
Breast	-Luminal A-like (ER+ and PR+ and HER2-) and age ≥65, and T1-2N0, and on endocrine therapy -Low risk DCIS:	5	**Fractionation:** -Omission of RT if patient on endocrine therapy -42.5Gy/16 or 50Gy/25 **Technique:** can include: Tangents, partial breast, DIBH	Consider Omitting RT and start patient on ET as appropriate	**Fractionation:** -Hypofractionation should be used for all clinically appropriate patients. Acceptable doses: 40-42.5Gy/15-16# -Limit use of boost -consider for: multiple close/+margins -Where nodal RT not planned, consider using accelerated hypofractionation per the FAST FORWARD trial (26Gy/5#)** **Techniques** -Uses the simplest planning technique to	-RO could initiate ET in this group of patients

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used (Current Standard)	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
					achieve standard target and OAR constraints -Omit DIBH when appropriate -Decrease OAR contours to minimum needed to evaluate plan safety	

*Abbreviations: RT: radiotherapy, Gy: Gray, CT: chemotherapy, ET: endocrine therapy, RO: radiation oncologist, MO: medical oncologist, ER: estrogen receptor, PR: progesterone receptor, HER2: human epidermal growth factor receptor 2, DCIS: ductal carcinoma in situ, IMRT: intensity modulated radiotherapy, OAR: organs at risk, DIBH: deep-inspiration breathe hold.

**FAST FORWARD trial: Acute toxicity slightly better than control arm of 40Gy/15 fractions. 3 year toxicity data is equivalent to the control arm of 40Gy/15 (submitted for publication but not yet published). No 5 year local control data available yet but predicted to have low recurrence given the low risk patients. If choosing this dose/fractionation this needs to be clearly explained to patients.

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3.0 Central Nervous System

3.1 Systemic Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Brain	Low Grade Glioma	3	RT + PCV chemotherapy	Eliminate VCR from PCV regimen to convert to all oral meds	Switch from PCV to Temozolomide	Brain
Brain	Relapsed Glioblastoma (Temozolomide resistant)	4	CNBEV	Dexamethasone until Bevacizumab available. Use 3 week dosing interval.	Triage patient urgency based on Imaging features and symptoms, Consider oral chemo options (CNCCNU, CNETO)	For most GBM delay of 2-3 weeks max is acceptable but longer risks increased symptom burden

3.2 Radiation Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Brain	Gr 3 Astrocytoma and Oligodendroglioma	3	ChemoRT with 6000cGy/30	Surgery debulking for tumours in non-eloquent brain.		Delays up to 12 weeks post debulking surgery are acceptable in

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
				Temozolomide chemotherapy, especially for Oligo*.		asymptomatic or minimally symptomatic patients
Brain	Gr 2 Astrocytoma and Oligodendroglioma	3	ChemoRT with 5040 cGy/28	Observation; Surgery debulking for tumours in non-eloquent brain. Temozolomide chemotherapy, especially for Oligo*.		Most grade 2 tumors can be delayed up to 6 months following surgery or biopsy
Brain	Glioblastoma	4	For age< 70 and KPS>60: ChemoRT with 6000cGy/30. For age >/= 70 or KPS 40-60: ChemoRT with 4000 cGy/15.	Surgical debulking for tumours in non-eloquent brain. Temozolomide chemo for MGMT methylation positive cases.	For age< 70 and KPS>60: ChemoRT with 4000cGy/15. RT alone with 2500cGy/5 for age >/= 70 or KPS 40-60 cases	Delay from debulking surgery up to 8 weeks not associated with increased mortality
Brain	Metastases	4	Depending on tumour size,	Surgery debulking for tumours in	Best supportive care/Dexamethasone.	

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			location, number of mets and patient's performance status, all of the options are considered: WBRT 2000 cGy/5 VMAT to mets only 2000 cGy/5 SRS 1500-2000 cGy/1 SRT 2500-3500 cGy/5	non-eloquent brain. Targeted therapy or immunotherapy if clinically indicated.	WBRT 2000 cGy/5 VMAT to mets only 2000 cGy/5	
Brain	Meningioma	5	SRT 5000 cGy/25 (or 5040 cGy/28 if close to optic chiasm) for grade 1 tumours. 5400 cGy/30 for grade 2 tumours and 6000 cGy/30 for grade 3 tumours.	Observation; Surgery	SRS ~1300cGy/1 or hypofractionated SRT 2100 cGy/3 or 2500cGy/5 for small, grade 1 tumors located >/=5mm from optic chiasm.	Minimally symptomatic patients may safely be delayed for 6 months
Brain	Pituitary Adenoma	5	SRT 5000 cGy/25	Observation; Surgery;	SRS ~1300cGy/1 or hypofractionated SRT	Minimally symptomatic

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
				Medical suppressive therapy for hormone secreting tumors	2100 cGy/3 or 2500cGy/5 for small tumors located >/=5mm from optic chiasm.	patients may safely be delayed for 6 months
Brain	Acoustic Neuroma	6	SRS 1200 cGy/1 for small tumours with no useful hearing. SRT 5000 cGy/25 for small tumours with useful hearing or large tumours.	Observation; Surgery	Hypofractionated SRT 2100 cGy/3 or 2500cGy/5 for small tumours with useful hearing or large tumours.	Minimally symptomatic patients may safely be delayed 6 months
Brain	Rare CNS Tumors	N/A	Refer to Multidisciplinary Case Conference for management guidance.			

4.0 Gastrointestinal Cancers

4.1 Systemic Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
GI	Pancreas (Advanced)	3	Chemotherapy (IV)	Consider capecitabine-based regimens. RT for symptomatic metastasis	Consider PS, prognosis and anticipated benefit of palliative chemotherapy	If unable to give IV chemotherapy could consider chemo holiday in responding patients, or single agent capecitabine as a maintenance strategy.
GI	Pancreas (Resectable)	3	Chemotherapy (IV)	Consider capecitabine - based regimens. RT if positive margins.		If unable to give IV chemotherapy could consider single agent capecitabine
GI	Esophageal (unresectable)	3	Chemotherapy (IV)	Consider capecitabine	RT to symptomatic primary tumour (bleeding, obstruction)	
GI	Esophageal/GE (resectable)	2	Neoadjuvant ChemoRT	RT alone		Consider adjuvant chemo post-op
GI	Gastric (unresectable)	3	Chemotherapy (IV)	Consider capecitabine	RT for symptomatic primary (bleeding, obstruction). Consider PS, prognosis	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
					and anticipated benefit of palliative chemotherapy.	
GI	Gastric (resectable)	2	Neoadjuvant Chemotherapy (IV)	Consider capecitabine		
GI	Biliary (unresectable)	3	Chemotherapy (IV)	Consider capecitabine	Consider PS, prognosis and anticipated benefit of palliative chemotherapy.	
GI	Biliary (resectable)	3	Chemotherapy (PO)	None	RT	
GI	HCC (unresectable)	3	Chemotherapy (oral TKI)	May continue TKI	Local Rx (RT, IR)	Consider dose modification to minimize toxicities
GI	HCC (resectable)	3	none	None	Local Rx (RT, IR)	
GI	Colon (unresectable)	3	Chemotherapy (IV)	Consider capecitabine. If prolonged SD (stable disease) or response consider chemo break.		If unable to give IV chemotherapy could consider single agent capecitabine. If 5FU resistant, could consider CAP-approval for trifluridine/tipiracil on a one week on, one week off schedule (to

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						minimize neutropenia)
GI	Colon (resectable)	3	Adjuvant Chemotherapy (IV)	Consider capecitabine	Adjuvant chemo reserved for T4-stage II or stage III	
GI	Rectal (unresectable)	3	Chemotherapy (IV)	Consider capecitabine. If prolonged SD or response consider chemo break.	Consider short course RT for symptomatic	
GI	Rectal (resectable)	3	Neoadjuvant ChemoRT	Capecitabine		
GI	Neuroendocrine Carcinoma (metastatic)	2	Chemotherapy	Continue IV chemotherapy if symptomatic but consider delay if asymptomatic. Could consider oral etoposide.		
GI	NET (unresectable)	4 if no syndrome 3 if	SSA*, PRRT*, chemo or targeted agents SSA +/- PRRT,	Observation if low rate of growth/low grade SSA +/- oral agents		An SSA should be considered in patients with functional tumors to prevent refractory

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
		symptomatic (carcinoid or tumour burden)	chemo or targeted agents			diarrhea that could result in a hospitalization.
GI	NET (resectable)	2	SSA peri-operative	Short acting SSA peri-operative		
GI	Anal (curative intent)	2	ChemoRT		RT alone	
GI	Anal (metastatic) 1st line	3	Chemotherapy (IV)	Consider capecitabine	Consider PS, prognosis and anticipated benefit of palliative chemotherapy	If unable to give IV chemotherapy could consider single agent capecitabine

4.2 Radiation Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
GI	Esophagus	2	Pre-op ChemoRT 4140 cGy/23 to 5000 cGy/25 fractions for resectable.	Surgery for resectable. Chemotherapy for non-resectable.	Consider shorter course of RT (4000 cGy/15 fractions) alone	Consider stent alone for palliative cases if service available

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			ChemoRT 5000 cGy/25 fractions for non-resectable			
GI	Rectum	2	Pre-op RT 2500 cGy/5 fractions for resectable that does not require down-staging. Pre-op ChemoRT 4500 cGy/25 fractions for resectable that requires down-staging and unresectable.	Surgery for resectable. Chemotherapy for non-resectable.	For cases that requires down staging, consider either short course of RT (2500 cGy/5 fractions) and wait for 8-12 weeks to assess its full effect before surgery, or short course of RT (2500 cGy/5 fractions) followed by FOLFOX chemotherapy 9-12 working days post RT X 4 cycles before surgery.	For cases that requires down-staging, wait time for surgery should be delayed for 8-12 weeks to assess its full effect. Could consider chemotherapy if surgery delayed.
GI	Anal canal	2	ChemoRT 5400 cGy/30 fractions	Surgery for resectable. Chemotherapy for non-resectable.	For cases suitable by trans-anal local excision, consider a shorter course of ChemoRT (3000 cGy/15 fractions)	

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
GI	HCC	3	SABR 4500cGy/3-5 fractions	Surgery for resectable. IR options (ablation or embolic therapy) or target therapy for non-resectable.	None	

*Abbreviations: HCC: hepatocellular carcinoma; NET: neuroendocrine tumour; TKI: tyrosine kinase inhibitor; SSA: somatostatin analogue; PRRT: peptide receptor radionuclide therapy; IR: interventional radiology. SABR: Stereotactic Ablative Body Radiotherapy

5.0 Genitourinary Cancers

5.1 Systemic Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Prostate	Metastatic Castration-sensitive - Low-volume disease	3	ADT ± Novel Androgen-pathway inhibitor (API) (abiraterone, apalutamide, enzalutamide) – access through patient assistance programs.	Could get ADT alone but combo has OS benefit	Avoid docetaxel	All oral / 3 months injection therapy Consider using 6 month depot LHRH, or orchiectomy. Mitigation not really needed
Prostate	Metastatic Castration-sensitive - High-volume disease	3	ADT + API: (abiraterone, apalutamide, enzalutamide) – access through patient assistance programs.	Could get ADT alone but combo has OS benefit	Avoid docetaxel	All oral / 3 months injection therapy Consider using 6 month depot LHRH, or orchiectomy. Mitigation not really needed

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Prostate	Non-metastatic (m0) castration-resistant prostate cancer - PSA DT ≤10 months	3	ADT + API: (apalutamide, enzalutamide, darolutamide) – access through patient assistance programs	Could get ADT alone but combo has OS benefit	Avoid docetaxel	All oral / 3 months injection therapy Consider using 6 month depot LHRH, or orchiectomy. Mitigation not really needed
Prostate	Metastatic castration-resistant prostate cancer (mCRPC) Post ADT alone	3	ADT + API: (abiraterone, apalutamide, enzalutamide) or ADT plus docetaxel		Avoid docetaxel	All oral / 3 months injection therapy Consider using 6 month depot LHRH, or orchiectomy. Mitigation not really needed
Prostate	Metastatic castration-resistant	3	ADT + API: (abiraterone, apalutamide,			All oral / 3 months injection therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	prostate cancer (mCRPC) Post ADT + docetaxel		enzalutamide)			Consider using 6 month depot LHRH, or orchiectomy. Mitigation not really needed
Prostate	Metastatic castration-resistant prostate cancer (mCRPC) Post ADT + API (apalutamide, darolutamide or enzalutamide)	3	ADT + docetaxel Or ADT + Radium-223	Defer treatment until clinically significant radiographic progression or symptomatic progression on previous line of therapy OR ADT + Enzalutamide: Only if post abiraterone	Avoid docetaxel Defer Radium-223 until clinical progression (pain). Avoid if visceral metastasis, or LN metastasis (especially if > 3 cm) If docetaxel used: Strongly consider G-CSF support with docetaxel to avoid FN and hospitalization / ER visit. AND/OR	Enzalutamide oral but currently not funded after abiraterone Consider using 6 month depot LHRH, or orchiectomy.

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
				OR ADT + Radium-223	Consider starting at reduced dose docetaxel, especially for elderly population (e.g. 60 mg/m^2) Dexamethasone alone (0.5-2mg PO daily) may induce a PSA response and be a successful mitigation strategy after progression on 1st line therapy. Abiraterone may be continued beyond progression with dexamethasone	
Prostate	Metastatic castration-resistant prostate cancer (mCRPC) Post ADT + API	3	ADT + Cabazitaxel OR ADT + Radium-223	Defer cabazitaxel treatment until clinically significant radiographic progression or	Strongly consider G-CSF support to avoid FN and hospitalization/ER visit. Use Cabazitaxel 20 mg/m^2 for elderly population or ECOG > 1	Cabazitaxel not currently funded after abiraterone/enzalutamide Consider using 6 month depot LHRH, or orchiectomy.

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	(apalutamide, darolutamide or enzalutamide) and post docetaxel			symptomatic progression on previous line of therapy. Radium-223: Defer until clinical progression (pain). Avoid if visceral metastasis, or LN metastasis (especially if > 3 cm).	or other risk factors for neutropenia Given the marginal clinical benefit observed with Radium-223 for most patients and risks of myelosuppression, consider deferring Radium-223 treatment or offer palliative care	
Testis	Clinical stage I non-seminoma and seminoma – adjuvant therapy	2	Active surveillance OR Adjuvant chemotherapy OR Adjuvant RPLND for non-seminoma OR Adjuvant RT for seminoma	Use active surveillance	Avoid adjuvant therapy Utilizing virtual care pathways and outpatient laboratory testing / imaging in local facilities to minimize hospital contact.	No difference in overall outcomes between active surveillance and adjuvant treatment options
Testis	Treatment for IGCCCG good-	2	Chemotherapy with BEP x 3 or EP x 4	Selected patients may	Use of treatment options which are	All patients should be discussed with an expert

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	risk, disseminated GCT		RT for stage IIA seminoma Surgery for stage IIA non-seminoma	tolerate a modest treatment delay (e.g. retroperitoneal LN < 3 cm, slow growing, marker negative) Use BEP x3 in order to keep chemotherapy duration as short as possible Treatment should be given with G-CSF support and prophylactic antimicrobial therapy should be considered in order to minimize risk of	available e.g. if RT available but not chemotherapy use RT for stage IIA seminoma	center to determine treatment urgency. Treatment delays should be discussed with an expert center or tumor board.

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
				FN		
Testis	Treatment for IGCCCG intermediate or poor-risk, disseminated GCT	2	Chemotherapy with BEP x 4 or VIP x 4	Use VIP x 4 cycles, unless contraindication to VIP in which case BEP x 4 is reasonable.	Treatment should be given with G-CSF support and prophylactic antimicrobial therapy should be considered in order to minimize risk of FN.	All patients should be discussed with an expert center to determine optimal treatment management. It is not an option to delay treatment Delays in post-chemotherapy surgical management should be kept to a minimum if possible.
Bladder	Neoadjuvant chemotherapy cT2 cN0/+ M0 localized bladder cancer	4	Neoadjuvant chemotherapy with cisplatin/gemcitabine x 4 cycles	No alternative	Treatment should be given with G-CSF support and prophylactic antimicrobial therapy should be considered in order to minimize risk of FN.	Delays should be avoided as much as possible
Bladder	Adjuvant chemotherapy pT2 N0/+ M0	4	Adjuvant chemotherapy with cisplatin/gemcitabine x	No alternative	Treatment should be given with G-CSF support and	Delays should be avoided as much as possible

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	localized bladder cancer		4 cycles		prophylactic antimicrobial therapy should be considered in order to minimize risk of FN.	
Bladder	Metastatic disease – 1st line therapy	3	cisplatin/gemcitabine x 4 cycles	No alternative Utilize carboplatin for cisplatin-ineligible	Treatment should be given with G-CSF support and prophylactic antimicrobial therapy should be considered in order to minimize risk of FN.	Pembrolizumab 1st line not funded
Bladder	Metastatic disease -2nd line therapy	4 (unless pembrolizumab is available)	Pembrolizumab (Access program) Chemotherapy with paclitaxel or docetaxel	Utilize pembrolizumab for 2nd line therapy	Chemotherapy should be given with G-CSF support and prophylactic antimicrobial therapy should be considered in order to minimize risk of FN.	Pembrolizumab 2nd line not funded
RCC	Metastatic disease - Good risk	4	Sunitinib OR Pazopanib OR Pembrolizumab/Axitinib	Delay treatment if metastatic volume low	Use pembrolizumab/axitinib access program if possible	Sunitinib and pazopanib are oral therapies hence mitigation of limited use

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			(Access program)			
RCC	Metastatic disease - Intermediate risk	3	Nivolumab/Ipilimumab OR Pembrolizumab/Axitinib (Access program)	Use sunitinib or pazopanib or cabozantinib to avoid infusion clinic (see comments)	Delay treatment if metastatic volume is low	If sunitinib or pazopanib is used as 1st line therapy then Nivolumab/Ipilimumab should be funded as 2nd line therapy. Cabozantinib not currently funded as 1st line therapy. Both Nivolumab/Ipilimumab and Pembrolizumab/axitinib have significant and meaningful OS benefit.
RCC	Metastatic disease – Poor risk	3	Nivolumab/Ipilimumab OR Pembrolizumab/Axitinib (Access program)	Use sunitinib or pazopanib or cabozantinib to avoid infusion clinic (see comments)		If sunitinib or pazopanib is used as 1st line therapy then Nivolumab/Ipilimumab should be funded for 2nd line therapy. Both

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						Nivolumab/Ipilimumab and Pembrolizumab/Axitinib have significant and meaningful OS benefit. Cabozantinib currently not funded as a 1st line therapy.

*Abbreviations: API: novel androgen-pathway inhibitor; ADT: androgen deprivation therapy; FN: febrile neutropenia; IGCCCG: International Germ Cell Cancer Collaborative Group

5.2 Radiation Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Prostate	Palliative/Bleeding	2	8Gy/1 - 20Gy/5	Supportive care	Prostate	
Prostate	Low-tier	4	60 Gy/20#	Delay RT 3-6	Use 3 to 6 months of	A delay of 3 to 6 months

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	Intermediate risk: <T2c and iPSA 10-15 with GS=6 OR GS=7 with iPSA<10		CHHip regimen OR 36.25-40 Gy/ 5 fraction SBRT (1 fraction per week)	months	neoadjuvant ADT if appropriate. Avoid use of fiducial markers or SpaceOar. Avoid use of contrast for CT SIM (if appropriate).	is an option unlikely to be associated with a high risk of adverse outcome. This is the preferred option. ADT may not be necessary in these patients and there should be a consideration of the risks.
Prostate	High-tier Intermediate risk: <T2c and: iPSA 15-20 and GS=6 OR iPSA 10-20 and GS7	4	60 Gy/20# CHHip regimen OR 36.25-40 Gy/ 5 fraction SBRT (1 fraction per week)	Delay RT 3-6 months	Use 3 to 9 months of neoadjuvant ADT if appropriate. Avoid use of fiducial markers or SpaceOar. Avoid use of contrast for CT SIM (if appropriate).	A delay of 3 to 6 months is an option unlikely to be associated with a high risk of adverse outcome.
Prostate	High Risk: >T3a iPSA >20	4	60 Gy/20# CHHip regimen OR	3-9 months Neoadjuvant ADT	Use 3 to 9 months of neoadjuvant ADT if appropriate.	If patient is responding to ADT, the preference is for neoadjuvant ADT to

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	OR GS 8-10		36.25-40 Gy/ 5 fraction SBRT (1 fraction per week) if treating the pelvis, may use SIB 44Gy/20, or standard fractionations. (No SBRT if treating LNs/pelvis).		Avoid use of fiducial markers or SpaceOar. Avoid use of contrast for CT SIM (if appropriate).	be continued longer and RT delayed. If RT must be delivered, use hypo-fractionated regimens to reduce visits.
Prostate	Metastatic M1 (low volume)	4	55 Gy/20# OR 36 Gy/ 6 fraction SBRT (STAMPEDE)	All patients will be on ADT and RT can be delayed 3-6 months		All patients will be on ADT and RT can be delayed 3-6 months
Prostate	Adjuvant	4	52.5Gy/20 (RADICALS) 62.5Gy/25 (NRG GU003)	Delay 3-6 months	3-6 months neoadjuvant ADT, if appropriate	Majority of patients can be delayed safely for 3-6 months. If appropriate for risk group, ADT can be used and RT delayed.
Prostate	Salvage	4	52.5Gy/20 (RADICALS) 62.5Gy/25 (NRG GU003)	Delay 3-6 months	3-6 months neoadjuvant ADT, if appropriate	Majority of patients can be delayed safely for 3-6 months. This is the preferred strategy.

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						If appropriate for risk group, ADT can be used and RT delayed Many BC Cancer ROs not comfortable with hypo fractionated regimens in the post-op setting: standard fractionation 33-35#, or 28 (Kelowna)
Prostate	Low risk: <T2a and iPSA < 10 and GS<6	5	N/A	N/A	Active surveillance	Active surveillance is standard of care and other treatments should not be offered during the pandemic
Bladder	Palliative/Bleeding	2	8Gy/1 - 20Gy/5	Supportive care		
Bladder	MIBC T2 to T3a, N0M0 (eligible for bladder preservation)	3	Chemo-RT 55Gy/20 (BC2001) to bladder only.	Consider neoadjuvant chemotherapy (2-4 cycles of Gem/Cis)		Where pelvic nodal Rt is indicated, 2 Gy/# regimen preferred.

Footnotes:

1) At physician discretion, adopt telephone or video-conference for consults and follow-up, deferring examination to next visit:
    a. During the pandemic, consider doing all initial GU RO consultations by virtual health (Zoom, Skype, FaceTime are approved by PHSA) or on telephone. Differ physical examinations/consents to next visit, or on the day of CT SIM if treating with RT (the longer consultation, including prognosis and side effects discussion, can be done on the phone prior, to minimize length of visit on the day of CT SIM, the total number of visits to the hospital for the patient, as well as time spent with the RO in a confined room).
    b. Consider doing all GU follow-up visits by virtual health during the pandemic, and defer examination to next visit.
2) Minimize use of PSA testing (reduce lab visits).
3) Consider deferring low and intermediate risk prostate cancer consults by 3 months.
4) ADT: consider 6 month depot.
5) Avoid use of fiducial markers or Space OAR.
6) Avoid use of contrast for CT sim (if appropriate).

6.0 Gynecological Cancers

6.1 Systemic Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Gyne	Hypercalcemia	1	SCHYPCAL	SCHYPCAL		
Gyne	Bowel Obstruction	1	Assessment for 1) Surgical	If surgery not available –	Dexamethasone, octreotide, venting G-	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			intervention 2) Possibly stenting of distal sigmoid/rectal mass	symptom management	tube.	
Gyne - Sarcoma	Metastatic Uterine Sarcomas	2	GOSAD GOSADG	Consider oral anti-estrogen therapy in ER+ disease.	RT for palliation.	
Gyne – Small cell cancers	Adjuvant	3	GOSMCCRT or GOSCPERT	RT		
Gyne – Small cell cancers	Metastatic	3	GOSMCCRT or GOSCPERT	Oral etoposide and RT	Gyne – Small cell cancers	Metastatic
Gyne - Cervix	Locally advanced cervical cancer (stage IB2 to IVA) All histotypes (possibly including stage IB1)	2	Concurrent Chemo-RT	RT alone		If surgery also not available, may need to include stage IB1
Gyne - Cervix	Locally advanced cervical cancer (stage IB2 to IVA) All histotypes	4	Adenocarcinomas currently receive adjuvant GOCXAJCAT X3 cycles.	Omit adjuvant systemic therapy for cervical adenocarcinomas		The benefit of adjuvant therapy in adenocarcinoma of the cervix is controversial.

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Gyne – Cervix	Metastatic cervical cancer	3	Symptomatic, GOOCAT or GOOCATB If asymptomatic, observe.	RT for palliation	Best supportive care	
Gyne - GCT	Ovarian Germ cell cancers	2	GOOVBEP GOOVEP	Mitigating therapies such as surgery or RT	Oral etoposide	Use mitigating strategies with goal of initiating delayed systemic therapy.
Gyne –GTN	Gestational Trophoblastic Neoplasm No metastases and HCG <10, 000	2	GOTDLR	Uterine evacuation or hysterectomy		Use mitigating strategies with goal of initiating delayed systemic therapy.
Gyne - GTN	Gestational Trophoblastic Neoplasm No metastases and HCG >10, 000	2	GOTDLR	Hysterectomy		Use mitigating strategies with goal of initiating delayed systemic therapy.
Gyne - GTN	Gestational Trophoblastic Neoplasm Metastases (FIGO score	2	GOTDLR	No known alternative. Could try surgery or RT on case by case		Use mitigating strategies with goal of initiating delayed systemic

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	<7)			basis.		therapy.
Gyne - GTN	Gestational Trophoblastic Neoplasm Metastases (FIGO score ≥7)	2	GOTDEMA (+/-CO)	No known alternative. Could try surgery or RT on case by case basis.		Use mitigating strategies with goal of initiating delayed systemic therapy.
Gyne – EOC	Early Stage Ovarian cancer (adjuvant) Stage IB-IIA	4	GOOVCATM For 3-6 cycles	In some subtypes can consider RT (e.g. clear cell, endometrioid and mucinous carcinomas)		Absolute benefit of adjuvant therapy for early stage ovarian cancer is <10% improvement in OS.
Gyne - EOC	Advanced stage high grade ovarian cancer Newly diagnosed	2	GOOVCATM GOOVCATX GOOVCATR GOOVCIS GOOVDDCAT GOOVFPLDC GOOVIPPC GOOVCAD GOOVCAG UGOOVCATB GOOVCAR	Surgery (if still possible) in selected cases	Oral cyclophosphamide (GOOVCYCPO) or oral etoposide (GOOVETO). Oral anti-estrogen therapy in ER (+) disease could be considered if no other options (GOOVAI or GOOVTAM).	Treatment delays are reasonable to consider. If limited access to chemotherapy still available, can give treatment on a less frequent bases (e.g. every 6 -8 weeks), or reduce to single

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						agent use. Paracentesis, indwelling peritoneal and pleural drains. End of life planning if appropriate.
Gyne - EOC	Platinum-sensitive recurrent ovarian cancer – Symptomatic Patient	2	Asymptomatic patients should be offered watchful waiting. Symptomatic patients are offered therapy: GOOVCATM GOOVCATX GOOVCATR GOOVCIS GOOVDDCAT GOOVFPLDC GOOVIPPC	Oral cyclophosphamide (GOOVCYCPO) or oral etoposide (GOOVETO). Oral anti-estrogen	Surgery if still possible in selected cases, and palliative RT.	Treatment delays or longer treatment cycles are reasonable to consider to reduce resource impact. Paracentesis, indwelling peritoneal and pleural drains, analgesia and end of life planning.

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			GOOVCAD GOOVCAG UGOOVCATB	therapy in ER (+) disease could be considered if no other options (GOOVAI or GOOVTAM).		
Gyne – EOC BRCA	BRCA mutated ovarian cancer – Maintenance therapy	2	Oral maintenance treatment with a PARP inhibitor UGOOVOLAPM	None		
Gyne – EOC	Platinum-resistant ovarian cancer	3	If asymptomatic – watchful waiting. If symptomatic: GOOVGEM, GOOVPLD, GOOVETO, GOOVTAX3 GOOVTOP GOOVVIN GOOVDOC All of the above + Bevacizumab	If symptomatic: Oral cyclophosphamide (GOOVCYCPO) or oral etoposide (GOOVETO). Could consider oral anti-estrogen therapy in ER (+)	Best supportive care	Paracentesis, indwelling peritoneal and pleural drains, analgesia and end of life planning.

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			(UGOOVBEV -G, -LD, - P, - V)	disease (GOOVAI or GOOVTAM).		
Gyne – EOC	Platinum-resistant ovarian cancer - > 2 lines of non-platinum therapy	5	If asymptomatic – watchful waiting. I	If symptomatic - best supportive care.		End of life planning.
Gyne - Endo	Endometrial cancer Adjuvant therapy stage III-IV (all histotypes)	3	GOOENDCAT for up to 6 cycles and RT.	RT for local disease control benefit.	For ER positive cases, could consider adjuvant anti-estrogen therapy (GOENDAI or GOENDH)	If less than 12 weeks from surgical date, delayed adjuvant chemotherapy could be considered.
Gyne – Endo	Metastatic Endometrial Cancer	3	Asymptomatic patients should be offered observation only. If symptomatic: GOENDCAT GOENDCAD GOENDD	In ER + consider oral anti-estrogen therapy.	Best supportive care.	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Gyne - Endo	Endometrial cancer Adjuvant therapy Stage I-II non-serous histology	4	GOOENDCAT and adjuvant RT.	Omit adjuvant chemotherapy.	Consider RT only, for local control benefit.	Benefits of adjuvant systemic therapy in the setting of non-serous early stage endometrial cancers are poorly defined and felt to be low.
Gyne – Endo	Metastatic Endometrial Cancer > 2nd line therapy	5	No standard.	In ER + consider oral anti-estrogen therapy.	Best supportive care.	End of life planning.

Abbreviations: GCT: germ cell tumours; GTN: gestational trophoblastic neoplasm; EOC: epithelial ovarian carcinoma

6.2 Radiation Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Gyne	Endometrium adjuvant: Endometrioid 1BG1-2, A1G3	4	Vault brachytherapy	Observation only	Defer RT up to 4 months post-surgery	
Gyne	Endometrium adjuvant: Endometrioid 1BG3+	4	45 Gy/25 #	Adjuvant chemotherapy for 6 cycles and then RT	Defer RT up to 4 months post-surgery if no chemotherapy Chemotherapy alone	If RT is delayed more than 4 months post-surgery, plan for FU treatment at recurrence
Gyne	Endometrium adjuvant: Serous/clear cell 1A	4	45 Gy/25# or vault brachytherapy	Adjuvant chemotherapy for 6 cycles then RT	Chemotherapy alone	
Gyne	Endometrium adjuvant: Serous/clear cell 1B+	4	45 Gy/25#	Adjuvant chemotherapy for 6 cycles then RT	Defer RT up to 4 months post-surgery if no chemotherapy Chemotherapy alone	If RT is delayed more than 4 month post-surgery, plan for FU at treatment at recurrence
Gyne	Cervix – curative	2	45 Gy /25# +brachytherapy	Surgery may be an option for selected cases if feasible	Treat in another centre Consider hypofractionation	
Gyne	Cervix – adjuvant	3	45 Gy/25#	Adjuvant chemotherapy and delay RT	Delay RT up to 4 months? Consider hypofractionation	

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Gyne	Vulva – curative	3	63 Gy/35# 59.3 Gy/33# with chemo	No known alternative	Neo-adjuvant chemotherapy?	
Gyne	Vulva – adjuvant	3	45 Gy/25# + boost	No known alternative if surgery is incomplete		
Gyne	Ovary – adjuvant	4	45 Gy/25#	Defer RT up to 4 months post-surgery	Adjuvant chemotherapy	If RT is delayed more than 4 months post-surgery, plan for FU and treatment at recurrence

7.0 Head & Neck Cancers

7.1 Systemic Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
H&N	HNSCC (oral cavity, oropharynx p16 positive and negative, larynx, hypopharynx, PU) - neoadjuvant	2	HNLADCF – cisplatin, docetaxel +/- 5FU		Consider immediate initiation of concurrent Chemo-RT	
	HNSCC (oral cavity, oropharynx p16 positive and negative, larynx, hypopharynx, PU) - locally advanced	2	Concurrent Chemo-RT with cisplatin q3wk HNLAPRT or weekly HNNLAPRT		Consider altered fractionation radiotherapy	The choice of treatment schedule will depend on local available resources (host hospital vs BC Cancer ward) and risk. *Consider prioritization Level 1 if airway compromise
	HNSCC (oral cavity, oropharynx p16 positive and	3 – symptomatic (asymptomatic patients with	1st line: platinum doublet or single agent platinum		1st line: Favor IV chemotherapy on q3w schedule over weekly x 6 cycles. If	*Consider prioritization Level 2 if airway compromise

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	negative, larynx, hypopharynx, PU) – metastatic	impending compromise of local structures) 4 - asymptomatic	2nd /3rd line: nivolumab, capecitabine, 5 FU, docetaxel, methotrexate		stable at treatment cessation, option to re-treat at progression. 2nd line: Nivolumab q4w. Favor oral capecitabine over 5FU. Favor IV chemotherapy on q3w schedule over weekly. Treatment for 6 cycles and if stable at treatment cessation, option to re-treat at progression.	
	NPC - neoadjuvant	2	HNNLAPG – platinum, gemcitabine		Consider immediate initiation of concurrent Chemo-RT	
	NPC – locally advanced	2	Concurrent Chemo-RT with weekly cisplatin HNNLAPRT		Consider altered fractionation radiotherapy	Treatment could be offered on a q3w schedule, the choice of treatment schedule will depend on local

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						available resources and risk *Consider prioritization Level 1 if airway compromise
	NPC - metastatic	3 - symptomatic (asymptomatic patients with impending compromise of local structures) 4 – asymptomatic	1st line: platinum doublet 2nd/3rd line: single agent platinum, 5FU, gemcitabine, capecitabine		1st line: Favor IV chemotherapy on q3w schedule over weekly x 6 cycles. If stable at treatment cessation, option to re-treat at progression. 2nd line: Favor oral capecitabine over 5FU. Favor IV chemotherapy on q3w schedule over weekly (omit day 8). Treatment for 6 cycles and if stable at treatment cessation, option to re-treat at progression.	*Consider prioritization Level 2 if airway compromise

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	Salivary - metastatic	3 – symptomatic	Platinum based chemotherapy or FAC		Favor IV chemotherapy on q3w schedule over weekly x 6 cycles. If stable at treatment cessation, option to re-treat at progression	Asymptomatic patients are not offered treatment
	RAI refractory thyroid – metastatic	3 Symptomatic (includes asymptomatic patients with impending compromise of local structures)	Lenvatinib PO daily			Asymptomatic patients are not offered treatment
	Medullary thyroid - metastatic	3 Symptomatic (includes asymptomatic patients with impending compromise of local structures)	Vandetanib PO daily			Asymptomatic patients are not offered treatment
	Anaplastic	3 –				

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	thyroid - metastatic	Symptomatic 4 - Asymptomatic				

Abbreviations: HNSCC: head and neck squamous cell carcinoma; NPC: nasopharyngeal carcinoma

7.2 Radiation Therapy

Guiding Principles

- Due to the possibility of decreasing resources in the immediate future, please consider initiating shorter fractionation schemes for all radiotherapy regimens
- Elderly patients and those with medical comorbidities are at higher risk of serious COVID-19 infection
- Individual cases can be reviewed at our weekly multi-disciplinary Provincial H&N (Mondays, 11:00 to 12:00) and Thyroid (Thursdays, 8:00 to 9:15) Tumour Conferences

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Squamous cell	Curative intent	2	70 Gy in 35#	Delay in RT is	Surgical resection	Any delay in

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
carcinoma: • oral cavity • oropharynx • hypopharynx • primary unknown	Early Stage RT alone		66 Gy in 30# 60 Gy in 25#	not an option; Surgical resection if feasible		radiation beyond 2-4 weeks associated with risk of progression and reduced survival outcomes
Laryngeal carcinoma	Curative intent Early stage RT alone	2	50-55 Gy in 20# 63 Gy in 28# 60 Gy in 25#	Delay in RT not an option; Surgical resection if feasible	Surgical resection	Any delay in radiation beyond 2-4 weeks associated with risk of progression and reduced survival outcomes
Squamous cell carcinoma: • oral cavity • oropharynx • larynx • hypopharynx • primary unknown	Curative intent Locally advanced RT +/- Chemotherapy	2	70 Gy in 35# if concurrent with radio-sensitizing chemotherapy. If RT alone, may consider other fractionations ie. 6# per week (with potential resource	Neo-adjuvant chemotherapy if RT to be delayed	Surgical resection (if resectable & surgical treatment available)	Any delay in radiation beyond 2-4 weeks associated with risk of progression and reduced survival outcomes. Consider RT alone

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			and tumour control implications).			for elderly population.
Squamous cell carcinoma	Adjuvant intent Post-operative RT +/- Chemotherapy	3 Positive margin, residual disease, extra-capsular extension	60 Gy in 30# to 66 Gy in 33#. 55 to 60 Gy in 25#.	No	No	Delays in radiotherapy may be associated with risk of progression and reduced survival outcomes
Squamous cell carcinoma	Adjuvant intent Post-operative RT +/- Chemotherapy	4 Close margin, positive lymph nodes, peri-neural invasion, comorbidities, elderly population	60 Gy in 30# to 66 Gy in 33#. 55 to 60 Gy in 25#	No	No	
Nasopharyngeal carcinoma	Curative intent RT +/- Chemotherapy	2	70 Gy in 35# Accelerated fractionation detrimental	Neoadjuvant chemo if need to defer RT	No	Any delay in radiation beyond 2-4 weeks associated with risk of

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						progression and reduced survival outcomes
Salivary gland tumours	Unresectable RT alone	2	50-55 Gy in 20# 60 Gy in 25# 70 Gy in 35# Palliative: 20 to 25 Gy in 5# 30 Gy in 10# 40 Gy in 15#	No	No	Surgery is the primary treatment modality. Primary RT indicated for unresectable or inoperable patients. Chemotherapy has a limited role, and no evidence to support its use in neoadjuvant, concurrent or adjuvant regimens.
Salivary gland tumours	Adjuvant intent Post-operative RT alone	3 High grade, positive margin, residual disease,	60 Gy in 30# to 66 Gy in 33# 60 Gy in 25#	No	No	

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
		extra-capsular extension				
Salivary gland tumours	Adjuvant intent Post-operative RT alone	4 Low grade, positive margin, residual disease, extra-capsular extension	60 Gy in 30# to 66 Gy in 33# 60 Gy in 25#	No	No	
Salivary gland tumours	Adjuvant intent Post-operative RT alone	5 Low grade, close margin, positive lymph nodes, peri-neural invasion, comorbidities, elderly population	60 Gy in 30# to 66 Gy in 33# 60 Gy in 25#	No	No	
Nasal cavity and paranasal sinuses	Curative intent RT +/-	2	70 Gy in 35# if concurrent with radio-sensitizing	Neo-adjuvant chemotherapy may be	Surgical resection	Consider review at Provincial H&N Conference

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	Chemotherapy		chemotherapy If RT alone, may consider other fractionations ie. 6# per week (with potential resource and tumour control implications)	indicated if RT to be delayed		
Nasal cavity and paranasal sinuses	Adjuvant intent Post-operative RT +/- Chemotherapy	3 Positive margin, residual disease, extra-capsular extension	60 Gy in 30# to 66 Gy in 33#. 55 to 60 Gy in 25#.	No	No	Any delay in radiation beyond 2-4 weeks associated with risk of progression and reduced survival outcomes
Nasal cavity and paranasal sinuses	Adjuvant intent Post-operative RT +/- Chemotherapy	4 Close margin, positive lymph nodes, peri-neural invasion, comorbidities,	60 Gy in 30# to 66 Gy in 33#. 55 to 60 Gy in 25#.	No	No	

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
		elderly population				
Thyroid carcinoma Well differentiated	Adjuvant intent Post-operative RT alone	4	60 to 66 Gy in 30 to 33#. 60 Gy in 25#.	Radioactive iodine in select cases	No	Surgery is the primary curative regimen. Cases should be reviewed at Provincial Thyroid Conference to discuss the possibility of delaying RT
Thyroid carcinoma Well differentiated	Adjuvant intent Post-operative RAI	4	30 to 200 mCi In or out-patient	No	No	VC: On hold until end of April SPH: Status pending FVC: Inpatient and out-patient VIC: Status

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						pending CSI: Out-patient only AC: Out-patient only (inpatient @ FVC) CN: Status pending, inpatient @ VC
Medullary thyroid carcinoma	Adjuvant intent Post-operative RT alone	4	60 to 66 Gy in 30 to 33# 60 Gy in 25#	No	No	Cases should be reviewed at Provincial Thyroid Conference
Anaplastic thyroid carcinoma	RT +/- Chemotherapy	1	60 Gy in 25# 70 Gy in 35# Versus palliative regimens	Delay in RT not an option. Surgical resection if feasible	Surgical resection followed by RT +/- Chemotherapy	Multi-modality treatment including surgery, is required for curative intent regimens.

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						Cases should be reviewed at Provincial Thyroid Conference
Malignant Parathyroid Neoplasms	Primary RT alone	2	60 Gy in 25# 70 Gy in 35# Versus palliative regimens	Delay in RT not an option. Surgical resection if feasible.	Surgical Resection	Cases should be reviewed at Provincial Thyroid Conference
Malignant Parathyroid Neoplasms	Adjuvant intent Post-operative RT alone	3	60 to 66 Gy in 30 to 33# 60 Gy in 25# Versus palliative regimens	No	No	Cases should be reviewed at Provincial Thyroid Conference
Paraganglioma	Malignant Primary RT or Adjuvant intent	2	60 to 70 Gy in 30 to 35# 60 Gy in 25# Versus palliative regimens	Radio-nucleotide therapy Systemic therapy	Surgical resection	Cases should be reviewed at Provincial H&N Conference

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Paraganglioma	Non-Malignant Primary RT	3	45 to 50 Gy in 25#	Delay in RT not an option. Surgical resection if feasible.	Surgical resection	Cases should be reviewed at Provincial H&N Conference
Paraganglioma	Non-Malignant Adjuvant intent	4	45 to 50 Gy in 25# or less	No	No	Cases should be reviewed at Provincial H&N Conference
NA	Palliative intent	1 = Bleeding 3, 4 or 5 (see comments)	20 Gy in 5# 30 Gy in 10# 40 Gy in 15# 8 Gy, single or multiple ie. 0, 7, 21 QUAD SHOT (consider 8 Gy single # in place of 14 Gy / 4 # for first cycle)	Palliative chemotherapy if symptomatic	No	Do not deliver palliative radiotherapy unless benefits clearly outweigh current risks, particularly in the elderly population.
NA	Re-irradiation					Consider review at Local or Provincial H&N

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						Conference
	Benign conditions Sialorrhea (ALS) Thyroid orbitopathy	6				

8.0 Lung Cancer

8.1 Systemic Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Lung	Limited stage SCLC, with or without emergent indications	1	1st-line LUSCPERT (limited)	LUSCPOE with or without RT LUSCPOE LUSCPOE Delay/omit	Consider RT alone	e.g. SVC obstruction

Lung	Extensive stage SCLC with or without emergent indications	2	1st-line LUSCPE 2nd-line + LUSCPI, LUSCTOP,LUSCPOE	LUSCPOE with or without RT LUSCPOE LUSCPOE Delay/omit	Consider RT alone	eg. symptomatic/life-threatening visceral involvement not amenable to RT Consider patient factors e.g. duration of prior response, performance status.
Lung	Stage II or IIIA NSCLC (Adjuvant)	2	LUAJNP, LUAJPC	Consider LUAVPP or Delay/omit	Delay or omit Adjuvant RT alone for stage III	Avoid delay >12 weeks as curative
Lung	Stage IIIA NSCLC (combined modality)	3	LULAPERT, LULAPE2RT, LULACATRT, followed by ULULADUR or ULULADUR4	LUAVPP with or without sequential RT ULULADUR4 only	RT or surgery alone Delay/omit ULULADUR or ULULADUR4	Avoid delay >12 weeks as curative
Lung	Stage IIIB/IV NSCLC EGFR+	3	ULUAVOSIF, ULUAVOSI, LUAVGEFF, LUAVERL, LUAVAFAT	Oral therapy	Further mitigation not likely needed	
Lung	Stage IIIB/IV NSCLC ALK +	4	LUAVALE, ULUAVCER, LUAVCRIZ, LUAVCRIZF	Oral therapy	Further mitigation not likely needed	
Lung	Stage IIIB/IV NSCLC EGFR/ALK neg PDL1 <50%	4 5	1st-line LUAVPP x 4-6 cycles->LUAVPMTN, LUAVPG x 4-6 cycles 2nd-line + LUAVPEM,LUAVDOC,LUAVERL,	q4-6 weekly cycle 4 cycles platinum doublet only Delay/omit LUAVPMTN Consider q4-6 weekly cycle Delay/omit	Consider RT and/or BSC	Consider patient factors e.g. ECOG, co-morbidities

			ULUAVNIV,ULUAVNIV4, ULUAVATZ, ULUAVPMB,ULUAVPMB 6			
Lung	Stage IIIB/IV NSCLC EGFR/ALK neg PDL1 ≥50%	4 5	1st-line ULUAVPMBF,ULUAVPM BF6 2nd-line + LUAVPP, followed by LUAVPMTN LUAVPG x 4-6 cycles LUAVPEM, LUAVDOC, LUAVERL	q6 weekly cycle or delay Consider q4-6 weekly cycle x 4 Delay/omit	Consider RT and/or BSC	
Lung	Malignant mesothelioma	4 5	1st 2nd-line LUMMPP, LUMMPG, LUMMVIN	q4-6 weekly cycle Delay/omit	Consider RT and/or BSC	
Lung	Thymoma Thymic carcinoma	3 (curative) 4/5 (palliative)	LUOTPERT LUOTCAV, LUOTPAC, LUOTPE,	Substitute oral etoposide Delay/omit	Consider RT only Consider RT and/or BSC	

8.2 Radiation Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used (non-pandemic situation)	Management Option for Deferral of RT During Pandemic	Other mitigations (including aggressive tx reduction measures)	Comments: (Reasonable delays, other treatment options, other comment…)
NSCLC	Stage III	2	60Gy/30 VMAT (w/	Neoadj chemo	55Gy/20 VMAT (no	Neoadj chemo allowed in

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used (non-pandemic situation)	Management Option for Deferral of RT During Pandemic	Other mitigations (including aggressive tx reduction measures)	Comments: (Reasonable delays, other treatment options, other comment…)
			chemo)	Sequential chemo	concurrent chemo) 50-60Gy/15 VMAT (no concurrent chemo) Omit RT (if no concurrent/seq chemo)	PACIFIC. Sequential chemo-RT only slightly inferior to concurrent chemo-RT. 15 fraction from Sunnybrook and UK RT alone has low probability of long term survival
NSCLC	Stage I-IIA (peripheral)	3	48 Gy/4 SABR	Observation	34Gy/1* SABR Surgery	Observation reasonable for early stage cancer, especially if no biopsy, growingly slowly on serial CTs, lepidic adeno, older age, multiple comorbidities, history of multiple previous lung cancers 34Gy/1 comparable to 48Gy/4 per RTOG 0915
NSCLC	Stage I-IIA	3	60 Gy/8 SABR	Observation	50Gy/5	Observation as above

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used (non-pandemic situation)	Management Option for Deferral of RT During Pandemic	Other mitigations (including aggressive tx reduction measures)	Comments: (Reasonable delays, other treatment options, other comment…)
	(central)				Surgery	50Gy/5 from USA. Can adapt constraints from TG101 or RTOG0813
NSCLC	Stage IIB (T3N0)	3	60Gy/30 VMAT (w/ chemo)	Neoadjuvant chemo	60Gy/15 VMAT Surgery	Can adapt 60/15 constraints from BR25/LUSTRE/SUNSET even though these trials did not study this disease stage
NSCLC	Stage IIB (T1-2N1)	3	60Gy/30 VMAT (w/ chemo)	Neoadjuvant chemo	55Gy/20 VMAT (no concurrent chemo) 50-60Gy/15 VMAT (no concurrent chemo) Surgery	55Gy/20 from UK (no concurrent chemo) 15 fraction from Sunnybrook and UK
NSCLC	Post-op N2 or +ve margins	4	RT 50-60Gy/25-30 VMAT	Defer RT	Omit RT	Benefit unclear in N2
All Lung	Stage IV	1-2	20Gy/5 POP	No deferral option	8-10 Gy/1 POP	10Gy/1 from UK
All Lung	Stage IV	3-5	20Gy/5 POP	Defer RT if asymptomatic	8-10Gy/1 POP	10Gy/1 from UK
SCLC	Limited Stage (Thoracic RT)	2	40Gy/15 or 45Gy/30 BID VMAT	40Gy/15 VMAT (no deferral	Surgery (select T1N0)	

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used (non-pandemic situation)	Management Option for Deferral of RT During Pandemic	Other mitigations (including aggressive tx reduction measures)	Comments: (Reasonable delays, other treatment options, other comment…)
				option)		
SCLC	Limited Stage (PCI)	3	25Gy/10 POP	Defer RT with MRI surveillance	Omit RT/surveillance	
SCLC	Extensive Stage (Consolidative Thoracic RT)	3	20-30Gy/5-10 POP	Defer RT	Omit RT	Benefit in small % of patients (2 yr OS 13% vs 3%, 1yr OS ~30%)
SCLC	Extensive Stage (PCI)	3	25Gy/10 or 20Gy/5 POP	Defer RT with MRI surveillance	Omit RT/surveillance	
Thymoma	Un-resected	3	60Gy/30 VMAT (w/ chemo)	Neoadj chemo	RT alone 55Gy/20 or 40Gy/15 VMAT Palliative 30Gy/10, 20Gy/5, 8-10Gy/1 POP	Try to give as many fractions as feasible
Thymoma	Resected	4	RT 50-60Gy/25-30 VMAT	Defer RT	Omit RT	

Footnotes: *Individual centres should determine the feasibility of introducing 34Gy/1 at their respective centres given their workload and resource availability during the pandemic.
3D CRT can be considered in lieu of VMAT if resources are impacted.

Provincial Health Services Authority

9.0 Lymphoma

9.1 Systemic Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Non-Hodgkin Lymphoma (NHL)	Low grade – limited stage, curative	4	RT	Observation 3-6 months (if low bulk, asymptomatic, or if completely excised)	If no RT available, but symptomatic, Consider systemic treatment: Rituximab monotherapy, or immuno-chemotherapy (BR)	
NHL	Low grade – advanced stage, symptomatic	4	BR x 6 and R maintenance x 2 years	Same, but consider close observation alone or RT to symptomatic sites followed by observation in patients with borderline indications for treatment; also recommend delaying/holding maintenance rituximab for all low grade	Can consider rituximab monotherapy or R-CVP instead of BR in patients who are high risk for infection, or consider no maintenance rituximab	For patients with an excellent response (eg CR after 4 cycles BR), can consider abbreviated therapy, or no maintenance. If no IV systemic therapy available, consider oral cyclophosphamide or steroids.

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
				lymphomas other than follicular lymphoma (ie. no maintenance for MZL, LPL, discordant or composite lymphomas)		
NHL	DLBCL – limited stage	2	R-CHOP x 3 then PET, followed by R-CHOP x 1 or RT	Same Empiric G-CSF for all patients	If no RT available, consider R-CHOP x 6 for PET-positive patients	Selective use of CNS prophylaxis with HD MTX for highest risk patients only (such as renal/adrenal involvement and testicular NHL); if no hospital admissions possible, delay or omit MTX
NHL	DLBCL – advanced stage	2	R-CHOP x 6 then PET, followed by RT if PET-positive	Same Empiric G-CSF for all patients	If no RT available, consider close observation	Selective use of CNS prophylaxis with HD MTX for highest risk patients only (such as renal/adrenal involvement and testicular NHL); if no hospital admissions

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						possible, delay or omit MTX
NHL	PMBCL – limited and advanced	2	R-CHOP x 6 or DA-EPOCHR x 6, followed by PET and RT if PET-positive	Same, but would try to avoid DA-EPOCHR. Empiric G-CSF for all patients	If no hospital admissions possible, then R-CHOP x 6; if no RT available, consider close observation.	
NHL	DHIT	2	R-CHOP x 6 or DA-EPOCHR, followed by PET and RT if PET-positive	Same, but would try to avoid DA-EPOCHR. Empiric G-CSF for all patients.	If no hospital admissions possible, then R-CHOP x 6; If no RT available, consider close observation.	
NHL	PTCL – limited stage	2	CHOP x 3 (or coming soon BV-CHP x 3 for $CD30^+$ patients) then RT	Same Empiric G-CSF for all patients.	If no RT available, consider CHOP x 6 (or coming soon BV-CHP x 6 for $CD30^+$ patients)	
NHL	PTCL – advanced stage	2	CHOP x 6 (or coming soon BV-CHP x 6 for $CD30^+$ patients) then PET, followed by RT if PET-positive. Consolidation	Same, Empiric G-CSF for all patients.	If no RT available, consider close observation. ASCT/allo-SCT may be delayed in some patients based on availability and risk assessment.	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			with ASCT/allo-SCT considered in suitable patients			
NHL	NK/T cell – limited stage	2	Concurrent cisplatin and RT, then VIPD x 3	Same Empiric G-CSF for all patients	If no RT available then 6 cycles of VIPD	
NHL	NK/T cell - Advanced stage	2	SMILE chemotherapy up to 6 cycles, then PET, followed by RT if PET-positive. Consolidation with ASCT/allo-SCT considered in suitable patients	Same, although given the intensity of SMILE and requirement for hospitalization, may consider alternative multi-agent chemotherapy options (such as gemcitabine-based regimens)	If no hospital admissions possible, consider alternative multi-agent chemotherapy options (such as gemcitabine-based regimens). If no RT available, consider close observation. ASCT/allo-SCT may be delayed in some patients based on availability and risk assessment.	
NHL	Aggressive B or T cell lymphoma, relapsed/refractory Transplant eligible	2	(R)-GDP x 3, then ASCT	Same Empiric G-CSF for all patients	ASCT may be delayed in some patients based on availability, consider additional cycles of (R)-GDP followed by close observation	
NHL	Aggressive B or T	3	Palliative	Same, select	CAR-T cell therapy and	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	cell lymphoma, relapsed/refractory Transplant ineligible		systemic therapy, or RT to symptomatic site followed by observation, clinical trials and CAR-T cell therapy to be considered	therapy with aim to reduce clinic/chemo unit visits and minimize toxicity, oral therapy preferred when appropriate	clinical trials will likely not be available	
NHL	MCL Transplant eligible	3	BR x 6, then ASCT, then Rituximab maintenance x 2 years	Same, but for patients with borderline indications for treatment, consider close observation, or consider RT to symptomatic sites followed by observation	ASCT will likely be delayed or deferred in some patients based on availability and risk assessment	If ASCT deferred, consider proceeding to Rituximab maintenance instead
NHL	MCL Transplant ineligible	3	BR x 6, then Rituximab maintenance x 2 years	Same, but for patients with borderline indications for treatment, consider close	Can consider R-CVP instead of BR in patients who are high risk for infection, or consider no maintenance	For patients with an excellent response (eg CR after 4 cycles BR), can consider abbreviated therapy, or no maintenance.

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
				observation, or consider RT to symptomatic sites followed by observation		If no IV systemic therapy, consider Ibrutinib.
NHL	Primary CNS	2	HD MTX in suitable patients, then ASCT consolidation in "fit" patients with good response. Otherwise whole brain RT	Same, ASCT may be delayed in some patients based on availability. If no hospital admissions possible, then whole brain RT would be alternative	If no RT available and patient is not a MTX candidate, then alternative systemic options should be considered, such as Temozolomide or high dose dexamethasone	
NHL	Burkitt lymphoma	1-2	Alternating CODOXMR/IVACR in suitable patients, otherwise DA-EPOCHR x 6	Same, if no hospital admissions possible, then R-CHOP x 6 may be an alternative		
Hodgkin lymphoma	Classical – Limited stage	2	ABVD x 2, then PET, then AVD x 2 or RT if PET-	Same	If no RT available, consider ABVD x 6 for PET-positive	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			positive			
Hodgkin lymphoma	Classical - Advanced stage	2	ABVD x 2, then PET, then AVDx4 if PET-negative or ABVD x 4 if PET-positive. PET-positive patients have EOT PET to consider consolidative RT Note: elderly patients receive dose-modified treatment, without bleomycin and with empiric G-CSF support	Same	If no RT, consider close observation in PET-positive	
Hodgkin lymphoma	NLPHL	3-4	Treated similar to classical HL as above. Alternatively, in select patients, surgical excision, local RT (stage 1), or observation,			

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			can be considered			
Hodgkin lymphoma	Relapsed/refractory Transplant eligible	2	GDP x 3 then ASCT, then BV maintenance x 1 year	Same, empiric G-CSF support for all patients	ASCT may be delayed in some patients based on availability, consider additional cycles of GDP followed by close observation	
Hodgkin lymphoma	Relapsed/refractory Transplant ineligible	3-4	Palliative Brentuximab or PD-1 inhibitors, or other systemic options or consider RT to symptomatic sites followed by observation, clinical trials to be considered	Same, select therapy with aim to reduce clinic/chemo unit visits and minimize toxicity. Clinical trials unlikely to be available		
CLL	Unsuitable for FCR, or high-risk genetics	4	Ibrutinib	Same.	Preferred option at relapse is Venetoclax-R. If no hospital admissions possible, patients at high risk of TLS may require "debulking" with an alternative regimen such	Select therapy with aim to reduce clinic/chemo unit visits and minimize toxicity

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
					as BR for 1-2 cycles, prior to starting venetoclax-R	
CLL	FCR-candidate, no high risk genetics	4	FCR	FCR treatment should be avoided at this time, ibrutinib should be considered front-line instead	Preferred option at relapse is Venetoclax-R. If no hospital admissions possible, patients at high risk of TLS may require "debulking" with an alternative regimen such as BR for 1-2 cycles, prior to starting venetoclax-R	Select therapy with aim to reduce clinic/chemo unit visits and minimize toxicity
Multiple Myeloma –	Transplant eligible	3-4	CyBorD x 4, then ASCT, then maintenance lenalidomide	Same, although ASCT will likely be delayed or deferred in some patients based on availability and risk assessment. If necessary, consider treating with up to 9 cycles of CyBorD followed by observation	For options at relapse, select therapy with aim to reduce clinic/chemo unit visits and minimize toxicity	
Multiple Myeloma –	Transplant ineligible	3-4	CyBorD x 9 or Lenalidomide-	Currently, the Len-Dex regimen	For options at relapse, select therapy with aim	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Transplant ineligible			dexamethasone	would be preferred to minimize patient visits	to reduce clinic/chemo unit visits and minimize toxicity	

9.2 Radiation Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Non Hodgkin Lymphoma (NHL)	DLBCL – PET + post chemo	2	35- 40Gy/20, VMAT vs 3DCRT	If uncertainties with PET, consider repeat imaging/observation x 3m , if limited stage and radiation not available consider further cycles of chemotherapy	Hypofractionated RT: ILROG:30Gy/6, mediastinum: 36-39Gy/12-13	

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
NHL	Low grade - Curative	4	24 Gy/12, VMAT vs 3DCRT	Observation x 3 – 6 months (if small bulk, or asymptomatic) If completely excised consider no RT.	Steroid treatment Rituximab, Hypofractionated RT: ILROG – 4Gy/1, re-evaluate if insufficient response proceed with 20Gy/5	No expected adverse effect on outcome
NHL	Low grade - Palliative	4	4Gy/2, 4 – 6Gy/1	Best Supportive Care (BSC) – steroids, pain medications	4 – 6Gy/1	
NHL	DLBCL – chemo refractory	2-3* case by case basis	40Gy/20 VMAT vs 3DCRT	Best Supportive Care (BSC) – steroids, pain medications	Hypofractionated RT: ILROG:30Gy/6, mediastinum: 36-39Gy/12-13	
NHL	DLBCL – no chemo option	2-3* case by case basis	35-40Gy/20 VMAT vs 3DCRT	Best Supportive Care (BSC) – steroids, pain medications	Hypofractionated RT: ILROG: 30Gy/6 or 36-39 Gy/12-13	
NHL	NK/T-cell	2	40 – 55Gy/20-30 with chemo	XRT alone if chemo not available	In patients treated with chemotherapy preRT: 36Gy/9	Would not advocate hypofractionated

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						course with concurrent chemo
NHL	Peripheral T-cell lymphoma	3	35Gy/20 if curative	Observation	25/5 curative dose; Palliative doses: 6-8Gy/1, 12Gy/3, 20Gy/5	
NHL	CNS lymphoma – no chemo option	2-3* case by case basis	35 – 45 Gy/20 – 25 fractions	Best Supportive Care (BSC) – steroids, pain medications	Hypofractionated RT: 30Gy/10-15 20Gy/5	
NHL	CNS lymphoma – post chemotherapy	2-3* case by case basis	35 – 40Gy/20	Best Supportive Care (BSC) – steroids, pain medications	Hypofractionated RT: 30 Gy/10-15 20Gy/5	
NHL	Testicular lymphoma – prophylactic radiation	4	30Gy/10, electrons vs photons	Observation, orchiectomy	30Gy/10 20-25/5	
Hodgkin Lymphoma	PET+ post chemo	2	30-35/15-20 VMAT vs 3DCRT	If uncertainty with PET can consider observation x 3 months	Hypofractionated RT: 36-39Gy/12-13	
	NLPHL	3	30-35/15-20 VMAT vs 3DCRT	Observation	Hypofractionated RT: ILROG:27Gy/9	

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Plasmacytoma	SPB	3	45Gy/25, VMAT vs 3DCRT	Observation if small/no impending fracture	Non-spine, non-H&N: 30gy/6; spine or H&N: 36/12	
	Extramedullary	3	45Gy/25, VMAT vs 3DCRT	Observation if small/no impending complication	Non-spine, non H&N: 30Gy/6; spine or H&N: 36/12	
Multiple Myeloma	Spinal Cord compression	1	8Gy/1 – 20Gy/5	Palliation, BSC	8Gy/1	
Multiple Myeloma	Symptomatic, no cord compression	3	8Gy/1 – 20Gy/5	Palliation, BSC	8Gy/1	

*Recommend keeping track of all cases where hypofractionation are used to evaluate collaboratively in future. Awaiting ILROG rapid publication in Blood to confirm doses and fractionation to ensure in keeping with recommended international policies.

*RIT –Do not recommend use of RIT during pandemic due to prolonged immunosuppression, many alternative therapies and rarity of use.

Provincial Health Services Authority

10.0 Sarcoma

10.1 Systemic Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Sarcoma	Ewing's sarcoma, Rhabdomyosarcoma – curative intent	2	Neoadjuvant chemotherapy with SAALT2W or SAALT3W (if q2weekly not tolerated). Currently given as inpatient at Vancouver Centre. All future pts can receive as outpatient protocol of both SAIME and SAVAC	Primary surgery	none	Highly sensitive tumour type with cure possible if neoadjuvant chemo + RT is given
Sarcoma	Osteosarcoma – curative intent	2	Neoadjuvant SAAJAP currently given as inpatient at Vancouver Centre. Plan for future pts to receive as	Primary surgery	Patients may need to return to centre for IV hydration if oral hydration cannot be maintained at home	Highly sensitive tumour type with cure possible with current protocols followed

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			outpatient as long as hydration can be given orally. Pediatric regimens include high dose methotrexate.			
Sarcoma	Ewing's sarcoma, Rhabdomyosarcoma – metastatic or recurrent, palliative intent	3	VOIT regimen should be utilized over SAAVTC protocol to minimize chemo chair time	Could consider omitting vincristine IV and continue with oral irinotecan and temozolomide only	Antibiotic prophylaxis needed with Cefixime	Highly sensitive tumour with opportunity to provide palliation but can progress quickly. Need to monitor closely
Sarcoma	Osteosarcoma – recurrent or palliative intent	3	SAAVAP if treatment naïve, plan as outpatient as long as hydration can be given orally. SAVIME3 for previously treated patients with good ECOG	Consider use of regorafenib orally for these patients to decrease utilization of chemotherapy chair	Response rates will be variable, and regorafenib likely inferior to first line chemotherapy	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			and able to tolerate , SAAVA for pts with lower PS Regorafenib as per REGABONE trial used orally			
Sarcoma	Soft tissue – curative intent	NA	Currently adjuvant chemotherapy not given standardly	No adjuvant therapy as there is no evidence to support		These patients do have good response to neoadjuvant radiotherapy and this should be considered
Sarcoma	Soft tissue – metastatic with palliative intent Dedifferentiated Liposarcoma	4	SAAVA, Eribulin	Offer SAAVA only		No sensitivity to oral pazopanib
Sarcoma	Soft tissue – metastatic, Leiomyosarcoma	4	SAAVA, Eribulin, Gemcitabine Docetaxel, Pazopanib (patient self-funded)	See comments	See comments	Pazopanib has shown benefit in metastatic STS (non-lipomatous) for improvement in PFS, and would be appropriate to use in situation where

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						access to IV therapy is limited or not available. In the event that phase is activated the cost-benefit of this agent may be appropriate depending on access or compassionate support from industry.
Sarcoma	Malignant solitary fibrous tumour	4	Temozolomide and bevacizumab	Consider holding bevacizumab (oral temozolomide only)		
Sarcoma	Kaposi's sarcoma – not responding to anti-retroviral if HIV associated or evidence of visceral disease or endemic KS	3	KSLDO	Could consider changing to q4 weeks instead of q2week dosing, only patients who are symptomatic or have organ involvement would be treated if prioritization level activated	Radiation to symptomatic areas in lieu of systemic chemotherapy	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Sarcoma	Giant cell tumour of bone	5	SAADENO	Arrange for patient to self-inject at home monthly, treatment can be delayed if needed, primary surgery may be most appropriate in cases	Review with Ortho with regards to operability and access to OR	
Sarcoma	Desmoid Fibromatosis	5	SAMV is an option in patients who are progressing and symptomatic and for whom sorafenib or other treatment modalities have not helped	Sorafenib should be used preferentially in these patients, for those progressing on sorafenib watchful waiting if symptoms controlled	Radiation may help for symptoms	Tumour has ability to spontaneously regress

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Soft tissue Sarcoma	Pre-operative: extremity, trunk, head and neck	3 *if surgery is available otherwise level 2	50Gy/25#	Surgery, Postoperative radiation, neoadjuvant chemotherapy for certain histologies (Myxoid LPS, SS etc.)	Hypofractionation: - 42.5Gy/16 with standard timing for surgery - RCR*: pre-op 25Gy/5 with surgery within 2 weeks. - RTOG 0630 30Gy/5 with surgery 1-2 weeks post-op	Primary treatment is surgery. Significant risk of patients becoming infected with COVID-19 during radiation over a 5-6 week course. Each case should be discussed on an individual basis.
Soft Tissue Sarcoma	Post-operative: extremity, trunk, head and neck	3	60-66Gy/30-33#		Hypofractionation: - 40-50Gy/15 -20 #(preferred), 36Gy/6# weekly	If RT deferred can reconsider RT when capacity is greater (16 – 20wks) as long as local recurrence has not occurred.
Soft Tissue Sarcoma	Retroperitoneal	3	45-50Gy/25	Surgery, Neoadj chemo	Depending on size/volume may consider 40Gy/15 pre-op.	Post-operative radiation is not an option. Would wait to see if recurrence and then consider radiation at that

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
						time
Rhabdomyosarcoma		3	50.4-55Gy/28 - 30	Surgery, chemo	Hypofractionation: - 40-50Gy/15 – 20 fractions, - 36/6 weekly*	Use of hypofractionation not encouraged in patients at risk for significant long term side effects (ie. age, size, location). Each case should be discussed on an individual basis.
Ewing		3	45Gy/25 50.4Gy/28	Surgery for local management	Hypofractionation: - 40-50Gy/15 – 20 fractions	Use of hypofractionation not encouraged in patients at risk for significant long term side effects (ie. age, size, location). Each case should be discussed on an individual basis. Definitive radiation should be used as normal if surgery not possible or appropriate.

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Osteosarcoma/ Chondrosarcoma		3	60Gy/30	Observation, chemotherapy	Hypofractionation: - 40-50Gy/15 – 20 fractions - 36Gy/6 weekly*	Postoperative radiation may be deferred in low grade tumours. Consider on an individual basis for high grade tumours.
Fibromatosis		4	54Gy/28	Observation, systemic options, surgery	Hypofractionation: - 40-50Gy/15 – 20 fractions - 36Gy/6 weekly*	Non-malignant local aggressive condition. Definitive radiation can be safely deferred in most instances.

Footnotes:

- At present no RT for benign conditions. For heterotrophic ossification/keloids elective surgeries have likely been cancelled. Case by case basis if patient has had surgery and is sent for radiation.
- Individual cases not fitting within the mandate of this document or requiring special consideration will be reviewed by the Provincial radiation oncologists as a group.

*RCR = Royal college of radiologists

Kosela-Aterczyk et al. Preoperative hypofractionated radiotherapy in the treatment of localized soft tissue sarcomas. Eur J Surg Oncol. 2014 Dec;40(12):1641-7

Kalbasi et al. A phase II trial of 5 day neoadjuvant radiotherapy for patients with high-risk primary soft tissue sarcoma. Clinical cancer research. 2020 Feb 13.

11.0 Skin Cancer

11.1 Systemic Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Melanoma	Stage III or IV resected NED Adjuvant therapy	3	1 year of dabrafenib and trametinib for BRAF positive patients or 1 year anti-PDI (nivolumab at this time but pembro in negotiation) for BRAF positive or negative patients.	May initiate up to 12 weeks from time of surgical resection of melanoma. Choose regimens that are the least taxing on the health system and patient. Options include: · Nivolumab 480 mg IV q 4 weeks x one year · Pembrolizumab, 200 IV q 3 weeks x one year ·dabrafenib/trametinib for 1 year		Reasonable to extend start to treatment window up to 4 or 5 months if a physician wants to avoid starting an adjuvant program in the height of COVID. (Note that here is no data to support such a delay but could be considered after taking into account risks of treatment vs risks of delaying treatment).
Melanoma	Stage IV	1 (if very symptomatic	BRAF positive -BRAF/MEK	Carefully consider the toxicity of the regimen	Footnote 2.	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	No prior systemic therapy No brain mets	with organ compromise as we can turn them around with targeted therapy or combination IO) 2 (minimally or asymptomatic) Palliative therapy with IO therapy in melanoma can result in 5 year PFS of 30% (single agent anti-PDI) and 50% (combo Ipi + Nivo). Many of these patient appear	inhibitor Or -Anti-PDI Or -Combination Ipi /Nivo [3] BRAF Wild Type -Anti-PDI Or -Combination Ipi/ Nivo [3]	selected with preference for agents with the lowest toxicity profile. Footnote 1. Single agent PD-1 should be considered for every patient without brain metastasis.	A regimen of ipilimumab 1 mg/kg and nivolumab 3 mg/kg every 3 weeks for 4 infusions, with subsequent consideration for nivolumab monotherapy, is associated with lower rates of immune-mediated toxicity compared to the FDA standard. This is currently not approved at BC Cancer.	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
		to stay in remission. Footnote 4.				
Melanoma	Stage IV Progressed on prior systemic therapy No brain mets	3 There is still evidence of improved outcomes for second line systemic therapy for advanced melanoma.	BRAF positive -BRAF/MEK inhibitor Or -Anti-PDI (if not already given or if progressed > 6 months off therapy that was stopped early for a complete response) Or -Single agent ipilimumab (BC Cancer current policy is that combination IO[3] is for first	Carefully consider the toxicity of the regimen selected with preference for agents with the lowest toxicity profile. See Footnote 1. If single agent anti-PD1 was requested for first line and then patient progressed consider second line combination IO therapy if no other option. CAP request required and approval is not guaranteed.	See Footnote 2. A regimen of ipilimumab 1 mg/kg and nivolumab 3 mg/kg every 3 weeks for 4 infusions, with subsequent consideration for nivolumab monotherapy, is associated with lower rates of immune-mediated toxicity compared to the FDA standard. This is currently not approved at BC Cancer.	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			line treatment) Or Chemotherapy BRAF Wild Type -Anti-PDI (if not already given or if progressed > 6 months off therapy that was stopped early for a complete response) OR -Single agent ipilimumab OR Chemotherapy			
Melanoma	Stage IV	2	SRS or WBRT to lesions	Nivolumab/ipilimumab combination has a high		

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
	No prior systemic therapy With asymptomatic brain mets	See Footnote 5.	Systemic therapy Combination Ipi +Nivo preferred in asymptomatic brain mets. Single agent anti-PDI less effective. Dabrafenib + Trametinib if BRAF MT and want to avoid risks of combination IO therapy. Combination IO has better PFS than Dabrafenib +	rate of intracranial durable responses (55-59%), comparable to the extracranial activity of these agents. See Footnotes 6-7. For patients with BRAF V600-mutated melanoma and brain metastasis, consideration could be given to BRAF inhibitor/MEK inhibitor, with an intracranial response rate of up to 58%. See Footnote 8.		

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			Trametinib			
Melanoma	Stage IV Prior or no prior systemic therapy Symptomatic brain mets requiring steroids	4	SRS or WBRT to lesions Dabrafenib + Trametinib if BRAF mutated. IO therapy has limited efficacy in patients with symptomatic brain mets still requiring steroids after RT.	In symptomatic patients with brain metastases palliative RT is best option. If BRAF mutated then consider combination dabrafenib and trametinib post RT. In patients rendered asymptomatic from palliative RT and on < 10 mg po daily prednisone or equivalent one could consider IO therapy but the risks and benefits in light of COVID need to be considered carefully.		
Merkel	Inoperable/	3 (ECOG 0-1)	Etoposide and platinum	Etoposide and platinum chemotherapy (if	The safety of IO therapy in the context of COVID	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Cell	Advanced	4 (ECOG 2) 5 (ECOG ≥ 3)	chemotherapy (if patient can tolerate) and at progression Avelumab	patient can tolerate) and at progression Avelumab.	is unknown. Limit to patients with ECOG 0-2. Risk of febrile neutropenia is high with etoposide and platinum chemotherapy. Consider best supportive care in patients who are very frail, or have lots of comorbidities.	
Squamous Cell Cancer	Inoperable/ Advanced	3 (ECOG 0-1) 4 (ECOG 2) 5 (ECOG ≥ 3)	Cemiplimab is available until May 2020 by pharma access program. Access after May 2020 unknown at this time. OR Palliative	Very frail patients should be considered for best supportive care. No IO therapy in organ transplant patients during COVID due to risk of organ rejection and the medical consequences of this (i.e. need for dialysis).	Limit treatment to patients with ECOG 0-2. The safety of IO therapy in the context of COVID is unknown. Consider best supportive care in patients who are very frail, or have lots of comorbidities.	

Tumour subsite	Subsite/risk group	Prioritization Level	Current Management	Management Option for use when prioritization level activated	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			chemotherapy, usually platinum based			
Basal Cell Cancer	Metastatic	3 (ECOG 0-1) 4 (ECOG 2) 5 (ECOG ≥ 3)	Vismodegib	Vismodegib	Limit treatment to patients with ECOG 0-2. Consider best supportive care in patients who are very frail, or have lots of comorbidities.	

Footnotes:

1. It is currently unknown how patients infected with COVID who are on IO therapy will react to the expected immune-related adverse events (irAEs).
2. We have asked CAP to consider allowing second line combo Ipi + Nivo for patients who are started on single agent anti-PDI during the COVID pandemic and whose disease progresses. The CAP request should mention that single agent anti-PDI was chosen in light of the risks of COVID 19.
3. Nivolumab/ipilimumab combination induces 50-60% grade 3-4 irAEs, more than twice as often as PD-1 monotherapy, frequently necessitating the use of high-dose and prolonged steroid or other immunosuppressive agents. Therefore, decisions about combination vs monotherapy need to be tailored to patient characteristics and with awareness of constrained capacity to manage toxicities.

4. There are also some patients who will have very long DFS and OS from targeted therapy (those with low LDH and < 3 organ sites at baseline).
5. 2 studies (ABC trial from Australia and the Checkmate 204) have shown response intracranial response rates of 55-59% for combination IO therapy for asymptomatic brain mets. In the Checkmate trial patients could have had SRS to their lesions. 3 year intracranial progression free survival was 43% so it is worth being aggressive in treating these patients. 3 yr PFS was much lower (15%) for patients given single agent anti-PD 1.
6. The risk of irAEs is the same as patients without brain metastasis and may be lessened by the alternate dosing of ipilimumab 1 mg/kg and nivolumab 3 mg/kg in the 4 cycles of induction therapy. (which is not approved dose at BC Cancer at this time).
7. Single agent anti-PDI 1 has RR 29% in the brain and 3 yr PFS 15%. It is an option for BRAF WT patients in whom the risk of combination IO is too great.
8. However, clinicians should take into account that the duration of response is limited, with median PFS around 5 months and there is evidence for lower response to IO therapy after BRAF/MEK inhibitor therapy.

11.2 Radiation Therapy

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Melanoma	Stage IV brain metastases	2 (assuming >6 week life expectancy); 5 (< 6 week life expectancy, symptom management)	Stereotactic brain radiation for small volume disease; whole brain RT 5 fractions for high volume disease	Surgery for small volume disease; best supportive care for high volume disease		Defer RT if asymptomatic brain lesions, stable on systemic treatment with regular imaging

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Melanoma	Stage IV disease (not brain) progressing on systemic therapy for SABR	3 (for palliation of symptoms) 4 (for asymptomatic oligo-metastases)	SABR or Single fraction palliative radiation if SABR not an option	Surgery for oligo-metastasis if surgically operable	Conservative symptom management; Switch systemic therapy if there is an option	
SCC	Operable	3 (radical RT for high risk lesion) 4 (radical RT for low risk lesion or postoperative RT for high risk lesion)	Radical RT dose fractionation dependent on volume of treatment. Adjuvant RT dose/fraction dependent on volume of treatment	Surgery for radical excision or for salvage	Surveillance - defer management if elderly or frail patient and low risk lesion	Some small stable lesions could be delayed; Squamous Cell Carcinoma In Situ could be treated with topical Efudex
SCC	Locally advanced	2 (primary radical RT) 3 (adjuvant RT)	Radical RT dose fractionation dependent on volume of treatment. Adjuvant	Cemiplimab (if available) or chemotherapy		

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			RT dose/fraction dependent on volume of treatment.			
SCC	Symptomatic Metastatic	1 (emergent cord compression, bleeding) 2 (>6 week life expectancy, intractable symptom) 3 (>6 weeks life expectancy moderate-severe symptoms) 4 (symptom that can be controlled by other means) 5 (<6 week life expectancy)	Palliative RT, dose/fraction dependent on location and volume of treatment. Single fraction preferred	Cemiplimab (if available) or chemotherapy	Surgery an option for cord compression	Also see palliative RT for metastases section below.

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
Merkel	Operable	2 (if RT primary modality) 3 (adjuvant RT)	Radical RT dose/fraction dependent on location and volume of treatment	Radical excision (surgery)		Prefer up front surgery, with RT as backup if surgery not available.
Merkel	Locally advanced/ Metastatic	See metastatic for squamous cell above	Radical RT and palliative RT dose/fraction dependent on location and volume of treatment	Systemic Therapy		
Basal Cell	Operable	4	Radical RT dose/fraction dependent on location and volume of treatment	Surgical excision	Observation	Most are slow growing and radical treatment can be delayed for months
Basal Cell	Locally advanced	See metastatic for squamous cell above	Radical RT and palliative RT dose/fraction dependent on location and volume	Vismodegib is an option for tumors that cannot be treated		

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (Reasonable delays, other treatment options, other comment…)
			of treatment	definitively with surgery and RT.		

12.0 Palliative radiotherapy for metastatic disease

Tumour subsite	Subsite/risk group	Prioritization Level	Preferred Fractionation and Technique if RT used	Management Option for Deferral of RT During Pandemic	Specifics Regarding Management Options when Prioritization Level Activated	Comments: (reasonable delays, other treatment options, other comment…)
NA	Painful bone metastases	2 to 3	8 Gy/1#	Opioids, bisphosphonate/denosumab	Consider targeted systemic therapy appropriate for site. Consider interventional radiology† , anaesthesia, or palliative care referral where appropriate.	When survival is estimated to be less than 4 weeks, best supportive care is recommended.
NA	Asymptomatic oligo-metastases / oligo-progression	4	Defer SABR if resources constrained Where used,	Continue systemic therapy, or start systemic therapy	Conventional dose and technique RT (eg 8 Gy/1# with simple conventional	

			consider 1 to 3 fraction regiments		technique) if becomes symptomatic.	
NA	Spinal Cord Compression	1	8 Gy / 1 #	Steroids, opioids, systemic therapy	Consider surgery if feasible.	SCORAD III study justifies consideration of single fractions for SCC.
NA	SVCO	2	10 Gy/ 1 #	Steroids, opioids, systemic therapy	Thoracics or IR intervention†	
NA	Multiple brain metastases (> 3)	2	20 Gy/5# whole brain RT Or VMAT to mets only with 20 Gy/5#	Steroids, opioids, systemic therapy	Consider omitting WBRT in patients >age 70, KPS<70, uncontrolled primary or extracranial metastases	See also the CNS Tumour group detailed recommendations on management of brain metastases and use of SRS
N/A	Malignant Bleeding	3	6-8Gy/1# Consider 0,7,21 day regimen with 8 Gy fractions	Tranexamic acid, dressings	Endoscopic or IR intervention†	Use of QUAD-SHOT ie 3.7 Gy x 4 fractions BID is not preferred due to BID fractionation.