BC Cancer Tumour Group Clinical Guidelines in COVID-19 Setting of Reduced Access to Cancer Surgeries

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Contents

1.0 Introduction

The COVID-19 pandemic represents a potentially significant stress to current and future workflows and timely patient care within BC Cancer and health organizations delivering cancer care. During the COVID-19 pandemic, it is very likely that clinical care will need to be prioritized, deferred and reduced due to capacity issues from health care worker absence and decreased efficiency. This document is intended as guidance for the most efficient treatment options in the event that the COVID-19 outbreak disrupts access to health care resources. This guidance document can also serve as recommendations to the provincial community oncology network clinics and other health authorities delivering cancer care. This guidance document was created with appropriate multi-disciplinary consultation and input by each tumour group. In addition to the clinical management guidelines outlined here, the BC Cancer staff will follow the guidelines sent out by PHSA, BC Cancer, Employee Wellness and Infection Control.

2.0 Preamble

It is recognized that there is a need to assess, manage and treat patients with cancer during this pandemic. Cancer is a life threatening disease and even if not immediately life threatening, if left untreated or if treatment is significantly delayed, will result in suffering or poor health outcomes. It is imperative that resources are used efficiently during this pandemic, should access to certain health care services such as surgeries, systemic therapy and radiation therapy be delayed, reduced, or non-existent. The following guidelines are organized by tumour site and make recommendations regarding how patients should be treated in light of cancer surgery delays or cancellations. The guidelines are intended to provide general directions and case-by-case multidisciplinary review is highly recommended.

3.0 Breast Cancer

3.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	**Subsite/risk group**	**Stage/Grade/ other factors**	**Is there a Neoadjuvant ST or RT Regimen Option**	**Preferred alternative if No Surgery**	**Other mitigations/ alternative Primary therapy**	**Comments:**
Breast	DCIS	TisN0	No	None preferred	Monitor with mammogram (q 3-6 months). ** see below comment	
Breast	HER2+	T1a-bN0	No	None preferred	Physical exam and imaging q3 months. ** see below comment	Strongly recommend surgery first.
Breast	HER2+	T1cN0	Yes	Neoadjuvant CT: UBRAJTTW†	If ER+ could continue on with HER2 directed therapy and ET after chemotherapy portion is completed.	
Breast	HER2+	Stage II-III	Yes	Neoadjuvant CT: BRAJTDC BRAJACTT BRAJACTTG	Shorter regimen. Need primary GCSF support to reduce FN. Non dose-dense reduces intensity of visits. Dose dense regimen.	Strongly consider factors of number of cycles, risks of toxicities that could lead to hospitalization. These patients should be prioritized for surgery after neoadjuvant CT.
Breast	ER-/PR-/HER2-	T1a-bN0	No	None preferred	Physical exam and imaging	Strongly recommend

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
					q3 months. ** see below comment	surgery first.
Breast	ER-/PR-/HER2-	T1cN0	Yes	Neoadjuvant CT: BRAJDC	Shorter regimen. Need primary GCSF support to reduce FN. Consider neoadjuvant RT in patients where surgery is not possible and no option for bridging ET.	These patients should be prioritized for surgery after neoadjuvant CT.
Breast	ER-/PR-/HER2-	Stage II-III	Yes	Neoadjuvant CT: BRAJDC BRAJACTG	Shorter regimen. Need primary GCSF support to reduce FN. Dose dense regimen. Consider neoadjuvant RT in patients where surgery is not possible and no option for bridging ET. #	These patients should be prioritized for surgery after neoadjuvant CT.
Breast	ER+/PR+/HER2-	T1aN0 Any grade	Potentially but not standard	Close observation or Neoadjuvant ET for 3-6 months.	Physical exam and imaging q3 months. ** see below comment	
Breast	ER+/PR+/HER2-	T1b-cN0 Grade 1	Potentially but not standard	Close observation or Neoadjuvant ET for 3-6 months.	Physical exam and imaging q3 months. ** see below comment	Not eligible for Oncotype DX. Consider pathology review on grade.
Breast	ER+/PR+/HER2-	T2N0 or T3N0	Potentially	Neoadjuvant ET for		Not eligible for

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
		Grade 1	but not standard	3-6 months.		Oncotype DX. Consider pathology review on grade.
Breast	ER+/PR+/HER2-	T1b-cN0 or T2N0 or T3N0 Grade 2-3	Potentially but not standard	Neoadjuvant ET for 3- 6 months. Neoadjuvant chemo if high (or intermediate high) Oncotype DX		Request Oncotype DX on diagnostic core biopsies.
Breast	ER+/PR+/HER2-	T(any)N1-3	Yes	Neoadjuvant ET or Neoadjuvant CT	Consider Neoadjuvant RT if significant decreased access to breast surgery.	Use clinical and standard pathological factors for decision of neoadjuvant ET or CT.
Breast	ER+/PR+/HER2-	Stage IIIC or Inflammatory breast cancer	Yes	Neoadjuvant RT after Neoadjuvant CT		If significant decreased access to breast surgery – this cohort should be considered for RT prior to definitive surgery
Breast	ER-/PR-/HER2- and HER2+	Stage IIIC or Inflammatory breast cancer			Assessment of residual disease important after neoadjuvant CT to determine appropriate adjuvant treatment.	These patients should be prioritized for surgery after neoadjuvant CT.

Footnotes:

**In the event that definitive surgery is not possible within 10 weeks of diagnosis of the breast cancer (when neoadjuvant systemic treatment is not preferred) patients should be considered for local excision of their primary tumour under local anaesthetic.

In the event that definitive surgery is not possible in a timely manner after the standard course of neoadjuvant CT. In patients with clinical evidence of residual disease – could consider adjuvant capecitabine before or after neoadjuvant RT.

† UBRAJTTW - The details on BC Cancer systemic therapy protocols used in this and other tables throughout the document can be found at http://www.bccancer.bc.ca/health-professionals/clinical-resources/chemotherapy-protocols.

Abbreviations: CT: chemotherapy; RT: radiotherapy; ET: endocrine therapy; FN: febrile neutropenia; ALND: axillary lymph node dissection

3.2 General Considerations:

- Have dialogue between your surgeons and the oncologists regionally about alterations in referrals (dependent on each centres resources, availability of breast cancer surgeries).
- If there is an altered pathway for pre-operative assessment clearly state on the referral form: Neoadjuvant assessment, cTNM stage, ER/HER2 status and potential time to surgery (if known). If there is uncertainties regarding a referral please directly contact your regional cancer centre breast oncologist on call.
- Biomarkers (ER, PR and HER2) should be done on the diagnostic core biopsy.
- Imaging of the axilla (and biopsy of suspicious nodes) is mandatory for consideration of neoadjuvant treatment (for ER- and/or HER2+) and is strongly recommended if local excision of the primary tumour under local anaesthetic is performed (except for ER+/HER2- age > 70 years old).
- Clips should be inserted in the breast mass (preferably at time of diagnostic core biopsies).
- Consideration of inserting clips in biopsy proven node(s) – if considering SLNB as definitive axillary staging after neoadjuvant CT.
- If there are still some surgeries being performed, limit patients sent back for completion ALND and re-excision of margins. Can use RT to improve local control for close margins.

4.0 Central Nervous System Cancers

4.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
Brain	Glioblastoma	All stages	No	CNAJTZRT, CNTZELRT	Single modality therapy with RT, CNTEMOZ or CNBEV, or best supportive care	Surgery necessary in cases of significant mass effect
Brain	Grade 3 Astrocytoma and Oligodendroglioma	All stages	No	CNAJ12TZRT	Single modality RT or CNTEMOZ	Surgery necessary in case of significant mass effect
Brain	Grade 2 Astrocytoma and Oligodendroglioma	All Stages	No	Defer until surgery	RT + PCV	Most low grade tumors can wait several months before definitive treatment
Brain	Metastases	Stage 4	No	SRS/SRT or WBRT	Systemic therapies based on primary site	Surgery necessary for significant mass effect
Brain	Meningioma	All stages	No	Defer until surgery	RT/SRT	Surgery necessary in cases of significant

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
						mass effect
Brain	Pituitary Adenoma	N/A	No	Hormonal therapy	Defer until surgery available or SRT if clinical urgency	Surgery necessary for chiasmal compression
Brain	Acoustic Neuroma	N/A	No	Defer until surgery	SRS as per stereotactic conference guidance	Most cases can be delayed several months to make treatment decisions
Brain	Rare CNS Tumors	All stages	No	Refer to Multidisciplinary Case Conference for management guidance	N/A	

Footnotes: CNS site group believes all patients should have biopsy prior to referral to BC Cancer unless tumor location dictates against surgery

5.0 Gastrointestinal

5.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	**Subsite/risk group**	**Stage/Grade/ other factors**	**Is there a Neoadjuvant ST or RT Regimen Option**	**Preferred alternative if No Surgery**	**Other mitigations/ alternative Primary therapy**	**Comments:**
GI	Esophageal	Resectable	Yes	Chemo/RT (GIENACTRT) *If early stage disease consider close observation*	Consider FOLFOX/RT if bulkier disease (GIEFFOXRT)	Neoadjuvant chemo/RT standard
GI	Gastric	Resectable	Yes	Chemo (GIGFLODOC) *If early stage disease consider close observation*	Typically give 4 cycles pre-op and 4 post-op. Could extend pre-op but not standard	Neoadjuvant chemo standard
GI	Pancreatic	Resectable	Not standard	Pre-operative chemotherapy (GIPAJFIROX)	Emerging evidence that pre-operative chemotherapy is a reasonable alternative to upfront surgery	Neoadjuvant chemo not standard, but is used in many centres currently
GI	Biliary	Resectable	Not standard	Pre-operative chemotherapy (GIAVPG)	If more locally advanced disease could also consider chemo/RT	Neoadjuvant chemo not standard
GI	Colon	Resectable	Not standard	Pre-operative chemotherapy	Could also consider pre-operative capecitabine if early	Some data to support

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
				(GIAJFFOX or GIAJCAPOX) *If early stage disease consider close observation*	disease (GIAJCAP)	neoadjuvant chemo in node positive disease
GI	Rectal	Resectable	Yes	Chemo/RT (GIRCRT)	If bulkier disease could consider neoadjuvant chemo (GIAJFFOX or GIACCAPOX)	Neoadjuvant chemo/RT standard
GI	Anal	Resectable	Yes	Chemo/RT (GICART)	Could consider RT alone if very early stage disease	Definitive chemo/RT standard (surgery not standard in this setting)
GI	Neuroendocrine	Resectable	Not standard	Somatostatin analogues (UGIOCTLAR; UGILAN), or targeted therapy (UGINETEV) or chemotherapy (GIAVTZCAP; GIPE) depending on grade of tumour.	Could consider interventional radiology options (y90)	Neoadjuvant therapy not standard

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
				If early stage disease consider close observation		
GI	HCC	Resectable	Not standard	If resectable could consider RT alone. If borderline resectable sorafenib (UGISORAF) or lenvatinib (PAP access)	Could consider interventional radiology options (ablation/chemoembolization)	Neoadjuvant treatments not standard

Footnotes: *CT: chemotherapy. ADT: Androgen Deprivation Therapy

5.2 General Considerations

- Use capecitabine-based regimens when possible
- Strongly consider risks versus benefits in situations with borderline benefit of chemotherapy (adjuvant for stage II colon cancer)

6.0 Genitourinary

6.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	**Subsite/risk group**	**Stage/Grade/ other factors**	**Is there a Neoadjuvant ST or RT Regimen Option**	**Preferred alternative if No Surgery**	**Other mitigations/ alternative Primary therapy**	**Comments:**
Kidney	T1a, Small renal mass	T1a, N0M0	No	Active surveillance, periodic renal imaging (US, CT or MRI)		
Kidney	>T1a	T1b-T4, N0M0	No	Needle ablation, if possible, are options for tumors < 3cm. No non-surgical curative options for tumors > 3cm	Consideration of VEGF TKI (sunitinib or pazopanib) for T4 tumors and IVC thrombus for 3-4 cycles if no surgical option	Larger tumors (T2 or greater) and IVC thrombus should be considered with higher priority
Kidney	Metastatic RCC	Any T, any N, M1	No	No	Avoid cytoreductive surgery and consider upfront systemic therapy (IO or TKI)	
Bladder	NMIBC / BCG Naive	Ta, T1, CIS	No	None preferred	Consider resection / cauterization of tumor under local anesthetic Consider adjuvant BCG in all high grade tumors	Avoid intra-vesical therapy for intermediate risk. Avoid maintenance BCG beyond 12

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
					without re-resection	months
Bladder	NMIBC BCG unresponsive	CIS, Ta, T1N0	No	None preferred	Close clinical monitoring Consider alternative intra-vesical chemotherapy options Consider resection / cauterization of tumor under local anesthetic	Consider TMT for T1 high grade
Bladder	MIBC	Clinical T2 to T3a, N0M0 AND Urothelial histology AND Maximal TURBT done AND No hydronephrosis AND Absence of extensive CIS AND Uni-focal tumors <5 cm AND Good bladder/renal function	Yes	Chemo-radiation	Consider Chemo-radiation Consider neoadjuvant chemotherapy (4 cycles of Gem/Cis)	
Bladder	MIBC	>T2, N0M0 (not eligible for CMT)	Yes		Consider neoadjuvant chemotherapy (4 cycles of Gem/Cis)	Level 1 evidence of benefit of neoadjuvant

Tumour subsite	**Subsite/risk group**	**Stage/Grade/ other factors**	**Is there a Neoadjuvant ST or RT Regimen Option**	**Preferred alternative if No Surgery**	**Other mitigations/ alternative Primary therapy**	**Comments:**
						chemotherapy
Prostate	Low risk	<T2a and iPSA < 10 and GS<6	No	None preferred	Active surveillance should be primary consideration	
Prostate	Low-tier Intermediate risk	<T2c and: iPSA 10-15 with GS=6 or GS=7 with iPSA<10	Yes	Neoadjuvant ADT for 3- 8 months	Consider Neo-adjuvant ADT and delay in surgery or brachytherapy and reassess in 3 months Consider Primary External Beam RT as alternative to surgery Consider Primary External Beam RT as alternative to brachytherapy	Neoadjuvant ADT does not normally add value to surgery, but is a consideration in context of long delays
Prostate	High-tier Intermediate risk	<T2c and: iPSA 15-20 and GS=6 or iPSA 10-20 and GS7	Yes	Consider Primary External Beam RT as alternative to surgery or brachytherapy	Consider Neo-adjuvant ADT and delay in surgery or brachytherapy and reassess in 3 months Consider Primary External Beam RT as alternative to surgery	Neoadjuvant ADT does not normally add value to surgery, but is a consideration in context of long delays

Tumour subsite	**Subsite/risk group**	**Stage/Grade/ other factors**	**Is there a Neoadjuvant ST or RT Regimen Option**	**Preferred alternative if No Surgery**	**Other mitigations/ alternative Primary therapy**	**Comments:**
					Consider Primary External Beam RT as alternative to brachytherapy	
Prostate	High Risk	>T3a iPSA >20 or GS 8-10	Yes	Consider Primary External Beam RT as alternative to surgery or brachytherapy boost	Consider Primary External Beam RT as alternative to surgery Consider Primary External beam RT as alternative to brachytherapy boost	Neoadjuvant ADT does not normally add value to surgery, but is a consideration in context of long delays
Testes	Testes mass	Any T	No	No	Consider radical orchiectomy under local anesthetic with sedation	

7.0 Gynecological Cancer

7.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	**Subsite/risk group**	**Stage/Grade/ other factors**	**Is there a Neoadjuvant ST or RT Regimen Option**	**Preferred alternative if No Surgery**	**Other mitigations/ alternative Primary therapy**	**Comments:**
GYNE	Advanced stage tubo-ovarian cancer	FIGO Stage IIIA – IV, high grade disease as demonstrated by core biopsy when possible (peritoneal, retro-peritoneal or distant metastatic spread)	Yes	GOOVCATX	No	Evidence based strategy, with interval de-bulking after cycle 3-4. If surgical delays, reasonable to rely on chemotherapy with surgery to occur when possible, but hopefully by cycle 6.
GYNE	Advanced stage endometrial cancer	FIGO Stage IIIA-IVB	Yes	GOENDCAT and/or RT	In some cases (in particular stage IIIC or greater) chemo and RT may be used as the curative intent therapy.	
GYNE	Early stage endometrial cancer	FIGO stage IA-II, Low grade endometrioid carcinoma (ER and PR positive)	Yes	GOENDAI, GOENDH Stage II can be offered curative intent RT.	Depending on the patient profile could consider short term disease stabilization by hormone therapy.	Given that hormone therapy may lead to disease regression, it is recommended that all patients have a baseline MRI as a substitute for surgical staging in order

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
						to determine whether systemic therapy and RT would also be required following surgery once performed.
GYNE	Early stage cervical cancer	Stage IA1/2 without LVSI	YES	LEEP under local anesthetic. Otherwise, can be considered for curative intent RT and concurrent cisplatin if appropriate (GOCXCRT)	LEEP under local anesthetic.	Treatment strategy using RT will depend on access to brachytherapy. Stage IB1/2 need multi-disciplinary conference discussion.
GYNE	Early stage vulvar	Stage IA			Wide local excision under local anesthetic – can be done in clinic in some situations.	Stage 1A2 or above, normally needing nodal dissection need conference discussion.

8.0 Head & Neck Cancer

8.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	**Subsite/risk group**	**Stage/Grade/ other factors**	**Is there a Neoadjuvant ST or RT Regimen Option**	**Preferred alternative if No Surgery**	**Other mitigations/ alternative Primary therapy**	**Comments:**
H&N	Oral Cavity	Resectable Stage I, II	ST – No RT - No	Curative intent external beam radiotherapy		
		Resectable Locally advanced	ST – No RT - No	Curative intent external beam radiotherapy, +/- concurrent chemotherapy		Neoadjuvant chemotherapy (HNLADCF) could be considered if there are delays to chemo-radiation
	Oropharynx P16 positive	Resectable Stage I, II	ST – No RT - No	Curative intent external beam radiotherapy		
		Resectable Locally advanced	ST – No RT - No	Curative intent external beam radiotherapy, +/- concurrent chemotherapy		Neoadjuvant chemotherapy (HNLADCF) could be considered if there are delays to chemo-radiation
	Oropharynx	Resectable	ST - No	Curative intent external beam		

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
	P16 negative	Stage I, II	RT - No	radiotherapy		
		Resectable Locally advanced	ST – No RT - No	Curative intent external beam radiotherapy, +/- concurrent chemotherapy		Neoadjuvant chemotherapy (HNLADCF) could be considered if there are delays to chemo-radiation
	Larynx Hypopharynx	Resectable Stage I, II	ST - No RT - No	Curative intent external beam radiotherapy		
		Resectable Locally advanced	ST - No RT - No	Curative intent external beam radiotherapy, +/- concurrent chemotherapy		Neoadjuvant chemotherapy (HNLADCF) could be considered if there are delays to chemo-radiation
	Squamous cell carcinoma – primary unknown	Resectable Neck dissection +/- tonsillectomy and tongue resection	ST - No RT - No	Curative intent external beam radiotherapy, +/- concurrent chemotherapy		Neoadjuvant chemotherapy (HNLADCF) could be considered if there are delays to chemo-radiation

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
	Squamous cell carcinoma – loco-regional recurrence, post radiotherapy	Resectable Surgical resection +/- Neck dissection	ST - No RT - No			Surgery is the only curative regimen in an "in-field" recurrence. Otherwise the two options are: 1. Palliative chemotherapy 2. Palliative radiotherapy
	Salivary gland tumours	Resectable	ST - No RT - No	Curative intent external beam radiotherapy		Surgery is the preferred modality since these are radio-resistant tumours
	Nasal cavity and Para-nasal sinuses	Resectable	ST - No RT - No	Curative intent external beam radiotherapy, +/- concurrent chemotherapy		Some histologies are radio-resistant.
	Nasopharyngeal carcinoma – loco-regional recurrence, post	Resectable Surgical	ST - No RT - No			Surgery is the only curative regimen in an "in-field" recurrence.

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
	radiotherapy	resection +/- Neck dissection				Otherwise the two options are: 1. Palliative chemotherapy 2. Palliative radiotherapy Neoadjuvant chemotherapy (HNLADCF) could be considered if there are delays to chemotherapy or radiation
	Thyroid carcinoma Well differentiated		ST – No RT - No			Surgery is the primary curative regimen. Low risk early stage cases will be deferred. The weekly Provincial Thyroid Conference should be leveraged to review locally advanced cases, or if the MRP is unsure

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
						about deferring primary surgery i.e. there are potential systemic therapy options but may not be evidence based.
	Thyroid carcinoma Medullar thyroid carcinoma		ST – No RT - No			Surgery is the primary curative regimen. All cases should be reviewed at the weekly Provincial Thyroid Conference regarding potential radiotherapy or systemic therapy options but may not be evidence based.
	Thyroid carcinoma Anaplastic		ST - No RT - No			Multi-modality treatment is required, including surgery. All cases should be reviewed at the weekly Provincial Thyroid Conference.

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
	Malignant Parathyroid Neoplasms		ST - No RT - No			Surgery is the primary curative regimen. All cases should be reviewed at the weekly Provincial Thyroid Conference regarding potential radiotherapy or systemic therapy options but may not be evidence based.

Footnote: There are no neoadjuvant options for H&N patients waiting for surgery, but there are other treatment options as indicated in the column "Preferred alternative if no surgery." This is to denote that "curative intent external beam radiotherapy" or "Curative intent external beam radiotherapy, +/- concurrent chemotherapy" is given in place of definitive surgery.

9.0 Leukemia/Bone Marrow Transplant

9.1 General Considerations

- The LBMT Program of BC is electively delaying transplants for some patients.
- This decision has been made after discussion with other transplant programs across the Canada as well as extensive discussion within the LBMT attendings.

- The primary reason for considering delaying transplants in select patients with Myeloma and Lymphoma is patient safety:
    - Patients post high dose therapy and stem cell transplant (even autologous transplant) are immunocompromised to a much greater degree than most patients with cancer post standard dose chemotherapy; is not just during the neutropenic phase post chemo but extends at least to a year beyond based on immune reconstitution studies
    - This period can be much longer post allogeneic stem cell transplant.
    - The risk of significantly worse outcome is higher for these patients than other patients should they contract COVID-19 infection post-transplant
    - There are anticipated blood product and drug shortages which may impact care of patients post transplants in the coming weeks
- The secondary reason for delay is the anticipated marked surge in the needs of patients infected with COVID-19 requiring hospital stay/ICU care at Vancouver General Hospital
- Therefore, largely keeping the patient's best interests at heart, our group along with many across Canada, are prioritizing patients for transplant based on risk/benefit, taking into account current circumstances.
- Patients with Myeloma have alternative treatment options which for them will be safer at the moment compared to undergoing auto-SCT. The same holds true for certain lymphoma patients.
- As of March 13th"Prospective rounds," the LBMT attendings have been carefully going through patients listed for SCT and assessing each patient's clinical situation and need to proceed to transplant on a case by case basis. The plan is for this to continue to occur on a weekly basis, as the situation related to COVID-19 evolves.
- A plan to reschedule patients will be developed in the future.

10.0 Lung Cancer

10.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	**Subsite/risk group**	**Stage/Grade/ other factors**	**Is there a Neoadjuvant ST or RT Regimen Option**	**Preferred alternative if No Surgery**	**Other mitigations/ alternative Primary therapy**	**Comments:**
Lung	NSCLC	Stage I-IIA	No	Observation until surgery	SABR	Observation reasonable for early stage cancer,

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
		(T1-2N0)				especially if no biopsy, growingly slowly on serial CTs, lepidic adeno, older age, multiple co-morbidities, history of multiple previous lung cancers
Lung	NSCLC	Stage IIB (T1-2N1, T3N0)	No	LULAPERT chemo + RT 60Gy/30	RT alone	
Lung	NSCLC	Stage IIIA (T1-2N2, T3N1, T4N0-1) (trimodality pts)	Yes	LULAPERT chemo + RT 60Gy/30 followed by 1 year durvalumab		Full dose RT recommended in case surgery not feasible
Lung	SCLC	T1-2 N0 M0 (Limited Stage)	No	LUSCPERT Chemo + RT 40Gy/15		
Thymoma			Yes	Observation until surgery	LUOTPERT chemo + RT 60Gy/30 (Neoadj) Chemo Alone (LUOTPE/LUOTPAC/ LUOTCAV)	

11.0 Lymphoma

11.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
Lymphoma	All	All	N/A	Surgery mainly used to obtain diagnostic biopsy, and is always preferred	If surgical biopsy unavailable, core needle biopsy would be next option	
Lymphoma	Localized primary cutaneous indolent lymphoma or primary cutaneous ALCL; or high cervical NLPHL	Stage 1	N/A	Local radiation	Observation	
Lymphoma	Spleen dominant conditions causing sequestration and cytopenias, such as CLL, MCL, splenic MZL or	All	N/A	While splenectomy is often considered, this can be deferred	Systemic therapy as appropriate, rituximab monotherapy, steroids or observation	

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
	autoimmune conditions causing cytopenias					

12.0 Ocular & Orbital

12.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
Uveal Melanoma	Requiring Brachytherapy	AJCC T1a	Proton therapy, also requires a surgical procedure for clip placement, not mitigating NOT AVAILABLE LOCALLY	Monitoring – photograph, ultrasound, OCT (delay treatment if vision not threatened)	Thermotherapy only in very low tumors (transpupillary laser), not ultimately effective alone, can allow delay	Dependent on patient location and monitoring availability
Uveal Melanoma	Requiring Brachytherapy	AJCC T2a-T3b	Proton – see above	PDT may have a limited role, as adjuvant only	Enucleation – also a surgical procedure, therefore not mitigating	

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
Ciliary Body Melanoma	Requiring Brachytherapy	AJCC T2b-T3b	Proton – see above	Eye wall resection – also a surgical procedure, therefore not mitigating		
Iris melanoma	Requiring Brachytherapy or eye wall resection		Proton – see above	Monitoring		
Uveal Melanoma	Requiring Enucleation	AJCC T3a-T4c	none	none	none	Risk of orbital extension and poor outcome
Conjunctival melanoma	Requiring en-bloc excision			Sr90 radiation depending on configuration and extent	Mitomycin C drops – after biopsy/excision	
Intraocular lymphoma	Requires vitrectomy+/- sub-retinal biopsy		no	no		Treatment depends on biopsy but is not really surgical
Retinoblastoma	Requiring surveillance, Laser, Cryotherapy,			Depends on treatment course May be able to omit	Intra-arterial chemotherapy – also done requiring anaesthesia and surgical	

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
	or enucleation			every second Exam under anaesthetic while undergoing chemotherapy	setup therefore not mitigating.	

Footnotes: PDT = Photodynamic Therapy (Photoporphyrin is delivered in Eye Care Centre, Vancouver)

13.0 Sarcoma

13.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
Sarcoma	GIST	>5cm intestinal, >10cm gastric , high mitotic count on biopsy	Yes	SAAJGI	These patients typically would be given adjuvant Imatinib and in some cases are offered neoadjuvant	Operable cases will need surgery. See Footnote #.

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
					(compromised valve function)	
	GIST	< 5cm intestinal, <10cm gastric, low mitotic count on biopsy	No	SAAJGI	These patients typically would not be given adjuvant Imatinib due to low risk. Giving them Imatinib would be a worst case scenario to bridge to surgery.	Should be evaluated on case by case basis, some very low risk GIST might even be stable to await a delayed surgery depending on how delayed.
Sarcoma	Osteosarcoma	Operable but advanced cases	Yes	SAAJAP x 3 cycles followed by surgery then followed by SAAJAP for another 3 cycles Some cases may use MAP chemotherapy although the addition of MTX has not shown OS improvement	We should attempt to treat these patients as per standard given high chemosensitivity and high risk of recurrence/mortality	Age of patient may factor into pathway of care – paediatric disease vs. adult.
	Osteosarcoma	Pediatric	Yes	As above	Patients to be managed at Children's Hospital, defer to prioritization needs at BCCH.	Case by case assessment and prioritization.
Sarcoma	Chondrosarcoma	Requiring surgical management – dedifferentiated,	No	This is a surgical disease that can progress rapidly, compromising life and	Nil.	These will generally be managed as

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
		grades 2 or 3 out of 3. Symptomatic Grade 1 with impending fracture		limb.		very urgent or emergent cases at VGH as they are now.
Sarcoma	Ewing's	Non-metastatic or minimally oligo-metastatic	Yes	SAALT2W or SAALT3W	Typically patients will be assessed for OR after cycle 3B and if operable will undergo surgery prior to cycle 4A. Chemo will be held for surgery but resumed concurrently with radiation.	See Footnote **
Soft Tissue Sarcoma - Extremity	Histology sensitive to radiation	Extremity, resectable with curative intent,	Yes	Neoadjuvant Radiation	Patient should undergo OR 4-8 weeks post radiation	Case by case assessment if prolonged duration beyond 8 weeks from completion of radiation. Not acceptable to delay surgery beyond 12 weeks post radiation in any circumstance.
Soft	Histology sensitive to	Resectable but	Yes	Neoadjuvant radiation	Patient would typically	Case by case

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
Tissue Sarcoma – Extremity	radiation	distant disease present			undergo OR 4-8 weeks post radiation	assessment if prolonged duration beyond 8 weeks from completion of radiation. Delay surgery beyond 12 weeks post radiation may be acceptable on case by case basis (ie Palliative setting).
Soft Tissue Sarcoma, extremity	Histology resistant to radiation (NOT including ALTs, DFSP)	Extremity, amenable to surgical resection, generally resistant to radiation. NOT including ALTs, DFSP.			Surgery should occur within 12-24 weeks or there will be risks of metastasis or local progression.	Case by case assessment if the delay looks to significantly extend beyond 12 weeks. Some histology may be ok, but repeat imaging at least should occur if 12 weeks is reached.
Soft	Retroperitoneal, high		Yes	STRASS study	Case by case evaluation	Case by case

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
tissue Sarcoma	grade			Neoadjuvant radiation revealed outcomes not worse	and neoadjuvant radiation to be given as standard	evaluation.
Soft tissue sarcoma	Retroperitoneal, Low grade	Well differentiated liposarcomas	No		Could be delayed by 12 weeks as natural history is low risk	Case by case and must be reviewed and agreed upon that delay would not impact care by multi-disciplinary conference.
Sarcoma	Atypical Lipomatous Tumours	Extremity – no sign of de-differentiation on MRI. No progressive neurological compression or other acute symptoms	No		Current wait time is 12 months, which is reasonable.	Discouraging new patients to go on the list at this time, and putting them on monitoring. Transfer as many to follow up scans as possible.
Sarcoma	Benign Aggressive Bone Tumours	E.g. Giant Cell Tumour of Bone, Chondroblastoma, Atypical Cartilaginous Neoplasms	No		Case by case – never watch a GCT. These are always urgent cases even though they are benign.	Possible denosumab for GCT of bone – but this carries risks in itself and is only

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
						rarely indicated in the extremity now. Using it just to delay is definitely second best.
Sarcoma	Soft tissue	Trunk and head and neck	Yes	Neoadjuvant Radiation	Patient should undergo OR 4-8 weeks post radiation	Case by case assessment as agreed upon by tumour conference if prolonged duration beyond 8 weeks from completion of radiation. Not acceptable to delay surgery beyond 12 weeks post radiation in any circumstance.
Sarcoma	Desmoid	Desmoid	Yes	Watchful waiting, Sorafenib first line if symptomatic/progressing and likely to become symptomatic	Surgery is not primary modality and should be reserved for extreme cases only. Radiation in selected cases	Case by case with discussion at multi-disciplinary conference
Sarcoma	Rhabdomyosarcoma	Paediatric	Yes	Standard neoadjuvant	Should be prioritized as	

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
				chemotherapy	per pediatric standard protocol	

Footnotes: The following cases would be considered Emergent/Urgent sarcoma cases requiring prioritized surgery upfront for which threat to outcome:

Patients will need to be followed with imaging while on neoadjuvant imatinib and if tumour is very sensitive (ie disappears on imatinib) will pose significant challenge at time of OR. Mutation analysis may need to be done on core if not enough viable cells at time of surgery.

** Some cases may undergo all chemotherapy with concurrent radiation upfront prior to surgery if borderline resectable. If patient is clearly resectable at cycle 3B then priority should be made for them to undergo surgical resection at the most appropriate time.

1. Patients with sarcoma of extremity with either an impending or actual pathological fracture or imminent limb loss – Should be prioritized as EMERGENCY.
2. All large high grade soft tissue sarcomas without evidence of distant metastases should be considered as URGENT cases. There are limited histologies for which systemic or radiation therapy would be offered as bridge to surgery.
3. Patients presenting with NEW mass that is suspected to be sarcoma should have access to timely biopsy for diagnosis – there are some cases for which excisional biopsy is only option. These cases would also be considered URGENT for the OR.
4. Note that due to the complexity and variety of bone and soft tissue malignancies and benign tumours, there can never be an absolute set of rules, and many decisions will be made on a case by case basis by experienced subspecialist surgeons using their best judgement, working with multidisciplinary colleagues. The principles of delaying all surgery that is not immediately threatening life or limb (Emergent), or where significant harm will occur if there is a delay of greater than 6 weeks (Urgent) will be adhered to.

13.2 General Considerations

- Sarcomas are a complex and serious group of malignancies that affect people of all ages.
- The BC Cancer Sarcoma tumour group is a highly collaborative and effective group that is motivated to ensure that evidence based, high quality care continues to be delivered to all patients diagnosed with sarcoma during this time.
- The surgical leads and physicians in this tumour group will be utilising the surgical resources available to us, including UBC, VGH, BCCH and BC Cancer to accommodate emergency and urgent patients.
- In the setting of decreased access to cancer surgeries, we have identified the scenarios above which may help mitigate demands on OR scheduling.

14.0 Skin Cancer

14.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	**Subsite/risk group**	**Stage/Grade/ other factors**	**Is there a Neoadjuvant ST or RT Regimen Option**	**Preferred alternative if No Surgery**	**Other mitigations/ alternative Primary therapy**	**Comments:**
Cutaneous Melanoma		Any T stage operable	No	None	Attempt excisional biopsy whenever possible with intent to remove clinical lesion. See Footnotes 1-6	Histological transection of the in-situ component at peripheral margin is less of a consequence. See Footnote 7.
Melanoma		Stage IV patients who are candidates for curative intent	Yes	Usually systemic therapy preferred over RT in melanoma. RT could be used to target lesions not responding to		Without BRAF testing the only therapy option is immunotherapy. See Footnotes 10-11.

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
		resection of their metastatic disease		systemic therapy in lieu of surgical resection. See Footnotes 8-9.		
Melanoma		Locally advanced (i.e. any T stage with bulky nodal disease or tumor invading into bone, muscle or other structures).	Yes	Usually systemic therapy preferred over RT. See Footnotes 12-13. RT could be used to target lesions not responding to systemic therapy in lieu of resection. Defer therapeutic lymphadenectomy in the setting of clinically palpable regional nodes, and start with systemic therapy instead. Consider surgery if disease not responding.		Without BRAF testing the only therapy option is immunotherapy. See Footnotes 10-11.

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
Merkel		Operable Any T stage Clinical NO	No	Standard is surgery and SLNB for cNO. If surgery not an option consider referral to radiation oncology.	Surgery for Merkel cell should probably be prioritized over less malignant skin cancers such as BCC or SCC. RT for Merkel cell should probably be prioritized over less malignant skin cancers such as BCC or SCC.	These are aggressive tumors. They act like small cell cancers. Standard for operable cN0 disease is wide excision and SLNB. Consideration for adjuvant RT after surgery.
Merkel		Operable Any T stage clinically node positive	No	Standard is Surgery and CLND. If not an option could consider referral for "neoadjuvant RT" with definitive surgery after. If RT not an option then could consider discussion at multi-disciplinary conference for recommendations.	Surgery for Merkel cell should probably be prioritized over less malignant skin cancers such as BCC or SCC. RT for Merkel cell should probably be prioritized over less malignant skin cancers such as BCC or SCC.	These are aggressive tumors. They act like small call cancers. Standard for operable disease node positive disease is wide excision and CLND if node positive. Consideration for adjuvant RT after surgery.

Tumour subsite	**Subsite/risk group**	**Stage/Grade/ other factors**	**Is there a Neoadjuvant ST or RT Regimen Option**	**Preferred alternative if No Surgery**	**Other mitigations/ alternative Primary therapy**	**Comments:**
Squamous Cell Cancer		Any operable lesion.	RT can be offered instead of surgery.	RT could be offered instead of surgery. Surgery could be deferred for "salvage".	Priority for RT would be for locally advanced tumors, or lesions threatening critical anatomy (i.e. eye, nose …) before smaller tumors.	No role for systemic therapy in disease that could be resected or treated with RT.
Squamous Cell Cancer		Locally advanced disease	RT can be offered instead of surgery.	RT can be offered instead of surgery. If lesion too large for RT then consider discussion at multi-disciplinary conference for recommendations.	Priority for RT would be for locally advanced tumors, or lesions threatening critical anatomy (i.e. eye, nose …) before smaller tumors.	
Basal Cell Cancer		Any operable lesions.	RT can be offered instead of surgery.	RT could be offered instead of surgery. Surgery could be reserved for "salvage".	Priority for RT would be for locally advanced tumors, or lesions threatening critical anatomy (eye, nose…) before smaller tumors. Patients with small tumors could have surgery delayed for 3	No role for systemic therapy in disease that could be resected or treated with RT.

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
					months or have an office resection.	
Basal Cell Cancer		Locally advanced.	RT can be offered instead of surgery.	RT could be offered instead of surgery. Surgery could be reserved for "salvage". Vismodegib is an option for tumors that cannot be treated definitively with RT.	Priority for RT would be for locally advanced tumors, or lesions threatening critical anatomy (eye, nose…)	See Footnotes 14-15.

Footnotes: *CT: chemotherapy, MIS: melanoma in situ, WE: wide excision, SLNB: Sentinel Lymph Node Biopsy, IO: Immunotherapy

NED: No evidence of disease CLND: complete lymph node dissection.

1. *Delay Wide Excision (WE) of melanoma in situ (MIS) for at least 3 months.*
2. *Delay WE for up to 3 months for melanoma of any depth for which previous biopsy had clear margins or histologic peripheral transection of in situ component.*
3. *Delay WE for T1 melanoma (<1mm thickness) for up to 3 months even for a positive margin as long as the initial biopsy removed the majority of the lesion. Or else do a complete/excisional biopsy with narrow surgical margins or elliptical excision with 1 cm surgical margins in the office/outpatient setting.*
4. *Depending on OR capabilities offer SLNB for cutaneous melanoma >1mm thickness. Defer SLNB for T1b melanoma (0.8-1.0 mm with or without ulceration) unless very high risk features are evident (LVI, very high mitotic rate, young patient (<= 40 yr)).*

5. *Surgical Margins of T3/T4 (> 2mm thickness) should take priority over T1/T2 melanomas (<2mm thickness). The exception is any melanoma that is partially or incompletely biopsies where there is a large clinical residual lesion remaining. Gross complete resection is recommended for this.*
6. *Delay SLNB for up to 3 months unless WE in OR is planned, in which case WE/SLNB may be performed at that same time.*
7. *Adjuvant therapies for completely resected stage III disease currently cannot be offered unless patients have a positive sentinel node. Delay in the SLNB will delay access to adjuvant therapy.*
8. *Start with systemic therapy (BRAF/MEK targeted therapy if melanoma BRAF mutated or immunotherapy (IO)). After 3-6 months of systemic therapy consider resection of any non-responding disease if it would result in a patient being rendered NED.*
9. *Metastatic resections should be placed on hold unless the patient is critical/symptomatic. Patients should be continued on systemic therapy (+/- RT) until there is the option for surgery.*
10. *Consider using less toxic immunotherapy (i.e. single agent anti-PDI vs combination IO) during COVID pandemic to reduce risk of ER and hospital visits/admissions. We cannot guarantee that patients treated with single agent IO therapy upfront will get combination IO upon progression.*
11. *Try to use q3-4 week IO dosing rather than q 2 week if possible to reduce frequency of clinic visits.*
12. *For locally advanced disease start with systemic therapy (BRAF/MEK targeted therapy (an option if melanoma BRAF mutated) or immunotherapy (IO)). After 3-6 months of systemic therapy consider resection of any non-responding disease if it would render the patient NED.*
13. *The data supporting neoadjuvant therapy in melanoma at this time is very limited and it is not considered standard of care. In the neoadjuvant trials that have been done patients appear to do better with immunotherapy vs targeted therapy. That is, some patients who had operable disease lost the window for resection on neoadjuvant targeted therapy trials more so than on neoadjuvant IO trials. Combination neoadjuvant IO appears superior to single agent anti-PD1; however this would be at greater risk of toxicity, which we want to avoid during a pandemic. In one neoadjuvant trial a lower dose combo Ipilimumab/ Nivolumab was used, but this is currently not an approved option at BC Cancer. (Could consider applying by CAP.) Close monitoring of the patient is very important to make sure not to miss the opportunity for curative resection.*
14. *Vismodegib is currently restricted for patients whose tumors are inoperable and unable to be treated definitively with surgery. We might want to be a little more lenient on access if patients cannot get surgery or RT for a locally advanced tumor in a timely fashion.*
15. *Vismodegib could be given as a "neoadjuvant" strategy for 6-9 months and then there could be an attempt to cure with RT or surgery.*

15. Palliative Radiotherapy for Metastases

15.1 ST and RT Mitigation Strategies in the Setting of Reduced Access to Surgery

Tumour subsite	**Subsite/risk group**	**Stage/Grade/ other factors**	**Is there a Neoadjuvant ST or RT Regimen Option**	**Preferred alternative if No Surgery**	**Other mitigations/ alternative Primary therapy**	**Comments:**
NA	Impending long bone fracture	High Mirels score	No	8 Gy single fraction	Bisphosphonate/ denosumab, limit weight bearing, cane/walker.	
NA	Vertebral fracture with cord compression		No	Palliative RT 8 Gy single #.	Steroids	
NA	Vertebral metastases without cord compression	High SINS score	No	Palliative RT, 8 Gy single #	Vertebroplasty†	
NA	Solitary brain metastases	Graded prognostic Assessment	Depends on site	Depends on site: see tumour group specific recommendations for targeted options. Consider SRS with single fraction if possible, or SRT, or simple partial brain RT technique if SRS/SRT not	Steroids	Use graded prognostic index to aid decision making.

Tumour subsite	Subsite/risk group	Stage/Grade/ other factors	Is there a Neoadjuvant ST or RT Regimen Option	Preferred alternative if No Surgery	Other mitigations/ alternative Primary therapy	Comments:
				available		