

**Table 1** PRT Covid-19 Summary: palliative emergencies

Emergencies						
Reference	Main Prescriptive Indication	Alternative	Additional Statement (if any)	% Consensus Vote*		
				A = Agreement (1 + 2)		
				D = Disagreement (3 + 4)		
				SA = Strong Agreement (1)		
				SD = Strong Disagreement (4)		
<b>E1 Metastatic Epidural Spinal Cord Compression (MESCC)</b>						
QE1a [9]	8 Gy/1fx8Gy [Maranzano [19]]	–	<ul style="list-style-type: none"> <li>Requires multidisciplinary discussion with neurosurgery, and evaluation of factors including degree of spinal cord compression and presence or absence of spinal instability</li> <li>Similar impact on OS and post-RT motor functions than multifractions</li> <li>Retreatment is safe</li> <li>RT is urgent</li> <li>Surgical treatment should theoretically be preferred if possible and for all pt with a life expectancy of more than few months</li> <li>Adjuvant RT after surgery for MESCC can be postponed for 4 to 12 weeks</li> <li>In cases where surgical treatment is contraindicated or not appropriate, RT should be arranged without delay</li> <li>The simplest conformal RT techniques should be used</li> <li>MESCC is likely the only instance justifying urgent management of a COVID + patient</li> <li>Prefer 3D</li> </ul>	A = 100% [SA = 100%]	D = 0% [SD = 0%]	
QE1b Curigliano [16]	–	–		A = 100% [SA = 80%]	D = 0% [SD = 0%]	
QE1c Thureau [8]	8 Gy/1fx8Gy	–		A = 70% [SA = 30%]	D = 30% [SD = 0%]	
QE1d Simcock [14]	6-10 Gy/1fx6-10 Gy [ICORG 05-03 [20], TROG 96.05 [21]]	–		A = 80% [SA = 10%]	D = 20% [SD = 0%]	
<b>E2 Hemostasis (including Hemoptysis)</b>						
QE2a Tchelebi [7]	<ul style="list-style-type: none"> <li><b>Esophageal cancer bleeding:</b> 6-8 Gy/ 1fx 6-8 Gy</li> <li><b>Gastric cancer bleeding:</b> 6-8 Gy/ 1fx 6-8 Gy (with anti-emetic)</li> </ul>	–	<ul style="list-style-type: none"> <li><b>Gastric cancer bleeding:</b> RT should be strictly reserved for palliation of symptoms in pts with gastric cancer at the present time</li> </ul>	A = 80% [SA = 20%]	D = 20% [SD = 0%]	

Table 1 (continued)

Emergencies						
Reference	Main Prescriptive Indication	Alternative	Additional Statement (if any)	% Consensus Vote*		
				A = Agreement (1 + 2)		
				D = Disagreement (3 + 4)		
				SA = Strong Agreement (1)		
				SD = Strong Disagreement (4)		
QE2b [9]	<ul style="list-style-type: none"> <li>• <b>Pelvic malignancies bleeding:</b> 14.8 Gy/4fx/3.7BID</li> <li>• <b>Pelvic malignancies bleeding, pt Covid + :</b> 20 Gy/5fx4Gy</li> </ul>	–	<p><b>Pelvic malignancies bleeding pt Covid + :</b> Avoid BID</p>	A = 80% [SA = 20%]	D = 20% [SD = 0%]	
QE2c Wu [13]	<ul style="list-style-type: none"> <li>• <b>Hemoptysis:</b> 20 Gy/5fx4Gy</li> <li>• 17 Gy/2fx8.5 Gy<sup>§</sup></li> <li>• 10 Gy/1fx10Gy</li> </ul>	–	Palliative lung radiation should be deferred when possible, otherwise reserved for pt with life-threatening complications such as high-volume hemoptysis	A = 80% [SA = 30%]	D = 20% [SD = 10%]	
QE2d Hahn et al. [63]	<ul style="list-style-type: none"> <li>• <b>Pelvic bleeding:</b> 8 Gy/1fx8Gy</li> </ul>	–	–	A = 80% [SA = 40%]	D = 20% [SD = 0%]	
QE2e Combs [15]	<ul style="list-style-type: none"> <li>• <b>Bleeding</b> 8 Gy/1fx8Gy (not further specified)</li> </ul>	–	–	A = 60% [SA = 30%]	D = 40% [SD = 0%]	
QE2f Thomson [6]	<ul style="list-style-type: none"> <li>• <b>H&amp;N bleeding:</b> <ul style="list-style-type: none"> <li>◦ Scenario 1- Early Pandemic—Risk mitigation</li> <li>• 8 Gy/1fx8Gy</li> <li>• 20 Gy/5fx4Gy</li> <li>• 44.4 Gy/12fx3.7 Gy</li> </ul> </li> <li>◦ Scenario 2- Late Pandemic—Severe shortage of RT capacity</li> <li>• 8 Gy/1fx8Gy</li> <li>• 20 Gy/5fx4Gy</li> </ul>	–	–	A = 70% [SA = 30%]	D = 30% [SD = 0%]	

Table 1 (continued)

Emergencies	Main Prescriptive Indication	Alternative	Additional Statement (if any)	% Consensus Vote*
Reference				A = Agreement (1 + 2) D = Disagreement (3 + 4) SA = Strong Agreement (1) SD = Strong Disagreement (4)
QE2g Simcock [14]	<p><b>Esophageal bleeding:</b></p> <ul style="list-style-type: none"> <li>12 Gy/4fx3Gy BID [SHARON project [23]]</li> <li>18 Gy/3fx6Gy Day (Q) 0, 7, 21 (weekly) (Adapted from other sites) [25]</li> </ul> <p><b>Pelvic/GI bleeding:</b></p> <ul style="list-style-type: none"> <li>20-24 Gy/5-6fx4Gy</li> <li>18 Gy/4fx4.5 Gy BID [SHARON project [23]]</li> <li>14.8 Gy/4fx3.7 Gy BID (Repeat q2-4 wks to total 44.4 Gy in 3 courses) [QUAD SHOT- RTOG 8502 [26, 27]]</li> <li>18-24 Gy/3fx6-8 Gy Day 0, 7, 21 [25]</li> <li>18-24 Gy/3fx6-8 Gy Day 0, 7, 21 [25]</li> </ul>	<p><b>Esophageal bleeding:</b></p> <ul style="list-style-type: none"> <li>15 Gy/3fx5Gy [SHARON project]§</li> </ul> <p><b>Pelvic/GI bleeding:</b></p> <ul style="list-style-type: none"> <li>Prefer 3D</li> <li>Prefer 3D</li> </ul>	<p><b>Esophageal bleeding:</b></p> <ul style="list-style-type: none"> <li>Prefer 3D</li> </ul>	A = 80% [SA = 30%] D = 20% [SD = 0%]
<b>E3 Mediastinal Syndrome</b>				
QE3a Yerramilli [9]	<p><b>SVC syndrome Airway Obstruction:</b></p> <ul style="list-style-type: none"> <li>17 Gy/2fx8.5 Gy (each, weekly) [Sundstrom [31]]</li> <li>20 Gy/5fx4Gy</li> </ul>	–	Multidisciplinary discussion may be recommended	A = 100% [SA = 70%] D = 0% [SD = 0%]
QE3b Guckenberger	<p><b>NSCLC-Early Phase</b> of the COVID-19 pandemic (risk mitigation):</p> <ul style="list-style-type: none"> <li>2, 8–10 Gy/1fx 8–10 Gy 20 Gy/5fx 4 Gy</li> </ul> <p><b>NSCLC-Later phase</b> of the COVID-19 pandemic: (lack of RT resources and need for patient triage) 8-10 Gy/1fx 8-10 Gy</p>	–	Order reported for <b>“NSCLC Early Phase”</b> follows the highest consensus reported in the paper	A = 80% [SA = 50%] D = 30% [SD = 0%]

Table 1 (continued)

Reference	Main Prescriptive Indication	Alternative	Additional Statement (if any)	% Consensus Vote*
QE3c Wu [13]	<p><b>Superior vena cava syndrome:</b></p> <ul style="list-style-type: none"> <li>• 17 Gy/2fx8.5 Gy<sup>§</sup></li> </ul> <p><b>§(Authors do not specify in text/table but the reference report the schedule as “weekly”) [24] [Rodrigues]</b></p> <ul style="list-style-type: none"> <li>• 10 Gy/1fx10Gy</li> </ul> <p><b>SCV Syndrome/Lung Cancer:</b></p> <ul style="list-style-type: none"> <li>• 8–10 Gy/1fx8-10 Gy</li> <li>• 17 Gy/2fx8.5 Gy (weekly) [33] [MRC]</li> </ul>	–	<p>Palliative lung RT should be deferred when possible, otherwise reserved for patients with life-threatening complications such as superior vena cava syndrome</p> <p>Prefer 3D</p>	<p>A = 70% [SA = 40%] D = 30% [SD = 0%]</p> <p>A = 90% [SA = 30%] D = 10% [SD = 0%]</p>

§(Authors do not specify in text/table but the reference report the schedule as “weekly”) [Rodrigues [24]]

§ Note: the schedule reported in the paper do not corresponds to Sharon Project schedule

\* Consensus Vote: 1 = Strongly Agree; 2 = Agree; 3 = Disagree; 4 = Strongly Disagree

MESCC Metastatic Epidural Spinal Cord Compression; fx fraction; OS overall Survival; RT Radiotherapy; pt patient; BID bis in die; Q schedule repetition interval; QoL quality of life; SBRT stereotactic body RT mets: metastases; wks weeks; PEG percutaneous endoscopic gastrostomy; WBRT whole brain RT; TMZ Temozolamide; mth months; IMRT-SIB Intensity modulated RT— Simultaneous integrated boost