Subsites 1-4 are mandatory, additional subsites added depending on tumor features and patient features Modified from Valentini et al, PMID 27528121 and Ng et al, PMID 22401917 Isotropic CTVN is delineated on MR

**PRORECT** 

OAR: S1-S2, bladder, bowel bag, femoral heads. **OARs are delineated on MR, bowel bags delineated on CT**. PTV is added by a physicist

Subsite	Limits CTVN	Limits ITVN	Recommendations:
	7-8 mm marginal to vessels minus bone/muscle if not stated otherwise		
1 Primary tumor	15 mm marginal from GTVT to CTVT or zCTVT		Mandatory
<b>2</b> Presakral subsite, pelvic part	Cranial limit: bifurcation a. iliaca ext/int or promotory Caudal limit: caudal limit mesorectum		Mandatory Consider lowering cranial limit to S2-S3 if ≤T3,N0,MRF- and non-high T.* Always at least 20 mm from cranial limit GTVT to cranial limit CTVN.
3 Mesorectum	Cranial limit: rectosigmoidal junction Caudal limit: insertion of the m. levator ani into the external sphincter (disappearing of the mesorectal fat) Posterior limit: presacral subsite until beginning of fossa ischiorectalis Mesorectal fascia in other directions	Isotropic CTV: Anteriorly add up to 10 mm to account for bladder filling variations. Consider the same if T4 is adjacent to uterus/vesicles. Posteriorly, in low T, account for pitching of the pelvis and add 5 mm.	Mandatory
<b>4</b> Lateral lymphatic nodes, a. iliaca interna subsite (situated laterally of mesorectum and presacral subsite)	Cranial limit: bifurkation a. iliaca externa/interna Caudal limit: insertion of the m. levator ani into the external sphincter (disappearing of the mesorectal fat) Anterior limit: 7-8 mm around vessels in the upper pelvis. Mid pelvis: up to external vessels. Lower pelvis: approximately middle of m obturatorius Lateral limit: m iliopsoas, m piriformis, m obturatorius int and bone.		Mandatory Consider lowering cranial limit to S2-S3 if ≤T3, N0, MRF- and non-high T.* Always at least 20 mm from cranial limit GTVT to cranial limit CTVN.
<b>5</b> Lateralt lymphatic nodes, obturator subsite (small volume)	Cranial limit: 5 mm above canalis obturatorius Caudal limit: canalis obturatorius Anterior limit: widest part of femoral head Medial limit: bladder		Include in case of: Positive nodes in the a iliaca interna subsite, T4, N2 T below the peritoneal fold

<b>6</b> Lateral lympatic nodes, a.iliaca	Cranial limit: bifurcation a iliaca externa/interna	Infiltration of anterior organs, i.e prostate,
externa subsite	Caudal limit: between roof of acetabulum and ramus pubis superior	vesicles, uterus, bladder, vagina or positive
	Anterior limit: 15 mm anterolaterally along the m iliopsoas	nodes in the obturatory- or ingual subsites
<b>7</b> Sphincter	Cranial limit: Anorectal juncion–>entire sphincter included	Infiltration of sphincter/analcanal
8 Fossa ischiorectalis (FIR)	Triangel of adipose tissue limited by levator ani, m obturatorius and m gluteus, posteriorly until m gluteus "turns".  Caudal limit: anal verge (sphincter included) in a plane of tuberositas ishii	Infiltration of external sphincter, levators or fossa ischiorectalis
<b>9</b> Inguinal lymphatic nodes. Pars profunda et superficialis	Cranial limit: where the external vessels leave the pelvis Caudal limit: tuberositas ishii Anteriomedial limit: at least 20 mm, include visible nodes/lymphocele Posterior limit: adjacent muscles	Include in case of: Positive inguinal nodes, infiltration below linea dentata, massiv infiltration of the external sphincter or infiltration of lower vagina
10 Iliaca communis subsite	Cranial limit: aortal bifurcation and/or 5 mm above positive nodes Caudal limit: bifurcation a iliaca externa/interna	To be included if decided by the tumor board
Explanation to subsite 2 och 4		*In accordance to Valentini et al. Consider lowered cranial limit if ≤T3 and non- high T (10-15 cm from anal verge) :
		MFR- with only mesorectala positive nodes: S1/S2 (Syk et al PMID 18495376 ) MRF- with N0: S2/S3 (Nijkamp et al PMID 20646849)
		ALWAYS at least 20 mm from cranial limit GTVT to cranial limit CTVN.