

Tumour site	Target volume	No of pts	No of obs	Imaging modality	Results	Author (publication date)
Rectum	GTV, CTV	2	10	CT,PET CT	CI(GTV)= 0.26-0.33 CI(CTV)=0.29-0.35	Krengli et al 2010
	GTV	52	5	CT, PET CT, MRI	CI=0.79-0.93	Buijisen et al 2012
	CTV	8	10	CT	CI=0.63-0.66	Nijkamp et al 2012
	GTV	6	4	CT, PET CT	SI(GTV-P)= 0.77-0.81 SI(GTV-N)=0.22-0.70	Patel et al 2007
Stomach	CTV, PTV	1	10	CT	Vmax/Vmin(CTV)=3.4 Vmax/Vmin(PTV)=2.6	Jansen et al 2010
Oesophagus	GTV	1	50	CT	JCI=0.69	Gwynne et al 2012
	GTV, CTV, PTV	1	48	CT	Vmax/Vmin(PTV)=5.25-6.03	Tai et al 1998
Cervix EBRT IGABT	CTV	3	7	CT	CI=0.11-0.57 Vmax/Vmin=3.6-4.9	Weiss et al 2003
	GTV, HRCTV, IRCTV	6	10	MRI	CI(GTV)=0.6-0.8 CI(HR&IR CTV)=0.6-0.7	Petrič et al 2012,2013
Head and neck	GTV, CTV, PTV	1	20	CT	Vmax/Vmin(CTV)=18.3	Hong et al 2012
	GTV	41	3	CT, PET CT, MRI	CI(GTV-P)=0.54-0.62 CI(GTV-N)>0.75	Thiagajaran et al 2012
	CTV, CTV E	10	10	CT,MRI	localSD(CTV)=3.3-4.4mm localSD(CTVe)=4.9-5.9mm	Rasch et al 2012
Lung	GTV	12	8	CT,CBCT	CI=0.27-0.39 CIgen=0.58-0.70	Altörjai et al 2012
	GTV	8	5	CT	Vmax/Vmin>7	Van De Steene et al 2002
	GTV	10	17	CT	Vmax/Vmin=5.2 CI=0.04-0.48	Giraud et al 2002
	GTV	22	11	CT,PET CT	meanCI=0.17(CT),0.29(PETCT) localSD=1cm(CT),0.4cm(PETCT)	Steenbakkers et al 2006
	GTV	19	2	CT,PET CT	medianCI(CT)=0.61, medianCI(PETCT)=0.70	Fox et al 2005
Brain	CTV	7	5	CT+MRI	CI=0.14-0.47	Cattaneo et al 2005
	GTV	5	9	CT,MRI	Vmax/Vmin(CT)=1.7-2.8 Vmax/Vmin(MR)=1.5-2.7	Weltens et al 2001
Prostate	Prostate, seminal vesicles (SV)	10	7	CT	Vmax/Vmin (P)= 1.18-1.63 Vmax/Vmin(SV)=2.02-6.43	Valicenti et al 1999
	Prostate	3	2	CT	Vmax/Vmin=1.39-1.65	Seddon et al 2000
	Prostate	5	5	CT,MRI	Mean CI(MR)CI=0.83 Mean CI (CT)= 0.69	Segedin et al 2011
Breast	Lumpectomy cavity (LC), CTV	15	3	CT,MRI	CI(LC)=0.32(MR), 0.52(CT) CI(CTV)=0.77(CT), 0.79(MR)	Giezen et al 2011, 2012
	Lumpectomy cavity	30	5	CT	Mean CI= 0.36	Boersma et al 2012
	Lumpectomy cavity, CTV, PTV	8	13	CT	CI(LC)=0.19-0.77 CI(CTV)=0.38-0.80 CI(PTV)=0.45-0.81	Van Mourik et al 2010
	Lumpectomy cavity, PTV	9 5	5 4	CT	CI(LC)=0.48-0.52 CI(PTV)=0.55-0.59 Vmax/Vmin=2.2-2.8	Major et al 2015
	Lumpectomy cavity, CTV	18	5	CT	Mean CI(LC)=0.56 Mean CI(CTV)=0.87	Struikmans et al 2005

