

Supplementary material

Prescribed dose, fractionation and RT technique for the DUE01 study.

Conventional fractionation			
	N	prescribed dose (Gy)	fraction size (Gy)
TOMO	1	78	2
3DCRT	32	74-78	2
VMAT	81	74-80	2
SS-IMRT	26	74-78	1.8-2
Hypofractionated			
	N	prescribed dose (Gy)	fraction size (Gy)
TOMO	111	70-83.2	2.35-3.65
3DCRT	0		
VMAT	17	59.8-65	2.6
SS-IMRT	25	70-70.2	2.5-2.7
Details for hypofractionation with TOMO			
		prescribed dose (Gy)	fraction size (Gy)
		2.35	70.5 OR 75.2
		2.5	70
		2.55	71.4
		2.6	83.2
		2.65	74.2
Details for hypofractionation with SS-IMRT			
		prescribed dose (Gy)	fraction size (Gy)
		2.5	70
		2.7	70.2

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Bladder and rectum relative volumes receiving 40, 50 and 75 Gy for the DUE01 study.

Overall population	Rectum (% volume)						Bladder (% volume)					
	alpha/beta=3Gy			alpha/beta=1Gy			alpha/beta=3Gy			alpha/beta=1Gy		
	V40Gy	V50Gy	V75Gy	V40Gy	V50Gy	V75Gy	V40Gy	V50Gy	V75Gy	V40Gy	V50Gy	V75Gy
10th percentile	36	22	0	37	23	2	21	15	1	21	15	3
25th percentile	43	29	2	45	30	4	30	21	4	32	22	5
50th percentile	51	36	5	54	37	6	46	32	8	47	33	10
75th percentile	59	44	8	61	46	14	57	42	14	61	45	17
90th percentile	69	51	13	71	53	21	70	55	20	74	57	24

Conventionally fractionated	Rectum (% volume)			Rectum (% volume)		
	V40Gy	V50Gy	V75Gy	V40Gy	V50Gy	V75Gy
10th percentile	38	24	0	19	14	1
25th percentile	44	29	2	26	17	3
50th percentile	53	35	4	40	25	6
75th percentile	59	41	6	50	38	10
90th percentile	68	50	7	65	46	14

Hypofractionated	Rectum (% volume)						Rectum (% volume)					
	alpha/beta=3Gy			alpha/beta=1Gy			alpha/beta=3Gy			alpha/beta=1Gy		
10th percentile	34	19	0	37	22	4	26	19	0	28	22	5
25th percentile	42	29	2	45	31	8	39	26	5	42	29	9
50th percentile	49	37	5	55	41	13	50	38	11	54	41	16
75th percentile	58	45	10	63	48	20	64	49	17	68	52	22
90th percentile	71	51	15	73	57	23	71	58	24	76	62	30