

*Supplement Table 1 – Patients and targets characteristics*

Patient number	Location	Age	Stage	Number of CBCTs	CTV size (cm <sup>3</sup> )		CTV size (cm <sup>3</sup> )		Weight change (kg)
					planning CT	Last CBCT	High risk	Low risk	
1	Oropharynx	58	T3N0	33	46.2	121.8	39.4	111.7	-5.5
2	Oropharynx	71	T4N0	32	21.7	97.6	20.4	82.6	-5.4
3	Oropharynx	70	T2N1	33	62.7	115.5	55.8	108.3	-12.1
4	Oropharynx	70	T2N1	32	27.2	60.4	22.6	53.5	-5.3
5	Tongue	64	T1N2	35	33.0	107.3	34.8	107.3	-1.4
6	Larynx	62	T2N2	33	10.2	65.5	9.0	62.1	-3.9
7	Larynx	68	T2N2	34	19.8	65.3	18.8	59.4	-7.3
8	Oropharynx	52	T4N1	30	255.7	200.5	246.1	200.6	-6
9	Oropharynx	67	T4N2	34	121.8	26.6	121.8	37.7	-4.7
10	Tongue	57	T2N2	32	52.8	94.0	56.9	103.9	1.9

*Abbreviations: CBCT = cone-beam computed tomography; CTV = clinical target volume; CT = Computed tomography;*