

**Table S1.** Dosimetric data with and without gating.

Case	GW [phase]	PTV [cm <sup>3</sup> ]	PTV			Lung			Esophagus		Heart		Trachea/ large bronchii	Aorta	Spinal Cord	Ribs/ chest wall
			D <sub>2</sub>	D <sub>50</sub>	D <sub>95</sub>	D <sub>mean</sub> (Total Lung- GTV) [Gy]	V <sub>20Gy</sub> (lung treated) [%]	D <sub>mean</sub> (lung treated) [Gy]	D <sub>max</sub> [Gy]	D <sub>5cc</sub> [Gy]	D <sub>max</sub> [Gy]	D <sub>mean</sub> [Gy]	D <sub>max</sub> [Gy]	D <sub>max</sub> [Gy]	D <sub>max</sub> [Gy]	D <sub>max</sub> [Gy]
			[Gy]	[Gy]	[Gy]	[Gy]		[Gy]	[Gy]	[Gy]	[Gy]	[Gy]	[Gy]	[Gy]	[Gy]	[Gy]
1	40–60	43.3	61.2	51.6	45.2	3.75	6.5	5.9	9.0	5.8	13.8	2.3	14.2	8.3	12.3	49.5
	no gating	59.5	62.2	51.4	45.0	4.32	7.5	6.5	10.0	6.2	12.9	2.7		8.7	17.1	56.6
2	40–60	35.0	67.6	56.0	46.0	2.86	5.1	4.2	14.1	2.5	13.3	2.7		8.3	12.3	49.5
	no gating	31.7	70.3	56.1	45.3	3.21	5.7	4.6	15.7	3.4	13.2	3.2		27.0	18.2	52.9
3	40–60	11.6	62.4	53.1	45.3	2.13	4.2	3.9	6.9	0.6	4.6	0.3		11.8	5.5	
	no gating	34.1	62.5	55.1	44.6	3.48	9.5	6.3	11.2	1.2	13.2	0.2	9.4	15.6	7.3	
4	40–60	48.8	66.4	55.1	43.1	4.35	8.2	7.1	8.1	5.6	12.0	4.5		7.2	9.6	
	20–40	59.7	69.1	55.8	42.5	4.39	8.0	7.1	8.3	6.2	12.3	4.8	0.3			59.1
	20–70	59.3	72.3	57.9	41.9	4.70	8.8	7.5	8.7	6.3	13.6	5.2	0.3		10.5	61.7
	no gating	79.8	69.6	56.4	42.9	4.90	10.1	8.2	8.6	6.4	14.3	5.4	0.5		10.6	58.6
5	40–60	14.9	68.7	56.7	46.0	2.14	2.0	2.8	28.1	13.3	22.6	1.0		14.6	17.4	
	20–40	15.4	68.0	56.0	45.4	2.03	1.9	2.7	25.7	13.6	23.2	0.9		14.2	18.0	
	20–70	15.9	73.5	58.4	46.8	2.14	2.1	2.8	27.2	13.8	24.4	0.9		13.9	19.0	
	no gating	17.3	70.6	58.9	45.9	2.45	2.2	3.1	29.7	16.2	27.5	1.5	65.6	16.1	18.5	
6	40–60	36.1	67.8	56.0	45.8	3.76	11.0	6.2	11.6	7.9	4.2	0.3		28.9	7.6	
	20–40	38.1	65.6	54.5	45.1	3.88	11.6	6.4	11.7	7.3	5.7	0.3		27.9	6.1	
	20–70	42.2	68.5	57.8	48.5	4.36	14.1	7.2	12.4	7.9	7.1	0.4		30.3	7.3	
	no gating	48.3	79.5	63.2	48.4	5.23	17.5	6.5	17.2	11.2	8.6	0.4	17.6	38.5	11.6	28.4
7	40–60	28.2	61.2	54.0	46.1	4.01	15.1	9.8	48.0	22.0	34.7	2.4	13.8		13.9	24.8
	20–40	29.4	64.1	54.6	45.9	3.98	15.3	9.6	44.1	20.0	32.6	2.1	10.7		16.5	23.1
	20–70	34.7	65.8	56.1	46.7	4.44	17.5	10.7	46.2	22.4	34.2	2.4	13.3		17.3	26.8
	no gating	41.8	67.6	55.5	46.3	4.83	22.9	12.1	46.7	22.2	36.6	2.5	20.1	16.7	21.9	26.5
8	40–60	83.1	60.9	52.9	45.1	5.51	16.7	8.9	29.2	16.3	48.7	2.5		56.6	12.4	
	20–40	80.4	61.1	52.7	45.5	5.31	16.6	8.6	29.2	15.1	55.6	2.8		57.4	10.7	
	20–70	89.9	63.5	55.0	46.8	5.75	17.8	9.1	31.1	16.7	56.8	3.1		58.4	13.0	
	no gating	99.2	64.4	56.0	46.0	5.87	19.0	9.6	31.0	17.5	52.0	3.0	42.5	60.3	13.8	
9	40–60	71.1	62.6	54.3	43.2	6.21	12.9	9.2	28.4	17.7	10.8	2.2		26.9	15.9	
	20–40	61.7	61.2	54.1	45.9	6.30	12.5	9.0	24.9	15.6	12.9	2.4		23.3	18.7	
	20–70	75.7	65.5	55.5	43.7	6.73	14.3	9.6	27.1	16.8	12.0	2.5		26.1	20.1	
	no gating	91.6	65.1	56.5	43.8	6.76	14.5	9.7	32.6	19.5	19.0	3.2		29.7	18.0	
10	40–60	62.9	59.9	51.8	44.9	5.05	14.2	9.0	20.5	12.3	33.5	3.3		22.9	14.4	
	no gating	93.5	59.1	52.0	44.1	5.76	17.2	10.2	25.6	16.9	44.4	4.3		28.6	16.4	
11	40–60	40.7	64.5	54.4	45.9	2.53	4.2	3.3	19.0	10.6	0.8	0.1		49.6	13.2	
	no gating	45.0	66.4	54.9	45.6	2.65	4.5	3.6	19.1	12.6	0.9	0.1		55.7	10.8	
12	40–60	16.4	64.2	53.3	45.3	1.72	3.7	2.9	25.9	0.4	0.1	0.0		53.8	7.8	
	no gating	18.2	62.3	50.7	38.7	1.81	4.1	3.1	26.9	3.4	0.2	0.0		48.3	7.8	
13	40–60	8.9	65.6	53.5	44.3	3.48	6.6	6.2	6.8	0.5	25.3	2.7		5.4	4.1	
	no gating	14.0	65.1	52.3	40.1	3.95	7.9	6.9	7.3	0.6	25.3	3.3	0.6	5.9	4.0	
14	40–60	8.5	67.0	55.2	45.3	1.26	2.2	2.0	8.2	0.5	0.1	0.0		10.0	6.6	
	no gating	12.2	66.6	55.5	44.6	1.51	3.0	2.5	9.6	4.5	0.2	0.0	12.0	12.0	8.5	