

1 **Supporting document**

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3 **Supply 1. Evaluation of our DIR algorithm**

4 The DIR utilized an intensity-based algorithm, chosen because, in clinical scenarios, a control contour may not always be applicable, and only image intensity is utilized.¹ For the Tough
5 Water phantom, we were unable to calculate the correct amount of deformation for each 4DCT phase for a 7.5-mm displacement because of the uniform image intensity within this
6 phantom. Therefore, we added a control region of interest (ROI) centered on a 15×15×15 cm³ area to the deformation analysis. This adjustment was made by calculating the shift amount
7 between the most expiratory phase and other phases from the sine curve with an amplitude of 7.5 mm, ensuring sufficient inclusion of the corresponding irradiation field. The deformation
8 grid sizes for all CT datasets were 1.1, 1.1, and 2.0 mm for the right–left, anterior–posterior, and superior–inferior directions, respectively. This configuration represents the smallest
9 grid size permissible for a CT image with 2.0-mm slice thickness. We evaluated the Dice similarity coefficients (DSCs) between the gated CT and ten 4DCT phases for three amplitudes
10 (5.0, 7.5, and 10.0 mm) in the cheese phantoms and a single amplitude (7.5 mm) in the Tough Water phantom (Table S1).

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12 Table S1. Dice similarity coefficients between the gated CT and ten 4DCT phases for three amplitudes.

Phantoms (amplitudes)	Average ± standard deviations (ranges)
Cheese phantom (5.0 mm)	0.97 ± 0.02 (0.94–0.99)
Cheese phantom (7.5 mm)	0.96 ± 0.02 (0.93–1.00)
Cheese phantom (10.0 mm)	0.95 ± 0.02 (0.92–0.99)
Tough water (7.5 mm)	0.98 ± 0.02 (0.97–0.99)

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14 **References**

15 1. Tominaga Y, Suga M, Takeda M, et al. Comparing interplay effects in scanned proton therapy of lung cancer: Free breathing with various layer and volume rescanning versus
16 respiratory gating with different gate widths. *Phys Med.* 2024;120:103323. doi: 10.1016/j.ejmp.2024.103323.

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Table S2. Summary of verification results by gamma index analysis (average \pm standard deviation for three measurements per scan scenario) in 2D-array measurements. Numbers in parentheses indicate minimum gamma scores. Gamma scores of static plans indicate comparisons of measurements and TPS calculations without motion. Gamma scores of G10–G50 plans indicate comparisons of measurements and 4DDD calculations in motion.

Plan names	Amplitudes (mm)	Breathing periods (s)	Gamma scores of static plans (minimum)	Gamma scores of G10 (minimum)	Gamma scores of G30 (minimum)	Gamma scores of G50 (minimum)	Gamma scores of G50 at off-isocenter planes (minimum)
Cheese phantom (heterogeneous)	5.0	3.0, 4.0, and 6.0	100.0 \pm 0.0% (100%)	98.6 \pm 0.4% (98.3%)	97.5 \pm 1.4% (95.7%)	97.7 \pm 1.1% (96.6%)	-
	7.5		100.0 \pm 0.0% (100%)	99.2 \pm 0.7% (100%)	97.4 \pm 1.2% (96.4%)	98.6 \pm 0.8% (95.5%)	-
	10.0		99.7 \pm 0.4% (99.1%)	98.6 \pm 1.1% (97.4%)	98.2 \pm 1.2% (96.4%)	96.7 \pm 2.6% (93.0%)	-
Liver SFO beam 1	7.5	4.0	100.0 \pm 0.0% (100%)	99.3 \pm 1.0% (97.9%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	98.9 \pm 2.0% (96.6%)
Liver SFO beam 2	7.5	4.0	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)
Liver IMPT beam 1	7.5	4.0	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	99.2 \pm 1.1% (97.6%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)
Liver IMPT beam 2	Patient curve		100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	99.4 \pm 0.9% (98.1%)	99.3 \pm 0.9% (98.0%)	100.0 \pm 0.0% (100%)
Lung SFO beam 1	7.5	4.0	100.0 \pm 0.0% (100%)	100.0 \pm 0% (100%)	98.4 \pm 2.7% (95.2%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)
Lung SFO beam 2	Patient curve		100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)
Lung SFO beam 3	Patient curve		100.0 \pm 0.0% (100%)	100.0 \pm 0% (100%)	98.4 \pm 2.7% (95.2%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)
Lung IMPT beam 1	7.5	4.0	100.0 \pm 0.0% (100%)	97.2 \pm 2.0% (95.8%)	100.0 \pm 0.0% (100%)	95.4 \pm 3.7% (90.9%)	100.0 \pm 0.0% (100%)
Lung IMPT beam 2	Patient curve		100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	98.0 \pm 2.8% (94.1%)	100.0 \pm 0.0% (100%)
Lung IMPT beam 3	Patient curve		100 \pm 0.0% (100%)	98.2 \pm 3.0% (94.7%)	100 \pm 0.0% (100%)	98.2 \pm 3.0% (94.7%)	100.0 \pm 0.0% (100%)

Table S3. Film measurement results by gamma index analysis (average \pm standard deviation for three measurements per scan scenario). Numbers in parentheses indicate minimum gamma scores. Gamma scores of static plans indicate comparisons of measurements and TPS calculations without motion. Gamma scores of G10–G50 plans indicate comparisons of measurements and 4DDD calculations in motion.

Plan names	Amplitudes (mm)	Breathing periods (s)	Gamma scores of static plans (no motion)	Gamma scores of G10 (minimum)	Gamma scores of G30 (minimum)	Gamma scores of G50 (minimum)
Cheese phantom	10.0	4.0	100.0%	97.3 \pm 1.9% (95.4%)	97.8 \pm 0.6% (97.1%)	97.9 \pm 1.2% (97.0%)
Liver SFO beam 1	Patient curve		98.8%	-	-	97.3 \pm 0.5% (96.7%)
Liver IMPT beam 1	Patient curve		98.6%	-	-	97.3 \pm 0.5% (96.7%)
Lung SFO beam 1	Patient curve		99.1%	-	-	99.2 \pm 0.5% (98.5%)
Lung IMPT beam 1	Patient curve		95.8%	-	-	97.3 \pm 3.8% (92.9%)

Table S4. Average \pm standard deviation absolute dose difference results for three cubic plans and four patient plans. Numbers in parentheses indicate maximum differences. Dose differences of static plans indicate comparisons of measurements and TPS calculations without motion. Dose differences of G10–G50 plans indicate comparisons of measurements and 4DDD calculations in motion.

Plan names	Amplitudes (mm)	Breathing periods (s)	Dose differences of static plans (maximum)	Dose differences of G10 (maximum)	Dose differences of G30 (maximum)	Dose differences of G50 (maximum)	Dose differences of G50 off-isocenter planes (minimum)
Cheese phantom (heterogeneous)	5.0	3.0, 4.0, and 6.0	$-0.2 \pm 1.4\%$ (3.0%)	$0.7 \pm 1.4\%$ (4.2%)	$0.8 \pm 1.5\%$ (4.9%)	$0.6 \pm 1.6\%$ (5.9%)	-
	7.5		$-1.2 \pm 1.2\%$ (2.5%)	$-0.3 \pm 1.2\%$ (3.4%)	$-0.2 \pm 1.4\%$ (5.4%)	$-0.3 \pm 1.6\%$ (5.9%)	-
	10.0		$-1.4 \pm 1.3\%$ (1.1%)	$-0.7 \pm 1.3\%$ (3.4%)	$-0.7 \pm 1.4\%$ (4.7%)	$-0.9 \pm 1.6\%$ (4.9%)	-
Liver SFO beam 1	7.5	4.0	$0.8 \pm 0.8\%$ (2.6%)	$1.3 \pm 0.7\%$ (2.9%)	$1.2 \pm 0.9\%$ (3.8%)	$0.9 \pm 0.8\%$ (3.3%)	$0.2 \pm 1.5\%$ (3.0%)
Liver SFO beam 2	7.5	4.0	$0.3 \pm 0.8\%$ (1.8%)	$1.1 \pm 0.9\%$ (3.4%)	$0.9 \pm 0.9\%$ (3.3%)	$0.7 \pm 0.9\%$ (2.4%)	$0.5 \pm 1.7\%$ (9.1%)
Liver IMPT beam 1	7.5	4.0	$0.2 \pm 0.7\%$ (1.7%)	$0.9 \pm 1.0\%$ (3.2%)	$0.8 \pm 1.4\%$ (3.4%)	$1.0 \pm 1.0\%$ (3.3%)	$0.2 \pm 1.5\%$ (2.9%)
Liver IMPT beam 2	Patient curve		$0.3 \pm 1.1\%$ (2.5%)	$0.6 \pm 1.5\%$ (3.8%)	$0.5 \pm 1.6\%$ (3.5%)	$0.5 \pm 1.5\%$ (4.1%)	$0.7 \pm 1.5\%$ (7.5%)
Lung SFO beam 1	7.5	4.0	$0.3 \pm 1.7\%$ (4.4%)	$0.5 \pm 2.2\%$ (6.6%)	$0.5 \pm 2.7\%$ (6.9%)	$0.9 \pm 2.6\%$ (7.6%)	$0.5 \pm 2.9\%$ (6.6%)
Lung SFO beam 2	Patient curve		$-0.7 \pm 1.0\%$ (0.8%)	$-0.1 \pm 1.5\%$ (2.1%)	$-0.1 \pm 1.5\%$ (2.0%)	$0.0 \pm 1.6\%$ (3.8%)	$0.0 \pm 1.6\%$ (3.8%)
Lung SFO beam 3	Patient curve		$1.9 \pm 1.3\%$ (5.4%)	$1.8 \pm 1.5\%$ (5.8%)	$1.8 \pm 1.9\%$ (6.6%)	$1.7 \pm 1.8\%$ (6.9%)	$0.3 \pm 1.1\%$ (2.9%)
Lung IMPT beam 1	7.5	4.0	$2.5 \pm 1.9\%$ (4.9%)	$3.0 \pm 2.2\%$ (7.5%)	$3.2 \pm 2.9\%$ (10.2%)	$3.5 \pm 2.3\%$ (7.9%)	$1.6 \pm 2.4\%$ (7.2%)
Lung IMPT beam 2	Patient curve		$-0.2 \pm 1.3\%$ (1.3%)	$-0.2 \pm 1.1\%$ (1.5%)	$0.2 \pm 0.7\%$ (1.2%)	$0.6 \pm 1.7\%$ (3.1%)	$-0.2 \pm 2.5\%$ (4.3%)
Lung IMPT beam 3	Patient curve		$3.3 \pm 2.4\%$ (6.4%)	$3.2 \pm 1.9\%$ (5.7%)	$3.2 \pm 2.2\%$ (6.1%)	$3.4 \pm 2.4\%$ (6.7%)	$3.5 \pm 0.9\%$ (5.0%)

Table S5. Average \pm standard deviation gamma scores for five plans with three gating widths in terms of shifts in beam irradiation timing (± 0.08 sec, $S \pm 0.08$), gating timing (± 0.1 sec, $T \pm 0.1$) (each measured three times), both timings ($S \pm 0.08$ & $T \pm 0.1$), and dose rate ($\pm 10\%$, $DR \pm 10\%$). X and Y in A'X'–P'Y' column of plan names indicate amplitude and period, respectively. Numbers in parentheses indicate minimum gamma scores for each pattern.

Gating widths	Plan names	Cheese phantom (minimum) [A10.0-P4.0]	Liver IMPT beam 1 (minimum) [A7.5-P4.0]	Liver IMPT beam 2 (minimum) [Patient curve]	Lung IMPT beam 1 (minimum) [A7.5-P4.0]	Lung IMPT beam 2 (minimum) [Patient curve]
G10	No shift 4DDD	99.4 \pm 1% (98.3%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	97.2 \pm 2.0% (95.8%)	100.0 \pm 0.0% (100%)
	S–0.08	98.9 \pm 1.1% (97.4%)	98.9 \pm 1.1% (97.4%)	98.9 \pm 1.1% (97.4%)	98.9 \pm 1.1% (97.4%)	98.9 \pm 1.1% (97.4%)
	S+0.08	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)
	T–0.1	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)
	T+0.1	97.2 \pm 2.0% (95.8%)	97.2 \pm 2.0% (95.8%)	97.2 \pm 2.0% (95.8%)	97.2 \pm 2.0% (95.8%)	97.2 \pm 2.0% (95.8%)
	S–0.08&T–0.1	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)
	S+0.08&T+0.1	99.7 \pm 0.4% (99.1%)	99.7 \pm 0.4% (99.1%)	99.7 \pm 0.4% (99.1%)	99.7 \pm 0.4% (99.1%)	99.7 \pm 0.4% (99.1%)
	DR+10%	98.9 \pm 0.4 % (98.3%)	100.0 \pm 0.0 % (100%)	100.0 \pm 0.0% (100%)	98.6 \pm 2.0% (95.8%)	100.0 \pm 0.0% (100%)
	DR–10%	98.9 \pm 1.1% (97.4%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)
G30	No shift 4DDD	99.7 \pm 0.5% (99.1%)	99.2 \pm 1.1% (97.6%)	99.4 \pm 0.9% (98.1%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)
	S–0.08	99.1 \pm 0.0% (99.1%)	99.1 \pm 0.0% (99.1%)	99.1 \pm 0.0% (99.1%)	99.1 \pm 0.0% (99.1%)	99.1 \pm 0.0% (99.1%)
	S+0.08	99.2 \pm 1.1% (97.6%)	99.2 \pm 1.1% (97.6%)	99.2 \pm 1.1% (97.6%)	99.2 \pm 1.1% (97.6%)	99.2 \pm 1.1% (97.6%)
	T–0.1	99.4 \pm 0.9% (98.1%)	99.4 \pm 0.9% (98.1%)	99.4 \pm 0.9% (98.1%)	99.4 \pm 0.9% (98.1%)	99.4 \pm 0.9% (98.1%)
	T+0.1	97.1 \pm 2.0% (95.7%)	97.1 \pm 2.0% (95.7%)	97.1 \pm 2.0% (95.7%)	97.1 \pm 2.0% (95.7%)	97.1 \pm 2.0% (95.7%)
	S–0.08&T–0.1	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)
	S+0.08&T+0.1	99.1 \pm 0.7% (98.2%)	99.1 \pm 0.7% (98.2%)	99.1 \pm 0.7% (98.2%)	99.1 \pm 0.7% (98.2%)	99.1 \pm 0.7% (98.2%)
	DR+10%	98.6 \pm 0.4% (98.2%)	99.2 \pm 1.1% (97.6%)	99.4 \pm 0.9% (98.1%)	98.6 \pm 2.0% (95.7%)	100.0 \pm 0.0% (100%)
	DR–10%	98.6 \pm 0.4% (98.2%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	97.1 \pm 4.1% (91.3%)	100.0 \pm 0.0% (100%)
G50	No shift 4DDD	97.1 \pm 1.6% (95.2%)	100.0 \pm 0.0% (100%)	99.3 \pm 0.9% (98.0%)	95.4 \pm 3.7% (90.9%)	98.0 \pm 2.8% (94.1%)
	S–0.08	95.6 \pm 1.7% (94.2%)	100.0 \pm 0.0% (100%)	98.1 \pm 1.6% (96.1%)	92.5 \pm 7.8% (81.8%)	98.0 \pm 2.8% (94.1%)
	S+0.08	97.4 \pm 0.9% (96.2%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	96.8 \pm 4.5% (90.5%)	100.0 \pm 0.0% (100%)
	T–0.1	95.5 \pm 0.5% (95.1%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	95.4 \pm 3.9% (90.5%)	100.0 \pm 0.0% (100%)
	T+0.1	95.2 \pm 1.4% (93.3%)	100.0 \pm 0.0% (100%)	96.8 \pm 0.9% (96.1%)	97.0 \pm 4.3% (90.9%)	98.0 \pm 2.8% (94.1%)
	S–0.08&T–0.1	95.2 \pm 0.8% (94.2%)	100.0 \pm 0.0% (100%)	99.3 \pm 0.9% (98.0%)	97.1 \pm 4.1% (91.3%)	98.0 \pm 2.8% (94.1%)
	S+0.08&T+0.1	95.5 \pm 2.8% (92.3%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	92.3 \pm 5.7% (86.4%)	100.0 \pm 0.0% (100%)
	DR+10%	94.3 \pm 0.9% (93.3%)	100.0 \pm 0.0% (100%)	100.0 \pm 0.0% (100%)	97.0 \pm 2.1% (95.5%)	98.0 \pm 2.8% (94.1%)
	DR–10%	97.1 \pm 1.4% (95.2%)	100.0 \pm 0.0% (100%)	99.3 \pm 0.9% (98.0%)	95.4 \pm 3.7% (90.9%)	100.0 \pm 0.0% (100%)

36 Table S6. Summary of beam irradiation times for verification plans with different gating windows. Numbers in parentheses indicate maximum values for each
37 pattern.

Plan names	Amplitudes (mm)	Breathing periods (sec)	Scan times of G10 (maximum)	Scan times of G30 (maximum)	Scan times of G50 (maximum)
Cheese phantom (heterogeneous)	5.0	3.0, 4.0, and 6.0	341 ± 24 sec (382 sec)	220 ± 19 sec (256 sec)	159 ± 9 sec (170 sec)
	7.5		401 ± 38 sec (465 sec)	246 ± 31 sec (293 sec)	177 ± 14 sec (198 sec)
	10.0		352 ± 13 sec (377 sec)	223 ± 21 sec (278 sec)	170 ± 21 sec (201 sec)
Liver SFO beam 1	7.5	4.0	670 ± 31 sec (713 sec)	406 ± 15 sec (422 sec)	333 ± 3 sec (337 sec)
Liver SFO beam 2	7.5	4.0	637 ± 33 sec (673 sec)	378 ± 12 sec (394 sec)	299 ± 7 sec (309 sec)
Liver IMPT beam 1	7.5	4.0	639 ± 27 sec (674 sec)	384 ± 6 sec (393 sec)	337 ± 27 sec (377 sec)
Liver IMPT beam 2	Patient curve		440 ± 46 sec (506 sec)	235 ± 7 sec (242 sec)	209 ± 9 sec (216 sec)
Lung SFO beam 1	7.5	4.0	427 ± 30 sec (457 sec)	243 ± 7 sec (254 sec)	190 ± 6 sec (197 sec)
Lung SFO beam 2	Patient curve		124 ± 1 sec (125 sec)	90 ± 4 sec (96 sec)	89 ± 4 sec (96 sec)
Lung SFO beam 3	Patient curve		150 ± 8 sec (162 sec)	96 ± 2 sec (100 sec)	78 ± 4 sec (84 sec)
Lung IMPT beam 1	7.5	4.0	456 ± 15 sec (478 sec)	272 ± 13 sec (281 sec)	249 ± 11 sec (265 sec)
Lung IMPT beam 2	Patient curve		192 ± 26 sec (229 sec)	103 ± 3 sec (106 sec)	100 ± 13 sec (111 sec)
Lung IMPT beam 3	Patient curve		250 ± 23 sec (275 sec)	120 ± 12 sec (136 sec)	115 ± 2 sec (117 sec)

Table S7. Dose statistics of gated irradiations for three gating widths on four patient plans at the time of measurement. Numbers in parentheses indicate minimum values for each plan.

Scenarios	Dose statistics	Liver SFO plan (minimum)	Liver IMPT plan (minimum)	Lung SFO plan (minimum)	Lung IMPT plan (minimum)
Doses of original plans	ITV D _{99%}	64.6 Gy	70.6 Gy	64.7 Gy	64.9 Gy
	ITV D _{2%}	73.5 Gy	74.1 Gy	67.9 Gy	67.2 Gy
	PTV D _{95%}	62.9 Gy	66.9 Gy	61.4 Gy	61.6 Gy
	Stomach D _{2%}	55.5 Gy	57.1 Gy	-	-
	Aorta D _{2%}	-	-	45.7 Gy	45.6 Gy
	Heart D _{2%}	-	-	25.9 Gy	25.4 Gy
Dose differences of 4DDD _s (G10)	ITV D _{99%}	0.7 ± 0.1% (0.7%)	0.3 ± 0.1% (0.3%)	-0.6 ± 0.2% (-0.7%)	-0.6 ± 0.3% (-1.0%)
	ITV D _{2%}	-0.0 ± 0.1% (-0.1%)	-0.1 ± 0.1% (-0.1%)	0.5 ± 0.1% (0.3%)	1.0 ± 0.2% (0.7%)
	PTV D _{95%}	0.7 ± 0.1% (0.7%)	0.3 ± 0.1% (0.2%)	-0.7 ± 0.2% (-1.0%)	-0.5 ± 0.1% (-0.6%)
	Stomach D _{2%}	1.4 ± 0.1% (1.4%)	1.7 ± 0.1% (1.8%)	-	-
	Aorta D _{2%}	-	-	0.1 ± 0.2% (0.3%)	0.3 ± 0.1% (0.4%)
	Heart D _{2%}	-	-	-5.4 ± 0.7% (-4.5%)	-5.5 ± 0.1% (-5.5%)
Dose differences of 4DDD _s (G30)	ITV D _{99%}	0.7 ± 0.1% (0.6%)	0.3 ± 0.1% (0.2%)	-1.4 ± 0.3% (-1.8%)	-2.4 ± 0.4% (-2.8%)
	ITV D _{2%}	-0.0 ± 0.1% (-0.1%)	-0.1 ± 0.1% (-0.1%)	0.3 ± 0.3% (-0.1%)	0.5 ± 0.1% (0.4%)
	PTV D _{95%}	0.7 ± 0.1% (0.7%)	0.4 ± 0.1% (0.4%)	-1.1 ± 0.2% (-1.3%)	-1.2 ± 0.2% (-1.4%)
	Stomach D _{2%}	1.3 ± 0.1% (1.4%)	1.8 ± 0.1% (1.8%)	-	-
	Aorta D _{2%}	-	-	-0.4 ± 0.0% (-0.4%)	-0.5 ± 0.3% (-0.1%)
	Heart D _{2%}	-	-	-5.8 ± 0.6% (-5.1%)	-5.7 ± 0.4% (-5.1%)
Dose differences of 4DDD _s (G50)	ITV D _{99%}	0.7 ± 0.1% (0.6%)	0.1 ± 0.0% (0.1%)	-1.7 ± 0.4% (-2.1%)	-2.3 ± 0.4% (-2.7%)
	ITV D _{2%}	-0.1 ± 0.1% (-0.1%)	-0.1 ± 0.0% (-0.2%)	-0.5 ± 0.2% (-0.5%)	0.8 ± 0.3% (0.5%)
	PTV D _{95%}	0.6 ± 0.1% (0.6%)	0.3 ± 0.1% (0.2%)	-1.1 ± 0.4% (-1.6%)	-1.0 ± 0.3% (-1.5%)
	Stomach D _{2%}	1.2 ± 0.1% (1.3%)	1.6 ± 0.1% (1.6%)	-	-
	Aorta D _{2%}	-	-	-0.5 ± 0.2% (-0.3%)	-0.2 ± 0.2% (0.1%)
	Heart D _{2%}	-	-	-5.5 ± 0.2% (-5.3%)	-6.4 ± 0.1% (-6.3%)