

Supplemental Table 1. Patient characteristics of MR-dCT paired dataset

Characteristics	Parameter	Value or patient number
<i>Abdomen (n=30)</i>		
Age	Mean \pm Std	66 \pm 10
Sex	Male	19
	Female	11
Diagnosis	Pancreatic cancer	14
	Klatskin tumor	4
	Liver lymph node metastasis	4
	Hepatocellular carcinoma	3
	Gallbladder cancer	2
	Other	3
Treatment technique	IMRT	17
	SBRT	13
Prescription dose	50 Gy / 5 fx	5
	45 Gy / 5 fx	5
	40 Gy / 5 fx	2
	37.5 Gy / 5 fx	1
	60 Gy / 30 fx	2
	56 Gy / 28 fx	4
	54 Gy / 27 fx	2
	50 Gy / 25 fx	5
	30 Gy / 5 fx	1
	27.5 Gy / 5 fx	1

	20 Gy / 5 fx	1
	40 Gy / 8 fx	1
<i>Thorax (n=30)</i>		
Age	Mean ± Std	59 ± 5
Sex	M	0
	F	30
Diagnosis	Right breast cancer	18
	Left breast cancer	12
Treatment technique	APBI using IMRT	30
Prescription dose	38.5 Gy / 10 fx	30
<i>Pelvis (n=30)</i>		
Age	Mean ± Std	74 ± 6
Sex	M	30
	F	0
Diagnosis	Prostate cancer	30
Treatment technique	IMRT	9
	IMRT with SIB	13
	SBRT	8
Prescription dose	70 Gy / 28 fx	20
	62.5 Gy / 25 fx	2
	36.25 Gy / 5 fx	8

IMRT = Intensity Modulated Radiation Therapy, SBRT = Stereotactic Body Radiation Therapy, APBI = Accelerated partial breast irradiation, SIB = Simultaneous-integrated boost

Supplemental Table 2. Gamma passing rate between dCT (reference) and sCT dose distributions

Gamma criteria	Dose > 10%	Dose > 50%	Dose > 90%
Total			
dCT vs. sCT _{U-net}			
γ 2mm / 2%	94.1 ± 9.10	75.6 ± 29.0	52.7 ± 33.9
γ 3mm / 3%	97.9 ± 3.99	87.0 ± 23.9	71.8 ± 38.3
dCT vs. sCT _{CyGAN}			
γ 2mm / 2%	99.1 ± 0.89	98.3 ± 1.37	96.6 ± 2.91
γ 3mm / 3%	99.7 ± 0.52	99.8 ± 0.34	99.8 ± 0.21
Pelvis			
dCT vs. sCT _{U-net}			
γ 2mm / 2%	98.0 ± 1.15	93.7 ± 6.89	70.0 ± 26.0
γ 3mm / 3%	99.3 ± 0.61	98.9 ± 1.92	91.9 ± 11.3
dCT vs. sCT _{CyGAN}			
γ 2mm / 2%	98.4 ± 0.95	98.9 ± 0.92	99.5 ± 1.39
γ 3mm / 3%	99.3 ± 0.71	99.9 ± 0.11	99.9 ± 0.04
Thorax			
dCT vs. sCT _{U-net}			
γ 2mm / 2%	97.2 ± 1.35	84.7 ± 8.14	63.9 ± 17.4
γ 3mm / 3%	99.6 ± 0.30	97.2 ± 2.52	90.5 ± 13.3
dCT vs. sCT _{CyGAN}			
γ 2mm / 2%	99.5 ± 0.51	98.3 ± 0.67	97.9 ± 0.89
γ 3mm / 3%	99.9 ± 0.10	99.9 ± 0.10	99.9 ± 0.05
Abdomen			
dCT vs. sCT _{U-net}			

γ 2mm / 2%	86.9 ± 13.0	48.5 ± 35.5	24.2 ± 35.2
γ 3mm / 3%	94.7 ± 5.64	65.0 ± 31.3	33.1 ± 44.1
dCT vs. sCT _{CyGAN}			
γ 2mm / 2%	99.4 ± 0.67	97.7 ± 1.90	93.5 ± 2.72
γ 3mm / 3%	99.9 ± 0.21	99.5 ± 0.50	99.6 ± 0.22