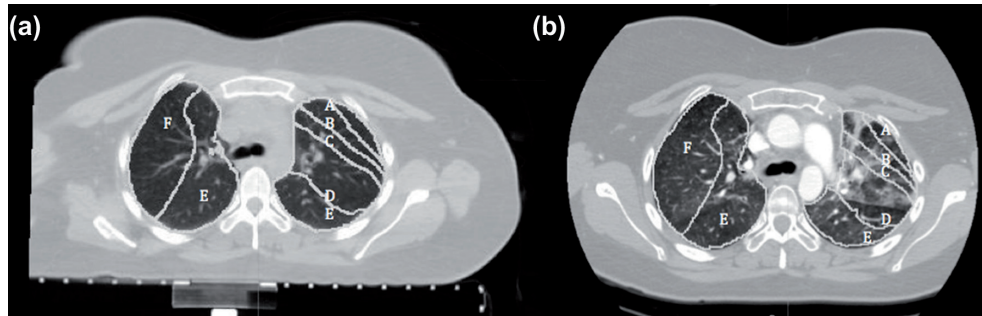


Supplementary material for Chow TL, et al. Radiation-induced lung injury after concurrent neoadjuvant chemoradiotherapy for locally advanced breast cancer. Acta Oncol, 2014;53:697–701.



Supplementary Figure 1. Representative example of image registration with overlaid isodose lines: (A) >40 Gy, (B) 30–40 Gy, (C) 20–30 Gy, (D) 10–20 Gy, (E) 5–10 Gy, (F) <5 Gy. (a) Planning CT scan with contoured isodose lines (b) Post-treatment follow-up CT scan with the contours from the planning scan overlaid via rigid registration.

Supplementary Table I. Dosimetric parameters.

Parameter	Median (min, max)
Lung V5 (%)	31.2 (25.5, 97.0)
Lung V10 (%)	27.2 (20.9, 45.4)
Lung V13 (%)	23.7 (19.4, 34.8)
Lung V20 (%)	21.0 (10.5, 31.1)
Lung V30 (%)	17.7 (7.6, 28.8)
Lung V40 (%)	11.7 (0.7, 24.1)
Mean lung dose (Gy)	10.3 (8.1, 15.7)
Heart V5 (%)	29.5 (3.6, 100)
Heart V10 (%)	22.5 (0.03, 91.8)
Heart V20 (%)	11.5 (0.0, 52.5)
Heart V30 (%)	6.0 (0.0, 49.2)
Heart V40 (%)	0.7 (0.0, 38.9)
Mean heart dose (Gy)	8.7 (1.6, 26.9)

Vx, volume of organ receiving $\geq x$ Gy.

Supplementary Table II. Univariable logistic regression models examining the relationship between individual predictors of pneumonitis grade ≥ 2 (n = 31).

	Odds Ratio (95% CI)	p-Value	C-statistic
Age (per 10 unit increase)	1.00 (0.48, 2.08)	0.997	0.519
Age (ref: ≤ 45)			
> 45– ≤ 55	2.80 (0.46, 16.93)	0.262	0.609
> 55	1.20 (0.22, 6.68)	0.835	
		**0.503	
T stage (ref: T1/T2)			
T3	0.61 (0.08, 4.41)	0.621	0.609
T4	2.67 (0.16, 45.14)	0.497	
		**0.446	
N stage (ref: N0)			
N1	0.96 (0.16, 5.64)	0.964	0.609
N2	1.60 (0.19, 13.70)	0.668	
N3	0.27 (0.02, 3.65)	0.322	
		**0.665	
Stage (ref: IIB)			
IIIA	1.25 (0.20, 7.96)	0.813	0.599
IIIB	2.00 (0.11, 35.81)	0.638	
IIIC	0.50 (0.03, 8.95)	0.638	
		**0.948	
Right (ref: Left)	1.60 (0.38, 6.82)	0.525	0.557
Multifocal disease (ref: No)	0.77 (0.15, 3.86)	0.750	0.525
Major ongoing medical problems (ref: No)	0.38 (0.03, 4.64)	0.445	0.542
Smoking history (ref: No)	0.98 (0.22, 4.31)	0.981	0.502
Left ventricular ejection fraction (LVEF) (per 10% increase)	0.30 (0.08, 1.20)	0.089	0.628
IMRT (ref: No)	1.60 (0.38, 6.82)	0.525	0.557
Her-2Neu Status (ref: Negative)			
Positive	0.89 (0.17, 4.78)	0.891	0.555
Equivocal	1.78 (0.25, 12.45)	0.562	
		**0.806	
Total docetaxel dose received (mg) (per 50 mg increase)	1.10 (0.64, 1.89)	0.731	0.496
Received trastuzumab (herceptin) (ref: No)	0.56 (0.13, 2.46)	0.438	0.567
Breast radiation dose (per 5 Gy increase)	0.84 (0.25, 2.80)	0.770	0.538
Bolus (ref: No)	0.48 (0.07, 3.40)	0.459	0.553
Boost (ref: No)	0.89 (0.22, 3.66)	0.871	0.515
Breast boost radiation dose (per 1 Gy increase)	1.23 (0.68, 2.22)	0.488	0.583
Lung V5 (per 10 unit increase)	0.77 (0.47, 1.26)	0.296	0.508
Lung V10 (per 10 unit increase)	0.75 (0.24, 2.34)	0.622	0.492
Lung V13 (per 10 unit increase)	0.97 (0.19, 4.99)	0.968	0.456
Lung V20 (per 10 unit increase)	2.55 (0.42, 15.33)	0.306	0.622
Lung V30 (per 10 unit increase)	2.10 (0.45, 9.74)	0.342	0.649
Lung V40 (per 10 unit increase)	2.15 (0.54, 8.54)	0.276	0.627
Mean lung dose (Gy) (per 5 Gy increase)	1.94 (0.21, 18.16)	0.560	0.544
Heart V5 (per 10 unit increase)	0.96 (0.74, 1.25)	0.764	0.569
Heart V10 (per 10 unit increase)	1.07 (0.76, 1.50)	0.701	0.506
Heart V20 (per 10 unit increase)	1.56 (0.80, 3.05)	0.195	0.570
Heart V30 (per 10 unit increase)	1.71 (0.72, 4.06)	0.227	0.595
Heart V40 (per 10 unit increase)	1.99 (0.54, 7.33)	0.303	0.582
Mean heart dose (per 5 Gy increase)	1.32 (0.68, 2.56)	0.416	0.502

**overall analysis of effects (applicable to categorical variables only).