

Supplementary

Table S1 Univariable and multivariable logistic regression analyses for predictive factors of CT use (SEER database 2010–2015)

Characteristics	Univariable analysis		Multivariable analysis	
	Odds ratio (95% CI)	P value	Odds ratio (95% CI)	P value
Age at diagnosis, years				
≤39	1.0 (reference)		1.0 (reference)	
40–49	0.498 (0.279–0.846)	0.013	0.476 (0.254–0.853)	0.016
50–59	0.336 (0.193–0.556)	<0.001	0.291 (0.159–0.510)	<0.001
60–69	0.228 (0.131–0.376)	<0.001	0.183 (0.100–0.320)	<0.001
≥70	0.053 (0.030–0.089)	<0.001	0.039 (0.021–0.070)	<0.001
Year of diagnosis				
2010–2012	1.0 (reference)		1.0 (reference)	
2013–2015	1.205 (1.046–1.389)	0.01	1.336 (1.129–1.582)	<0.001
Race				
White	1.0 (reference)		–	
Black	1.182 (0.976–1.432)	0.088	–	–
Others	0.953 (0.724–1.252)	0.728	–	–
Marital status				
Married	1.0 (reference)		1.0 (reference)	
Not married	0.716 (0.620–0.827)	<0.001	0.861 (0.725–1.023)	0.088
Laterality				
Right	1.0 (reference)		–	
Left	1.069 (0.928–1.231)	0.358	–	–
Histologic type				
Infiltrating duct carcinoma	1.0 (reference)		1.0 (reference)	
Others	0.517 (0.408–0.651)	<0.001	0.718 (0.544–0.946)	0.019
Histologic grade				
I	1.0 (reference)		1.0 (reference)	
II	2.994 (2.026–4.550)	<0.001	3.336 (2.152–5.298)	<0.001
III + IV	6.640 (4.547–9.991)	<0.001	6.003 (3.907–9.455)	<0.001
Tumor size (mm)				
T1a (2–5)	1.0 (reference)		1.0 (reference)	
T1b (6–10)	4.455 (3.738–5.327)	<0.001	5.633 (4.615–6.903)	<0.001
Breast surgery strategies				
Mastectomy	1.0 (reference)		1.0 (reference)	
BCS	1.212 (1.005–1.463)	0.045	0.668 (0.499–0.894)	0.007
Reconstruction	1.562 (1.187–2.059)	0.002	0.725 (0.519–1.012)	0.059
Regional nodes examined				
0	1.0 (reference)		–	
1–5	2.726 (1.860–4.082)	<0.001	–	–
≥6	2.694 (1.760–4.197)	<0.001	–	–
Radiation therapy				
Yes	1.0 (reference)		1.0 (reference)	
No	0.808 (0.698–0.934)	0.004	0.575 (0.449–0.736)	<0.001

CT, chemotherapy; SEER, the Surveillance, Epidemiology, and End Results; CI, confidence interval; BCS, breast-conserving surgery.

Table S2 Demographic, clinical, and pathological characteristics of patients with T1a,bN0M0 triple-negative breast cancer before and after propensity score matching (SEER database 2010–2015)

Characteristic	Before PSM			After PSM		
	CT cohort (n=1,534) No./Total No. (%)	No-CT cohort (n=1,531) No./Total No. (%)	P value	CT cohort (n=770) No./Total No. (%)	No-CT cohort (n=770) No./Total No. (%)	P value
Age at diagnosis (years)*				<0.001		
≤39	87 (5.7)	18 (1.2)		20 (2.6)	16 (2.1)	0.317
40–49	279 (18.2)	116 (7.6)		91 (11.8)	86 (11.2)	
50–59	500 (32.6)	308 (20.1)		233 (30.3)	204 (26.5)	
60–69	505 (32.9)	458 (29.9)		263 (34.2)	298 (38.7)	
≥70	163 (10.6)	631 (41.2)		163 (21.2)	166 (21.6)	
Year of diagnosis*				0.011		
2010–2012	726 (47.3)	796 (52.0)		406 (52.7)	384 (49.9)	0.284
2013–2015	808 (52.7)	735 (48.0)		364 (47.3)	386 (50.1)	
Race*				0.198		
White	1,150 (75.0)	1,176 (76.8)		554 (71.9)	582 (75.6)	
Black	275 (17.9)	238 (15.6)		146 (19.0)	137 (17.8)	
Others	109 (7.1)	117 (7.6)		70 (9.1)	51 (6.6)	
Marital status*				<0.001		
married	971 (63.3)	846 (55.3)		496 (64.4)	466 (60.5)	
Not married	563 (36.7)	685 (44.7)		274 (35.6)	304 (39.5)	
Laterality*				0.377		
Right	735 (47.9)	759 (49.6)		394 (51.2)	380 (49.4)	
Left	799 (52.1)	772 (50.4)		376 (48.8)	390 (50.6)	
Histologic type*				<0.001		
Infiltrating duct carcinoma	1,411 (92.0)	1,310 (85.6)		691 (89.7)	680 (88.3)	0.415
Others	123 (8.0)	221 (14.4)		79 (10.3)	90 (11.7)	
Histologic grade*				<0.001		
I	32 (2.1)	150 (9.8)		31 (4.0)	28 (3.6)	0.36
II	373 (24.3)	584 (38.1)		264 (34.3)	240 (31.2)	
III + IV	1,129 (73.6)	797 (52.1)		475 (61.7)	502 (65.2)	
Tumor size* (mm)				<0.001		
T1a (2–5)	212 (13.8)	638 (41.7)		190 (24.7)	185 (24.0)	0.812
T1b (6–10)	1,322 (86.2)	893 (58.3)		580 (75.3)	585 (76.0)	
Breast surgery strategies*				0.006		
Mastectomy	249 (16.2)	299 (19.5)		138 (17.9)	133 (17.3)	0.778
BCS	1,099 (71.6)	1,089 (71.1)		540 (70.1)	552 (71.7)	
Reconstruction	186 (12.1)	143 (9.3)		92 (12.0)	85 (11.0)	
Regional nodes examined*				<0.001		
0	36 (2.3)	94 (6.1)		22 (2.9)	17 (2.2)	0.634
1–5	1,304 (85.0)	1,249 (81.6)		660 (85.7)	658 (85.5)	
≥6	194 (12.7)	188 (12.3)		88 (11.4)	95 (12.3)	
Radiation therapy*				0.005		
Yes	989 (64.5)	910 (59.4)		477 (61.9)	476 (61.8)	1.0
No	545 (35.5)	621 (40.6)		293 (38.1)	294 (38.2)	
Vital status				–		
Alive	1,466 (95.6)	1,400 (91.4)		743 (96.5)	722 (93.8)	
Breast cancer-specific mortality	53 (3.5)	43 (2.8)		16 (2.1)	20 (2.6)	
Other cause-specific mortality	15 (1.0)	88 (5.8)		11 (1.4)	28 (3.6)	

*, based on these variables, propensity score matching was performed for the CT and no-CT cohorts. SEER, the Surveillance, Epidemiology, and End Results; PSM, propensity score matching; CT, chemotherapy; CI, confidence interval; BCS, breast-conserving surgery.

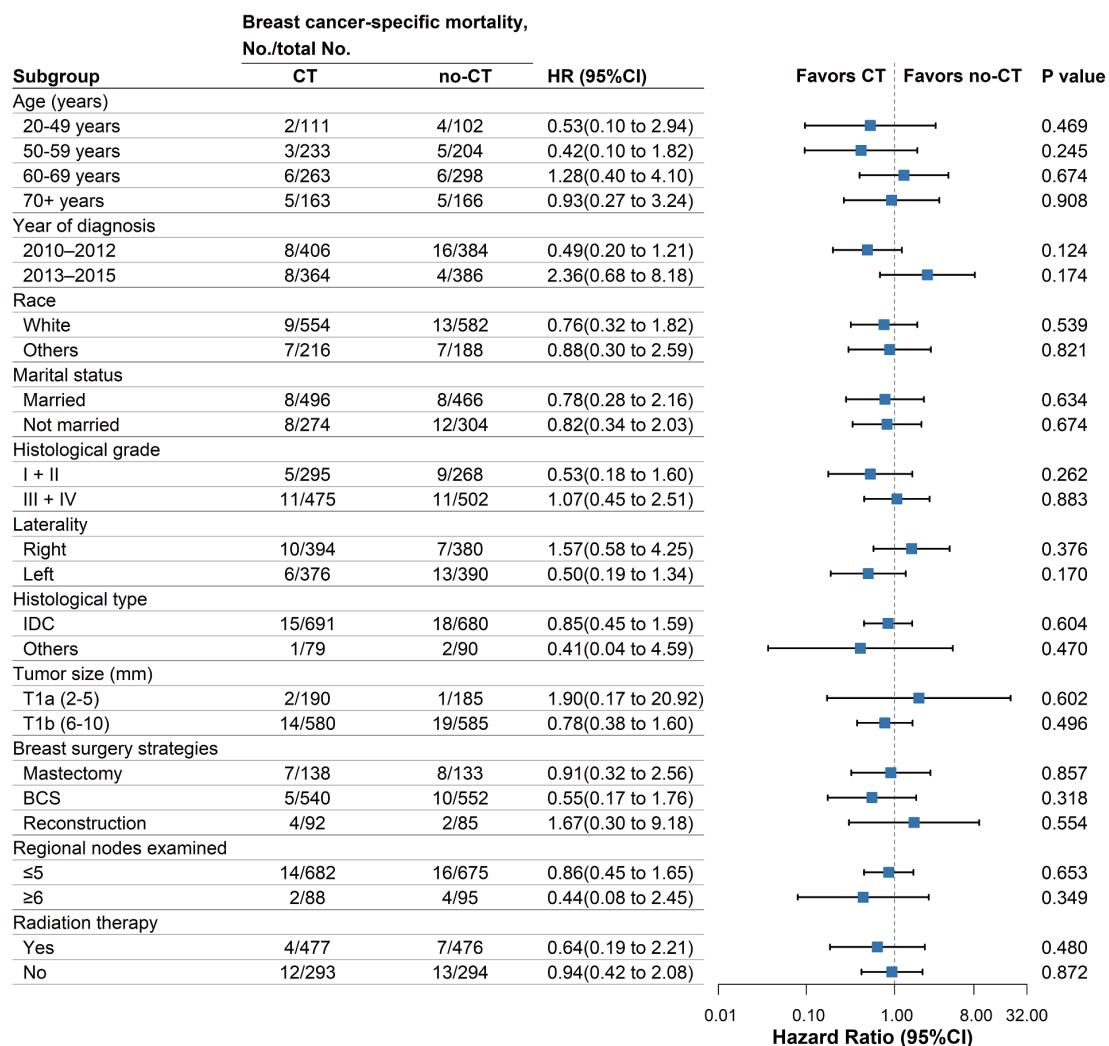


Figure S1 Exploratory subgroup analysis of breast cancer-specific mortality in the exact matched cohort (n=1,540) after propensity score matching. IDC, infiltrating duct carcinoma; BCS, breast-conserving surgery; CT, chemotherapy; CI, confidence interval.