

## CCRT for cervical SCC and ADC

**Supplemental Table 1.** Elixhauser comorbidities in patients with cervical squamous cell carcinoma and adenocarcinoma who received definitive concurrent chemoradiotherapy

Variable	Total	SCC	Adenocarcinoma	P value
	(N = 3258)	(N = 2927)	(N = 331)	
	n (%)	n (%)	n (%)	
Congestive heart failure	73 (2.2)	68 (2.3)	5 (1.5)	.3437
Cardiac arrhythmia	71 (2.2)	66 (2.3)	5 (1.5)	.3794
Valvular disease	34 (1.0)	34 (1.2)	0	.0487
Pulmonary disease	104 (3.2)	92 (3.1)	12 (3.6)	.6362
Peripheral vascular disorders	25 (0.8)	-	-	.3061
Hypertension	857 (26.3)	784 (26.8)	73 (22.1)	.0639
Paralysis	7 (0.2)	7 (0.2)	0	.3731
Other neurological disorders	27 (0.8)	24 (0.8)	3 (0.9)	.8695
Diabetes	407 (12.5)	357 (12.2)	50 (15.1)	.1292
Hypothyroidism	15 (0.5)	-	-	.6834
Renal failure	67 (2.1)	59 (2.0)	8 (2.4)	.6259
Liver disease	40 (1.2)	35 (1.2)	5 (1.5)	.6220
Peptic ulcer disease (excluding bleeding)	115 (3.5)	105 (3.6)	10 (3.0)	.5968
Rheumatoid arthritis/collagen vascular diseases	58 (1.8)	51 (1.7)	7 (2.1)	.6272
Coagulopathy	7 (0.2)	-	-	.7176
Fluid and electrolyte disorders	34 (1.0)	29 (1.0)	5 (1.5)	.3777
Blood loss anemia	34 (1.0)	-	-	.4066
Deficiency anemia	39 (1.2)	35 (1.2)	4 (1.2)	.9839
Alcohol abuse	7 (0.2)	7 (0.2)	0	.3731
Depression	66 (2.0)	56 (1.9)	10 (3.0)	.1751

**Supplemental Table 2.** Survival rates of all-cause mortality determined using the Kaplan-Meier method

	Patient no.	Event no. (%)	Survival rate			Survival time (months)	
			1 y	3 y	5 y	Median	95% CI
All patients							
SCC	2927	1081 (36.9)	0.91	0.72	0.66	.	-
adenocarcinoma	331	183 (55.3)	0.78	0.52	0.43	40.72	(33.67, 57.74)
Stage I							
SCC	438	100 (22.8)	0.97	0.85	0.80	.	-
adenocarcinoma	68	27 (39.7)	0.97	0.73	0.61	114.13	(47.21, -)
Stage II							
SCC	1426	420 (29.5)	0.95	0.80	0.74	237.00	-
adenocarcinoma	149	71 (47.7)	0.83	0.59	0.50	63.97	(39.05, -)
Stage III							
SCC	699	326 (46.6)	0.90	0.63	0.55	80.52	(64.10, 102.39)
adenocarcinoma	65	43 (66.2)	0.68	0.41	0.33	25.67	(14.39, 40.13)
Stage IV							
SCC	364	235 (64.6)	0.72	0.43	0.33	23.82	(20.00, 32.39)
adenocarcinoma	49	42 (85.7)	0.51	0.18	0.09	12.10	(10.23, 17.28)

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**Supplemental Table 3.** Characteristics of patients in propensity score-matched cohorts for cervical squamous cell carcinoma and adenocarcinoma who received definitive concurrent chemoradiotherapy

		SCC (N = 655)	Adenocarcinoma (N = 330)	<i>P</i> value
		<i>n</i> (%)	<i>n</i> (%)	
Age, years	0-49	216 (33.0)	110 (33.3)	1.000
	50-59	222 (33.9)	111 (33.6)	
	60-69	125 (19.1)	63 (19.1)	
	≥ 70	92 (14.0)	46 (13.9)	
FIGO stage	1	134 (20.5)	67 (20.3)	1.000
	2	298 (45.5)	149 (45.2)	
	3	126 (19.2)	65 (19.7)	
	4	97 (14.8)	49 (14.8)	
Year of diagnosis	2007-2009	203 (31.0)	104 (31.5)	.4292
	2010-2012	204 (31.1)	94 (28.5)	
	2013-2015	248 (37.9)	132 (40.0)	
RT cumulative dose	< 50 Gy	276 (42.1)	142 (43.0)	.7502
	≥ 50 Gy	379 (57.9)	188 (57.0)	
Platinum cumulative dose	< 500 mg	315 (48.1)	158 (47.9)	.9641
	≥ 500 mg	340 (51.9)	172 (52.1)	
IC Brachytherapy dose	No IC Brachytherapy	115 (17.6)	69 (20.9)	.3535
	< 2500 cGy	238 (36.3)	114 (34.5)	
	≥ 2500 cGy	302 (46.1)	147 (44.5)	
CCI scores	0	500 (76.3)	244 (73.9)	.4451
	1	88 (13.4)	53 (16.1)	
	≥ 2	67 (10.2)	33 (10.0)	
Income	< 18,000 NTD	167 (25.5)	84 (25.5)	.1689
	18,000-22,500 NTD	204 (31.1)	95 (28.8)	
	22,500-30,000 NTD	77 (11.8)	51 (15.5)	
	≥ 30,000 NTD	207 (31.6)	100 (30.3)	
Hospital type	Medical center	499 (76.2)	248 (75.2)	.6792
	others	156 (23.8)	82 (24.8)	
Hospital location	North	304 (46.4)	153 (46.4)	.9941
	Middle	170 (26.0)	87 (26.4)	
	South/East	181 (27.6)	90 (27.3)	

Gy, gray; SCC, squamous cell carcinoma; ADC, adenocarcinoma; FIGO, International Federation of Gynecology and Obstetrics; EBRT, external beam radiotherapy; CCI, Charlson comorbidity index; mg, milligrams; HR, hazard ratio; CI, confidence interval; NTD, New Taiwan dollar; IC, intracavitary; aHR, adjusted hazard ratio.

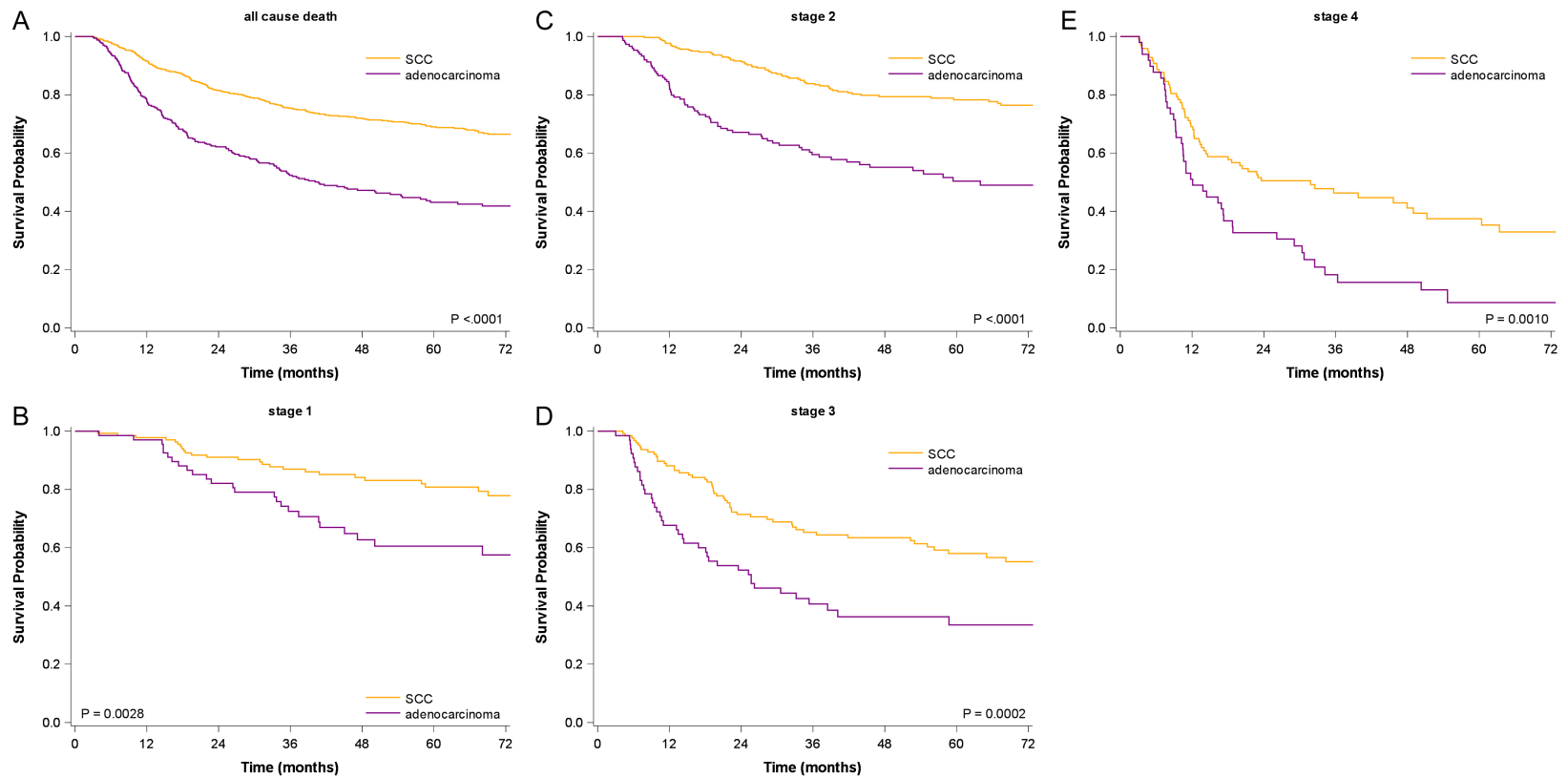
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**Supplemental Table 4.** Results of Cox proportional hazards regression analysis of propensity score-matched cohorts and the risk of all-cause mortality, locoregional recurrence, and distant metastasis among patients with cervical adenocarcinoma or squamous cell carcinoma who received definitive concurrent chemoradiotherapy

FIGO stage	Event	Pathologic type	Patient no.	Event no. (%)	Adjusted HR* (95% CI)	P value	
All patients	All-cause mortality	SCC	655	211 (32.2)	ref.	< .0001	
		adenocarcinoma	330	183 (55.5)	2.39 (1.95-2.92)		
	Locoregional recurrence	SCC	655	80 (12.2)	ref.		.0004
		adenocarcinoma	330	58 (17.6)	1.86 (1.32-2.61)		
	Distant metastasis	SCC	655	97 (14.8)	ref.		< .0001
		adenocarcinoma	330	75 (22.7)	2.00 (1.47-2.71)		
Stage I	All-cause mortality	SCC	134	29 (21.6)	ref.	.0009	
		adenocarcinoma	67	27 (40.3)	2.56 (1.47-4.48)		
	Locoregional recurrence	SCC	134	12 (9.0)	ref.		.0066
		adenocarcinoma	67	14 (20.9)	3.19 (1.38-7.36)		
	Distant metastasis	SCC	134	16 (11.9)	ref.		.3605
		adenocarcinoma	67	11 (16.4)	1.46 (0.65-3.32)		
Stage II	All-cause mortality	SCC	298	69 (23.2)	ref.	< .0001	
		adenocarcinoma	149	71 (47.7)	2.91 (2.07-4.08)		
	Locoregional recurrence	SCC	298	44 (14.8)	ref.		.0378
		adenocarcinoma	149	29 (19.5)	1.66 (1.03-2.67)		
	Distant metastasis	SCC	298	37 (12.4)	ref.		< .0001
		adenocarcinoma	149	36 (24.2)	2.62 (1.64-4.18)		
Stage III-IV	All-cause mortality	SCC	223	113 (50.7)	ref.	< .0001	
		adenocarcinoma	114	85 (74.6)	2.06 (1.54-2.76)		
	Locoregional recurrence	SCC	223	24 (10.8)	ref.		.0892
		adenocarcinoma	114	15 (13.2)	1.80 (0.91-3.55)		
	Distant metastasis	SCC	223	44 (19.7)	ref.		.0220
		adenocarcinoma	114	28 (24.6)	1.79 (1.09-2.95)		

\*Propensity scores were estimated using a logistic regression model with the variables of age, FIGO stage, year of diagnosis, RT cumulative dose, platinum cumulative dose, IC Brachytherapy dose, CCI score, income, hospital type, and hospital location. \*Patients were 1:2 matched with the same stage, age group, and caliper (logit PS) within 0.5. Gy, gray; SCC, squamous cell carcinoma; ADC, adenocarcinoma; FIGO, International Federation of Gynecology and Obstetrics; EBRT, external beam radiotherapy; CCI, Charlson comorbidity index; mg, milligrams; HR, hazard ratio; CI, confidence interval; NTD, New Taiwan dollar; IC, intracavitary; aHR, adjusted hazard ratio.

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**Supplemental Figure 1.** Survival curves for all-cause mortality determined using the Kaplan-Meier method for propensity score-matched cohort at (A) stage I-IV (B) stage I (C) stage II (D) stage III (E) stage IV.