

Outcomes of surgery for cervical SCC and ADC

Supplementary Table 1. Stage variation from FIGO stage to AJCC pathologic stage

FIGO stage		All patients (N = 4628)	SCC (N = 3588)	Adenocarcinoma (N = 1040)	P-value
		n (%)	n (%)	n (%)	
Stage I	Unchanged pathologic stage	3234 (81.0)	2512 (81.2)	722 (80.2)	.5038
	Up-pathologic stage	759 (19.0)	581 (18.8)	178 (19.8)	
Stage IIA	Down-pathologic stage	78 (21.3)	63 (20.9)	15 (23.1)	.7841
	Unchanged pathologic stage	162 (44.3)	132 (43.9)	30 (46.2)	
Stage IIB	Up-pathologic stage	126 (34.4)	106 (35.2)	20 (30.8)	.0005
	Down-pathologic stage	19 (12.6)	13 (11.4)	6 (16.2)	
Stage III-IVA	Unchanged pathologic stage	74 (49.0)	66 (57.9)	8 (21.6)	.4774
	Up-pathologic stage	58 (38.4)	35 (30.7)	23 (62.2)	
Stage III-IVA	Down-pathologic stage	12 (10.2)	74 (92.5)	35 (92.1)	.4774
	Unchanged pathologic stage	97 (82.2)			
	Up-pathologic stage	9 (7.6)	6 (7.5)	3 (7.9)	

SCC, squamous cell carcinoma; FIGO, International Federation of Gynecology and Obstetrics.

Supplementary Table 2. Survival rate of all-cause mortality by the Kaplan-Meier method

	Patient (n)	Event (n) (%)	Survival rate			Survival time (month)	
			1 y	3 y	5 y	Median	95% CI
All patients							
SCC	3588	451 (12.57)	.98	.93	.90	-	-
Adenocarcinoma	1040	222 (21.35)	.97	.87	.80	-	-
AJCC pathologic Stages I-IIA							
SCC	2790	206 (7.38)	.99	.97	.95	-	-
Adenocarcinoma	788	79 (10.03)	.99	.95	.92	-	-
AJCC pathologic Stages IIB-IVA							
SCC	798	245 (30.70)	.96	.81	.74	-	-
Adenocarcinoma	252	143 (56.75)	.90	.59	.42	3.73	(3.16, 4.66)

SCC, squamous cell carcinoma; CI, confidence intervals; AJCC, American Joint Committee on Cancer.

Outcomes of surgery for cervical SCC and ADC

Supplementary Table 3. Patient Characteristics of the propensity score matching cohort

		AJCC pathologic stages I-IIA			AJCC pathologic stages IIB-IVA				
		SCC (N = 1218)		P-value	SCC (N = 384)		P-value		
		n (%)	n (%)		n (%)	n (%)			
Age, years	0-39	213 (17.5)	119 (17.8)	-	44 (11.5)	23 (11.0)	-		
	40-49	437 (35.9)	246 (36.9)		107 (27.9)	59 (28.1)			
	50-59	372 (30.5)	198 (29.7)		147 (38.3)	78 (37.1)			
	60-69	152 (12.5)	82 (12.3)		72 (18.8)	40 (19.0)			
	70+	44 (3.6)	22 (3.3)		14 (3.6)	10 (4.8)			
AJCC pathologic stage	1	1156 (94.9)		-	45 (11.7)		-		
	2A	62 (5.1)			289 (75.3)				
	2B				151 (71.9)				
	3				50 (13.0)				
	4				35 (16.7)				
Year of diagnosis	2007-2009	438 (36.0)	207 (31.0)	.1483	122 (31.8)	62 (29.5)	.8714		
	2010-2012	443 (36.4)	266 (39.9)		154 (40.1)	86 (41.0)			
	2013-2015	337 (27.7)	194 (29.1)		108 (28.1)	62 (29.5)			
Grade	I (well differentiated)	126 (10.3)	118 (17.7)	.1478	14 (3.6)	11 (5.2)	.9974		
	II (moderately differentiated)	654 (53.7)	331 (49.6)		243 (63.3)	129 (61.4)			
	III (poorly differentiated)	194 (15.9)	98 (14.7)		91 (23.7)	51 (24.3)			
	IV (undifferentiated)	8 (0.7)	5 (0.7)		36 (9.4)	19 (9.1)			
	Missing	236 (19.4)	115 (17.2)		0	0			
Surgical margin	No residual	1124 (92.3)		.8654	291 (75.8)	159 (75.7)	.9009		
	Residual	35 (2.9)			67 (17.4)	38 (18.1)			
	Unknown	59 (4.8)			26 (6.8)	13 (6.2)			
Adjuvant treatment	Adjuvant CCRT	101 (8.3)	61 (9.1)	.9998	204 (53.1)	104 (49.5)	.8408		
	Adjuvant sequential CT and RT	15 (1.2)	10 (1.5)		35 (9.1)	26 (12.4)			
	Adjuvant RT	156 (12.8)	83 (12.4)		70 (18.2)	38 (18.1)			
	No adjuvant	946 (77.7)	513 (76.9)		75 (19.5)	42 (20.0)			
RT cumulative dose	No RT	961 (78.9)	523 (78.4)	.7930	110 (28.6)	68 (32.4)	.4556		
	<50 Gy	119 (9.8)	70 (10.5)		109 (28.4)	65 (31.0)			
	50+ Gy	138 (11.3)	74 (11.1)		165 (43.0)	77 (36.7)			
Platinum cumulative dose	No CT	1102 (90.5)	596 (89.4)	.7525	145 (37.8)	80 (38.1)	.9099		
	<500 MG	70 (5.7)	38 (5.7)		115 (29.9)	66 (31.4)			
	500+ MG	46 (3.8)	33 (4.9)		124 (32.3)	64 (30.5)			

Outcomes of surgery for cervical SCC and ADC

Intracavitary brachytherapy dose	No intracavitary brachytherapy	935 (76.8)	518 (77.7)	.6904	123 (32.0)	73 (34.8)	.8960
	<2500 cGy	233 (19.1)	127 (19.0)		212 (55.2)	110 (52.4)	
	2500+ cGy	50 (4.1)	22 (3.3)		49 (12.8)	27 (12.9)	
CCI Scores	0	1012 (83.1)	546 (81.9)	.5622	314 (81.8)	167 (79.5)	.9380
	1	148 (12.2)	85 (12.7)		44 (11.5)	28 (13.3)	
	2+	58 (4.8)	36 (5.4)		26 (6.8)	15 (7.1)	
Income	<NTD 18,000	250 (20.5)	132 (19.8)	.8744	94 (24.5)	54 (25.7)	.8204
	NTD 18,000-22,500	440 (36.1)	232 (34.8)		133 (34.6)	70 (33.3)	
	NTD 22,500-30,000	175 (14.4)	98 (14.7)		59 (15.4)	28 (13.3)	
	NTD 30,000+	353 (29.0)	205 (30.7)		98 (25.5)	58 (27.6)	
Hospital level	Medical center	899 (73.8)	488 (73.2)	.8751	272 (70.8)	150 (71.4)	.9226
	Other	319 (26.2)	179 (26.8)		112 (29.2)	60 (28.6)	
Hospital area	North	642 (52.7)	358 (53.7)	.9741	194 (50.5)	105 (50.0)	.7100
	Central	239 (19.6)	131 (19.6)		75 (19.5)	46 (21.9)	
	South/East	337 (27.7)	178 (26.7)		115 (29.9)	59 (28.1)	

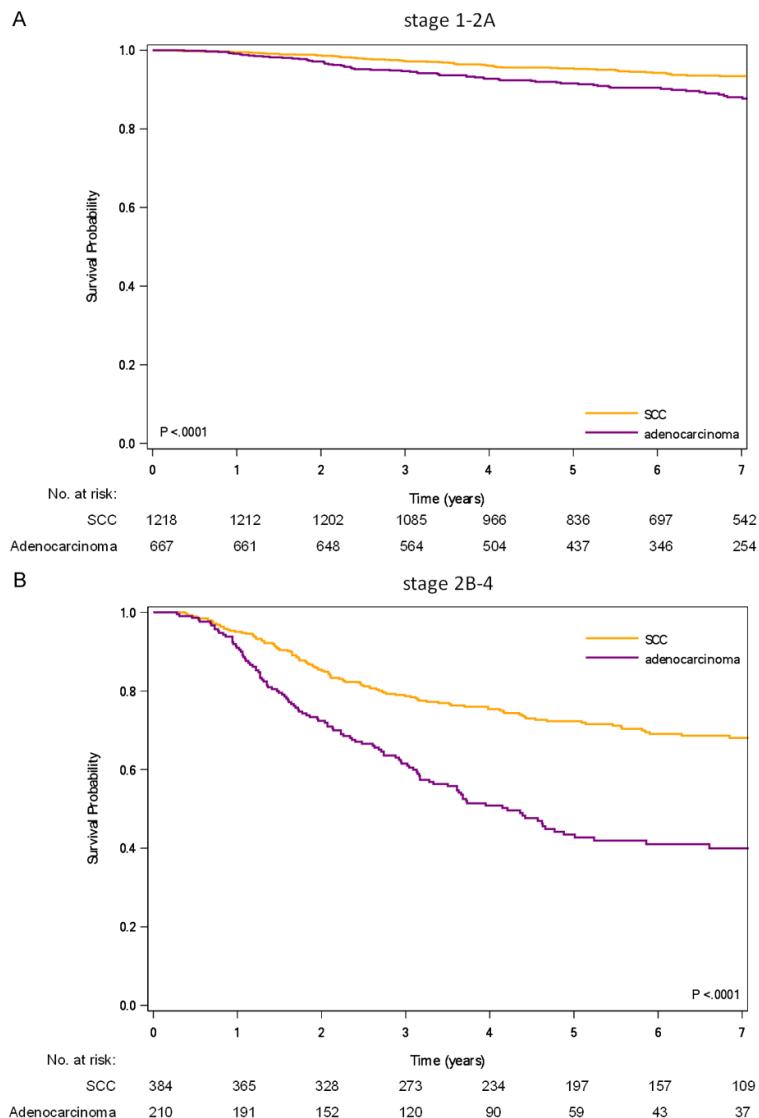
CCRT, concurrent chemoradiotherapy; cGy, centigray; Gy, gray; SCC, squamous cell carcinoma; FIGO, International Federation of Gynecology and Obstetrics; CT, chemotherapy; RT, radiotherapy; EBRT, external beam radiotherapy; CCI, Charlson comorbidity index; MG, milligrams; SD, standard deviation; IQR, interquartile range; NTD, New Taiwan dollar; AJCC, American Joint Committee on Cancer.

Supplementary Table 4. Results of Cox proportional hazard regression analysis of the propensity score matched cohort

AJCC pathologic stage	Event	Pathologic type	Patient (n)	Event (n) (%)	Adjusted HR (95% CI)	P-value
Stages 1-2A	All-cause mortality	SCC	1218	73 (5.99)	ref.	<.0001
		Adenocarcinoma	667	72 (10.79)	2.06 (1.48-2.88)	
	Locoregional recurrence	SCC	1218	92 (7.55)	ref.	.8558
		Adenocarcinoma	667	46 (6.90)	0.97 (0.67-1.39)	
	Distant metastasis	SCC	1218	50 (4.11)	ref.	<.0001
		Adenocarcinoma	667	60 (9.00)	2.75 (1.86-4.05)	
Stages 2B-4	All-cause mortality	SCC	384	116 (30.21)	ref.	<.0001
		Adenocarcinoma	210	117 (55.71)	2.54 (1.94-3.32)	
	Locoregional recurrence	SCC	384	49 (12.76)	ref.	.8027
		Adenocarcinoma	210	30 (14.29)	1.06 (0.66-1.72)	
	Distant metastasis	SCC	384	93 (24.22)	ref.	<.0001
		Adenocarcinoma	210	79 (37.62)	1.89 (1.39-2.57)	

*All the variables included in *Supplemental Table 3* were used in the multivariate analysis. HR, hazard ratio; CI, confidence intervals; AJCC, American Joint Committee on Cancer.

Outcomes of surgery for cervical SCC and ADC



Supplementary Figure 1. Kaplan-Meier survival curves for all-cause death in the propensity score matched cohort.
A. Stages I-IIA. B. Stages IIB-IVA.