Table S1 Univariate and multivariate analyses of the unmatched cohort for OS

Variables	Univariate analysis		Multivariate analysis	
	HR (95% CI)	P value	HR (95% CI)	P value
Race: Black *vs.* White	1.006 (0.834–1.214)	0.947	0.947 (0.784–1.144)	0.571
Race: Other *vs.* White	0.394 (0.324–0.478)	<0.001	0.633 (0.518–0.775)	<0.001
FIGO: IIB–IVB *vs.* IA1–IIA2	13.327 (10.613–16.735)	<0.001	5.996 (4.43–8.115)	<0.001
Primary site: other *vs.* cervix uteri	0.684 (0.579–0.809)	<0.001	0.849 (0.715–1.007)	0.06
Radiation: yes *vs.* no	0.9 (0.735–1.101)	0.306	1.481 (1.122–1.954)	0.005
Chemotherapy: yes *vs.* no	3.751 (3.133–4.49)	<0.001	0.561 (0.454–0.693)	<0.001
Regional nodes: 0–18 *vs.* 0	0.24 (0.19–0.304)	<0.001	0.507 (0.357–0.72)	<0.001
Regional nodes: 19–90 *vs.* 0	0.124 (0.088–0.176)	<0.001	0.271 (0.171–0.43)	<0.001
Positive nodes: 0–2 *vs.* 0	1.307 (0.919–1.86)	0.136	1.507 (0.938–2.421)	0.09
Positive nodes: 3–23 *vs.* 0	2.245 (1.524–3.307)	<0.001	2.385 (1.436–3.96)	<0.001
Marital: married *vs.* single/unmarried	1.254 (1.076–1.461)	0.004	1.005 (0.858–1.178)	0.949
Marital: divorced/unknown *vs.* single/unmarried	1.43 (1.246–1.641)	<0.001	1.14 (0.99–1.313)	0.068
Surgery: yes *vs.* no	0.119 (0.099–0.143)	<0.001	0.428 (0.321–0.569)	<0.001
Age category: 40–44 *vs.* 21–39	1.129 (0.76–1.678)	0.548	1.029 (0.689–1.536)	0.89
Age category: 45–59 *vs.* 21–39	2.385 (1.782–3.193)	<0.001	1.51 (1.116–2.043)	0.007
Age category: 60–97 *vs.* 21–39	7.311 (5.568–9.6)	<0.001	2.912 (2.171–3.905)	<0.001
Tumor type: EC *vs.* AC	0.786 (0.589–1.048)	0.1	0.838 (0.624–1.124)	0.238

AC, ordinary cervical adenocarcinoma; EC, cervical endometrioid adenocarcinoma; FIGO, Federation International of Gynecology and Obstetrics; OS, overall survival.

Table S2 Univariate and multivariate analyses of the unmatched cohort for DSS

Variables	Univariate analysis		Multivariate analysis	
	HR (95% CI)	P value	HR (95% CI)	P value
Race: Black *vs.* White	1.008 (0.824–1.233)	0.938	0.973 (0.795–1.191)	0.789
Race: Other *vs.* White	0.406 (0.33–0.501)	<0.001	0.662 (0.533–0.823)	<0.001
FIGO: IIB–IVB *vs.* IA1–IIA2	16.927 (12.978–22.077)	<0.001	7.306 (5.172–10.319)	<0.001
Primary site: other *vs.* cervix uteri	0.689 (0.577–0.825)	<0.001	0.856 (0.713–1.027)	0.094
Radiation: yes *vs.* no	0.871 (0.7–1.083)	0.213	1.421 (1.044–1.932)	0.025
Chemotherapy: Yes *vs.* No	4.285 (3.516–5.224)	<0.001	0.596 (0.474–0.75)	<0.001
Regional nodes: 0–18 *vs.* 0	0.216 (0.167–0.281)	<0.001	0.444 (0.296–0.667)	<0.001
Regional nodes: 19–90 *vs.* 0	0.107 (0.072–0.158)	<0.001	0.244 (0.144–0.412)	<0.001
Positive nodes: 0–3 *vs.* 0	1.419 (1.014–1.985)	0.041	1.783 (1.085–2.93)	0.022
Positive nodes: 4–23 *vs.* 0	2.507 (1.522–4.129)	<0.001	2.79 (1.497–5.199)	0.001
Marital: married *vs.* single/unmarried	1.164 (0.988–1.37)	0.069	0.956 (0.808–1.132)	0.603
Marital: divorced/unknown *vs.* single/unmarried	1.442 (1.244–1.67)	<0.001	1.14 (0.981–1.326)	0.088
Surgery: yes *vs.* no	0.105 (0.085–0.129)	<0.001	0.42 (0.306–0.576)	<0.001
Age category: 40–44 *vs.* 21–39	1.095 (0.727–1.649)	0.665	0.96 (0.634–1.454)	0.848
Age category: 45–59 *vs.* 21–39	2.296 (1.7–3.101)	<0.001	1.364 (0.998–1.864)	0.051
Age category: 60–97 *vs.* 21–39	6.499 (4.898–8.623)	<0.001	2.361 (1.74–3.204)	<0.001
Tumor type: EC *vs.* AC	0.724 (0.526–0.997)	0.048	0.809 (0.584–1.121)	0.203

AC, ordinary cervical adenocarcinoma; EC, cervical endometrioid adenocarcinoma; FIGO, Federation International of Gynecology and Obstetrics; DSS, disease-specific survival.
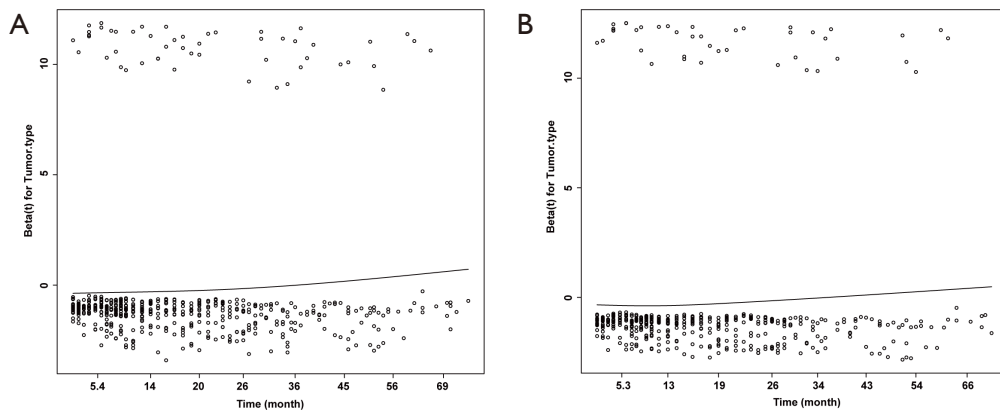
Figure S1 Residual diagram of the PH tests for OS and DSS (A,B). OS, overall survival; DSS, disease-specific survival.
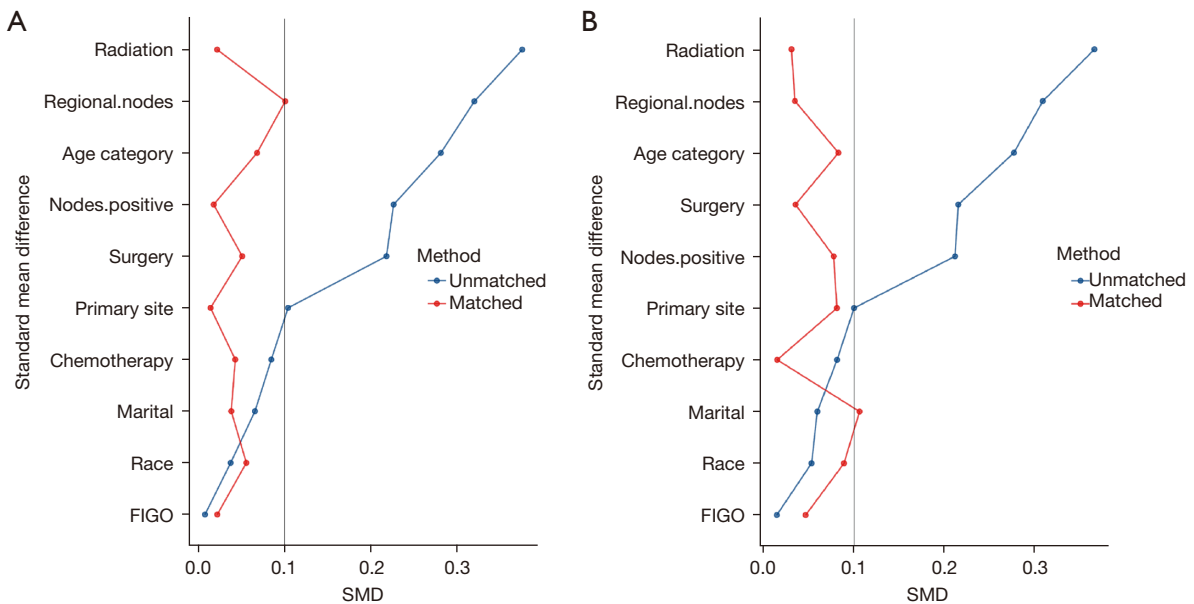

Figure S2 Balance tests of the baseline data before and after PSM (A,B). FIGO, Federation International of Gynecology and Obstetrics; SMD, standard mean difference.

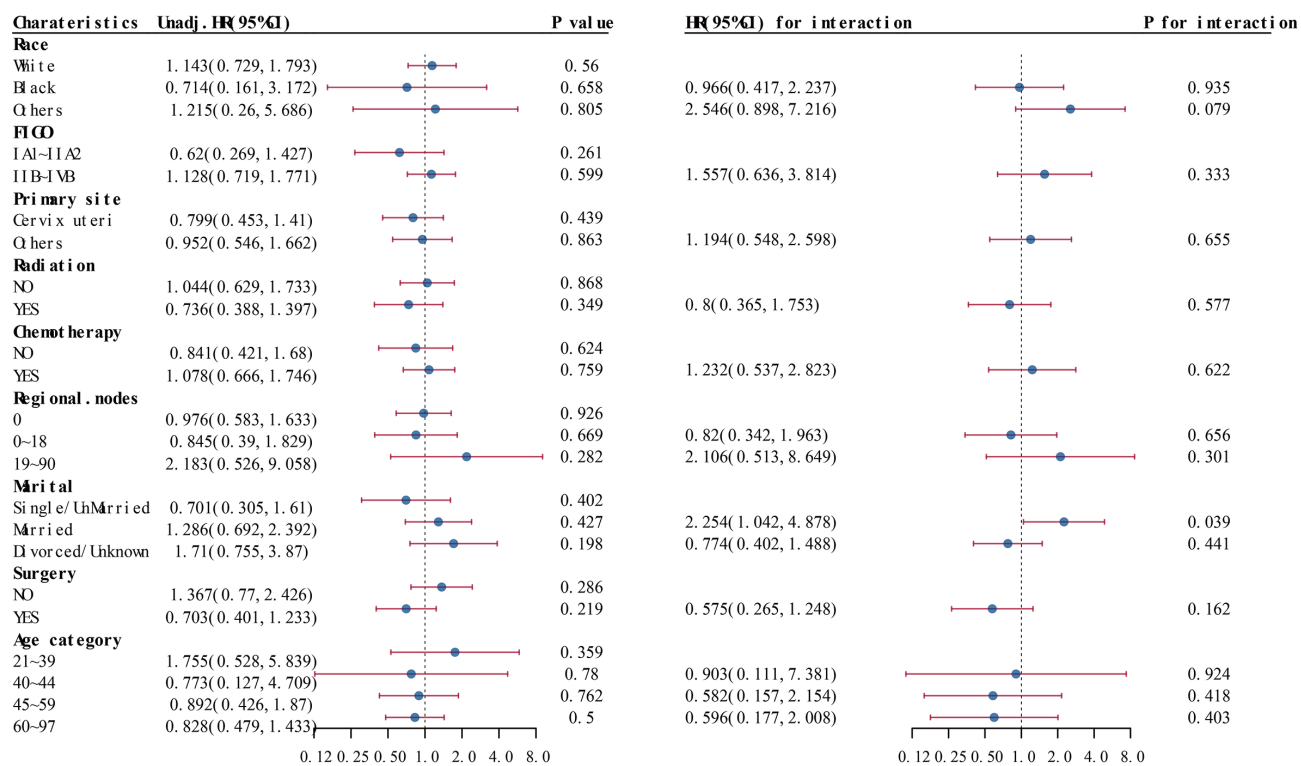| Charateristics	Unadj. HR(95%CI)		P value	HR(95%CI) for interaction		P for interaction
Race						
White	1.143(0.729, 1.793)		0.56			
Black	0.714(0.161, 3.172)		0.658	0.966(0.417, 2.237)		0.935
Others	1.215(0.26, 5.686)		0.805	2.546(0.898, 7.216)		0.079
FIGO						
IA1~IIA2	0.62(0.269, 1.427)		0.261			
IIB~IVB	1.128(0.719, 1.771)		0.599	1.557(0.636, 3.814)		0.333
Primary site						
Cervix uteri	0.799(0.453, 1.41)		0.439			
Others	0.952(0.546, 1.662)		0.863	1.194(0.548, 2.598)		0.655
Radiation						
NO	1.044(0.629, 1.733)		0.868			
YES	0.736(0.388, 1.397)		0.349	0.8(0.365, 1.753)		0.577
Chemotherapy						
NO	0.841(0.421, 1.68)		0.624			
YES	1.078(0.666, 1.746)		0.759	1.232(0.537, 2.823)		0.622
Regional.nodes						
0	0.976(0.583, 1.633)		0.926			
0~18	0.845(0.39, 1.829)		0.669	0.82(0.342, 1.963)		0.656
19~90	2.183(0.526, 9.058)		0.282	2.106(0.513, 8.649)		0.301
Marital						
Single/UnMarried	0.701(0.305, 1.61)		0.402			
Married	1.286(0.692, 2.392)		0.427	2.254(1.042, 4.878)		0.039
Divorced/Unknown	1.71(0.755, 3.87)		0.198	0.774(0.402, 1.488)		0.441
Surgery						
NO	1.367(0.77, 2.426)		0.286			
YES	0.703(0.401, 1.233)		0.219	0.575(0.265, 1.248)		0.162
Age category						
21~39	1.755(0.528, 5.839)		0.359			
40~44	0.773(0.127, 4.709)		0.78	0.903(0.111, 7.381)		0.924
45~59	0.892(0.426, 1.87)		0.762	0.582(0.157, 2.154)		0.418
60~97	0.828(0.479, 1.433)		0.5	0.596(0.177, 2.008)		0.403

Figure S3 Forest plot of the HRs comparing the EC and AC patients in the multivariate analyses in the matched cohort for OS. EC, cervical endometrioid adenocarcinoma; AC, ordinary cervical adenocarcinoma; OS, overall survival.
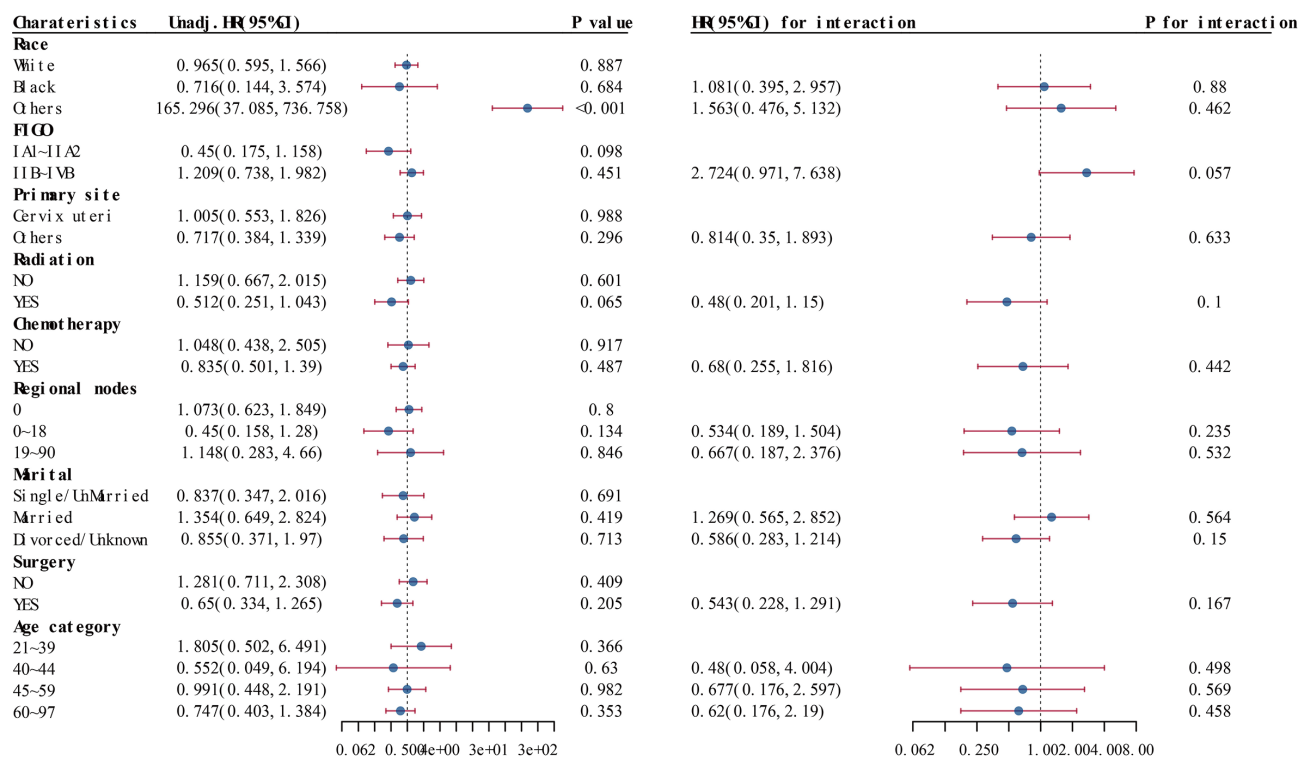
Charateristics	Unadj. HR(95%CI)	P value	HR(95%CI) for interaction	P for interaction
Race				
White	0.965(0.595, 1.566)	0.887		
Black	0.716(0.144, 3.574)	0.684	1.081(0.395, 2.957)	0.88
Others	165.296(37.085, 736.758)	<0.001	1.563(0.476, 5.132)	0.462
FIGO				
IA1~IIA2	0.45(0.175, 1.158)	0.098		
IIB~IVB	1.209(0.738, 1.982)	0.451	2.724(0.971, 7.638)	0.057
Primary site				
Cervix uteri	1.005(0.553, 1.826)	0.988		
Others	0.717(0.384, 1.339)	0.296	0.814(0.35, 1.893)	0.633
Radiation				
NO	1.159(0.667, 2.015)	0.601		
YES	0.512(0.251, 1.043)	0.065	0.48(0.201, 1.15)	0.1
Chemotherapy				
NO	1.048(0.438, 2.505)	0.917		
YES	0.835(0.501, 1.39)	0.487	0.68(0.255, 1.816)	0.442
Regional nodes				
0	1.073(0.623, 1.849)	0.8		
0~18	0.45(0.158, 1.28)	0.134	0.534(0.189, 1.504)	0.235
19~90	1.148(0.283, 4.66)	0.846	0.667(0.187, 2.376)	0.532
Marital				
Single/UnMarried	0.837(0.347, 2.016)	0.691		
Married	1.354(0.649, 2.824)	0.419	1.269(0.565, 2.852)	0.564
Divorced/Unknown	0.855(0.371, 1.97)	0.713	0.586(0.283, 1.214)	0.15
Surgery				
NO	1.281(0.711, 2.308)	0.409		
YES	0.65(0.334, 1.265)	0.205	0.543(0.228, 1.291)	0.167
Age category				
21~39	1.805(0.502, 6.491)	0.366		
40~44	0.552(0.049, 6.194)	0.63	0.48(0.058, 4.004)	0.498
45~59	0.991(0.448, 2.191)	0.982	0.677(0.176, 2.597)	0.569
60~97	0.747(0.403, 1.384)	0.353	0.62(0.176, 2.19)	0.458

Figure S4 Forest plot of the HRs comparing the EC and AC patients in the multivariate analyses in the matched cohort for DSS. EC, cervical endometrioid adenocarcinoma; AC, ordinary cervical adenocarcinoma; DSS, disease-specific survival.