Table S1 Univariable and multivariable analyses of OS in all enrolled PSC patients

Characteristics	Univariable analysis		Multivariable analysis	
	HR (95% CI)	P	HR (95% CI)	Р
Age (year)				
<65	Reference	2.224	Reference	
65–74	1.73 (1.38–2.16)	<0.001	1.74 (1.38–2.19)	<0.001
≥75	2.64 (2.09–3.33)	<0.001	2.43 (1.9–3.11)	<0.001
Sex				
Female	Reference		Reference	
Male	1.29 (1.08–1.54)	0.005	1.24 (1.03–1.48)	0.02
Race				
White	Reference			
Black	0.99 (0.73–1.34)	0.94		
Others [†]	0.85 (0.54–1.33)	0.47		
Year of diagnosis				
2000–2006	Reference		Reference	
2007–2013	1.18 (0.96–1.45)	0.11	1.1 (0.87–1.38)	0.42
2014–2020	0.8 (0.62–1.04)	0.09	0.69 (0.53–0.91)	0.009
Primary site				
Right upper lobe	Reference			
Right middle lobe	1.23 (0.84–1.79)	0.29		
Right lower lobe	1.06 (0.83–1.37)	0.64		
Left upper lobe	0.99 (0.79–1.24)	0.91		
Left lower lobe	0.94 (0.72-1.22)	0.62		
Size (cm)				
≤2	Reference		Reference	
2–4	1.51 (1.17–1.96)	0.002	1.41 (1.08–1.83)	0.01
4–6	1.67 (1.26–2.22)	<0.001	1.46 (1.08–1.96)	0.01
>6	1.66 (1.24–2.21)	0.001	2.1 (1.55–2.86)	<0.001
Surgery				
Sublobectomy	Reference			
Lobectomy/bilobectomy	0.96 (0.75–1.23)	0.74		
Differentiation	,			
Well/moderately differentiated	Reference		Reference	
Poorly differentiated	2.49 (1.48–4.2)	0.001	1.72 (0.99–2.99)	0.06
Undifferentiated	2.19 (1.26–3.82)	0.006	1.54 (0.86–2.77)	0.15
Unknown	2.09 (1.23–3.57)	0.007	1.53 (0.87–2.68)	0.14
Histological subtype	2.00 (1.20 0.01)	0.007	1.00 (0.07 2.00)	0.14
Pseudosarcomatous carcinoma	Reference		Reference	
		0.02		0.007
Pleomorphic carcinoma	0.76 (0.61–0.95)		0.72 (0.57–0.91)	
Giant cell carcinoma	0.69 (0.5–0.95)	0.02	0.79 (0.56–1.11)	0.18
Spindle cell carcinoma	0.64 (0.49–0.85)	0.002	0.81 (0.59–1.1)	0.17
Pulmonary blastoma	0.21 (0.1–0.43)	<0.001	0.26 (0.11–0.59)	0.001
Carcinosarcoma	0.83 (0.63–1.08)	0.17	0.74 (0.54–1.03)	0.07
N stage				
N0	Reference		Reference	
N1	1.87 (1.43–2.45)	<0.001	1.95 (1.44–2.64)	< 0.001
N2	1.55 (1.09–2.2)	0.01	1.58 (1.09–2.3)	0.02
NX [‡]	0.9 (0.65–1.25)	0.53	1.5 (0.97–2.3)	0.07
Summary stage [§]				
Localized	Reference		Reference	
Regional	1.7 (1.43–2.02)	<0.001	1.38 (1.12–1.69)	0.002
Chemotherapy				
No/unknown	Reference		Reference	
Yes	0.78 (0.63-0.96)	0.02	0.65 (0.51-0.83)	<0.001
Other malignancy ¹				
No	Reference			
Yes	1.11 (0.93–1.32)	0.24		

[&]quot;2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4 cm (included). So does the expression "4–6 cm". †, others included Asian/Pacific Islander and American Indian/Alaska Native; ‡, NX indicated that the N stage could not be assessed or the N stage was unknown; §, stage confirmed by the algorithm created by the SEER database. For more information: https://seer. cancer.gov/seerstat/variables/seer/Ird-stage/; 1, whether developed other in situ/malignant tumor before and after the diagnosis of PSC. OS, overall survival; PSC, pulmonary sarcomatoid carcinoma; HR, hazard ratio; CI, confidence interval; SEER, Surveillance, Epidemiology, and End Results.

Table S2 Univariable and multivariable analyses of CSS in all enrolled PSC patients

Characteristics	Univariable analysis		Multivariable analysis	
	HR (95% CI)	P	HR (95% CI)	Р
Age (year)				
<65	Reference	0.004	Reference	0.004
65–74	1.65 (1.25–2.16)	<0.001	1.76 (1.33–2.33)	<0.001
≥75	2.14 (1.61–2.84)	<0.001	2.22 (1.65–2.98)	<0.001
Sex				
Female	Reference		Reference	
Male	1.28 (1.03–1.58)	0.03	1.26 (1.01–1.58)	0.04
Race				
White	Reference	0.70		
Black	1.07 (0.74–1.53)	0.73		
Others [†]	0.7 (0.38–1.27)	0.24		
ear of diagnosis	Б. (D (
2000–2006	Reference	0.00	Reference	2.22
2007–2013	1 (0.78–1.29)	0.99	0.88 (0.67–1.17)	0.38
2014–2020	0.72 (0.54–0.97)	0.03	0.58 (0.42–0.8)	0.001
Primary site				
Right upper lobe	Reference			
Right middle lobe	1.45 (0.92–2.27)	0.11		
Right lower lobe	1.14 (0.83–1.57)	0.40		
Left upper lobe	1.07 (0.8–1.42)	0.66		
Left lower lobe	1.1 (0.8–1.51)	0.56		
Size (cm)				
≤2	Reference		Reference	
2–4	1.38 (0.99–1.93)	0.06	1.24 (0.88–1.74)	0.22
4–6	1.8 (1.27–2.57)	0.001	1.42 (0.98–2.05)	0.07
>6	2.01 (1.42–2.86)	<0.001	2.06 (1.43–2.97)	<0.00
Surgery				
Sublobectomy	Reference			
Lobectomy/bilobectomy	1.08 (0.79–1.47)	0.65		
Differentiation				
Well/moderately differentiated	Reference		Reference	
Poorly differentiated	2.04 (1.08–3.87)	0.03	1.63 (0.84–3.18)	0.15
Undifferentiated	1.74 (0.88–3.44)	0.11	1.43 (0.7–2.91)	0.32
Unknown	1.78 (0.93–3.43)	0.08	1.55 (0.79–3.05)	0.20
listological subtype				
Pseudosarcomatous carcinoma	Reference		Reference	
Pleomorphic carcinoma	0.64 (0.49–0.84)	0.001	0.6 (0.45–0.79)	<0.00
Giant cell carcinoma	0.71 (0.49–1.04)	0.08	0.74 (0.49–1.11)	0.15
Spindle cell carcinoma	0.64 (0.45–0.9)	0.01	0.76 (0.52–1.1)	0.14
Pulmonary blastoma	0.19 (0.07–0.52)	0.001	0.19 (0.06–0.59)	0.004
Carcinosarcoma	0.67 (0.48–0.94)	0.02	0.52 (0.34–0.79)	0.002
I stage				
N0	Reference		Reference	
N1	2.09 (1.54–2.84)	<0.001	1.9 (1.35–2.68)	<0.00
N2	1.72 (1.15–2.56)	0.008	1.48 (0.96–2.27)	0.08
NX^{\ddagger}	0.98 (0.65–1.49)	0.94	1.75 (1.02–3.01)	0.04
Summary stage§				
Localized	Reference		Reference	
Regional	2.01 (1.62–2.51)	<0.001	1.56 (1.21–2.01)	0.001
Chemotherapy				
No/unknown	Reference			
Yes	0.86 (0.67–1.11)	0.24		
Other malignancy ¹				
No	Reference			
Yes	0.85 (0.68-1.05)	0.14		

[&]quot;2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4 cm (included). So does the expression "4–6 cm". †, others included Asian/Pacific Islander and American Indian/Alaska Native; ‡, NX indicated that the N stage could not be assessed or the N stage was unknown; §, stage confirmed by the algorithm created by the SEER database. For more information: https://seer. cancer.gov/seerstat/variables/seer/Ird-stage/; 1, whether developed other in situ/malignant tumor before and after the diagnosis of PSC. CSS, cancer-specific survival; PSC, pulmonary sarcomatoid carcinoma; HR, hazard ratio; CI, confidence interval; SEER, Surveillance, Epidemiology, and End Results.

Table S3 The characteristics of all PSC patients after matching

Characteristics	Surgery (N=210)	Surgery + chemotherapy (N=210)	Р
Age (year)			0.17
<65	71 (33.8)	87 (41.4)	
65–74	93 (44.3)	89 (42.4)	
≥75	46 (21.9)	34 (16.2)	
Sex			0.77
Female	94 (44.8)	98 (46.7)	
Male	116 (55.2)	112 (53.3)	
Race			> 0.99
White	180 (85.7)	180 (85.7)	
Black	22 (10.5)	22 (10.5)	
Others [†]	8 (3.8)	8 (3.8)	
Year of diagnosis			0.96
2000–2006	34 (16.2)	32 (15.2)	
2007–2013	76 (36.2)	76 (36.2)	
2014–2020	100 (47.6)	102 (48.6)	
Primary site			0.84
Right upper lobe	69 (32.9)	71 (33.8)	
Right middle lobe	12 (5.7)	12 (5.7)	
Right lower lobe	47 (22.4)	39 (18.6)	
Left upper lobe	47 (22.4)	46 (21.9)	
Left lower lobe	35 (16.7)	42 (20.0)	
Size (cm)			0.87
≤2	14 (6.7)	18 (8.6)	
2–4	62 (29.5)	62 (29.5)	
4–6	67 (31.9)	62 (29.5)	
>6	67 (31.9)	68 (32.4)	
Surgery	, ,	, ,	> 0.99
Sublobectomy	16 (7.6)	17 (8.1)	
Lobectomy/bilobectomy	194 (92.4)	193 (91.9)	
Differentiation	,	,	0.46
Well/moderately differentiated	2 (1.0)	5 (2.4)	
Poorly differentiated	124 (59.0)	115 (54.8)	
Undifferentiated	30 (14.3)	38 (18.1)	
Unknown	54 (25.7)	52 (24.8)	
Histological subtype	, ,	, ,	0.49
Pseudosarcomatous carcinoma	65 (31.0)	59 (28.1)	
Pleomorphic carcinoma	80 (38.1)	75 (35.7)	
Giant cell carcinoma	13 (6.2)	18 (8.6)	
Spindle cell carcinoma	20 (9.5)	20 (9.5)	
Pulmonary blastoma	0 (0.0)	3 (1.4)	
Carcinosarcoma	32 (15.2)	35 (16.7)	
N stage	32 (13.2)	55 (.5)	0.52
N0	141 (67.1)	128 (61.0)	3.02
N1	37 (17.6)	40 (19.0)	
N2	19 (9.0)	27 (12.9)	
NX [‡]	13 (6.2)	15 (7.1)	
Summary stage [§]	10 (0.2)	10 (1.1)	0.54
Localized	68 (32.4)	75 (35.7)	0.54
Regional	142 (67.6)	135 (64.3)	
Other malignancy ¹	142 (07.0)	100 (04.0)	> 0.99
No	100 (50 6)	100 (50 1)	> 0.88
	123 (58.6)	122 (58.1)	
Yes	87 (41.4)	88 (41.9) of rounding. "2–4 cm" of tumor size indic	

Values are numbers (percentages), and percentages may not total 100 because of rounding. "2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4 cm (included). So does the expression "4–6 cm". †, others included Asian/Pacific Islander and American Indian/Alaska Native; †, NX indicated that the N stage could not be assessed or the N stage was unknown; §, stage confirmed by the algorithm created by the SEER database. For more information: https://seer.cancer.gov/seerstat/variables/seer/Ird-stage/; 1, whether developed other in situ/malignant tumor before and after the diagnosis of PSC. PSC, pulmonary sarcomatoid carcinoma; SEER, Surveillance, Epidemiology, and End Results.

Table S4 The characteristics of pleomorphic carcinoma patients after matching

Characteristics	Surgery (N=75)	Surgery + chemotherapy (N=75)	P
Age (year)			0.68
<65	24 (32.0)	27 (36.0)	
65–74	35 (46.7)	36 (48.0)	
≥75	16 (21.3)	12 (16.0)	
Sex			0.32
Female	28 (37.3)	35 (46.7)	
Male	47 (62.7)	40 (53.3)	
Race			0.32
White	61 (81.3)	64 (85.3)	
Black	13 (17.3)	8 (10.7)	
Others [†]	1 (1.3)	3 (4.0)	
ear of diagnosis			0.98
2000–2006	5 (6.7)	5 (6.7)	
2007–2013	23 (30.7)	24 (32.0)	
2014–2020	47 (62.7)	46 (61.3)	
Primary site			0.26
Right upper lobe	26 (34.7)	26 (34.7)	
Right middle lobe	3 (4.0)	6 (8.0)	
Right lower lobe	15 (20.0)	11 (14.7)	
Left upper lobe	21 (28.0)	14 (18.7)	
Left lower lobe	10 (13.3)	18 (24.0)	
Size (cm)			0.80
≤2	3 (4.0)	5 (6.7)	
2–4	29 (38.7)	27 (36.0)	
4–6	24 (32.0)	21 (28.0)	
>6	19 (25.3)	22 (29.3)	
Surgery	, ,		0.76
Sublobectomy	5 (6.7)	7 (9.3)	
Lobectomy/bilobectomy	70 (93.3)	68 (90.7)	
Differentiation	, ,	` ,	0.97
Poorly differentiated	45 (60.0)	46 (61.3)	
Undifferentiated	12 (16.0)	11 (14.7)	
Unknown	18 (24.0)	18 (24.0)	
√ stage	- (/		0.15
N0	51 (68.0)	42 (56.0)	21.0
N1	17 (22.7)	18 (24.0)	
N2	7 (9.3)	15 (20.0)	
Summary stage [§]	. (5.5)	(_5,0)	0.73
Localized	25 (33.3)	22 (29.3)	0.70
Regional	50 (66.7)	53 (70.7)	
Other malignancy ¹	00 (00.1)	55 (15.1)	>0.99
No	46 (61.3)	47 (62.7)	>0.33
Yes	29 (38.7)	28 (37.3)	

Values are numbers (percentages), and percentages may not total 100 because of rounding. "2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4 cm (included). So does the expression "4–6 cm". †, others included Asian/Pacific Islander and American Indian/Alaska Native; §, stage confirmed by the algorithm created by the SEER database. For more information: https://seer.cancer.gov/seerstat/variables/seer/Ird-stage/; 1, whether developed other in situ/malignant tumor before and after the diagnosis of PSC. PSC, pulmonary sarcomatoid carcinoma; SEER, Surveillance, Epidemiology, and End Results.

 $\textbf{Table S5} \ \ \textbf{The characteristics of giant cell carcinoma patients after matching}$

Characteristics	Surgery (N=18)	Surgery + chemotherapy (N=18)	Р
Age (year)			>0.99
<65	9 (50.0)	9 (50.0)	
65–74	5 (27.8)	5 (27.8)	
≥75	4 (22.2)	4 (22.2)	
Sex			>0.99
Female	7 (38.9)	8 (44.4)	
Male	11 (61.1)	10 (55.6)	
Race			0.44
White	16 (88.9)	13 (72.2)	
Black	1 (5.6)	3 (16.7)	
Others [†]	1 (5.6)	2 (11.1)	
ear of diagnosis			0.92
2000–2006	4 (22.2)	4 (22.2)	
2007–2013	10 (55.6)	9 (50.0)	
2014–2020	4 (22.2)	5 (27.8)	
Primary site			0.08
Right upper lobe	7 (38.9)	7 (38.9)	
Right middle lobe	4 (22.2)	0 (0.0)	
Right lower lobe	2 (11.1)	3 (16.7)	
Left upper lobe	5 (27.8)	4 (22.2)	
Left lower lobe	0 (0.0)	4 (22.2)	
Size (cm)			0.72
2–4	5 (27.8)	3 (16.7)	
4–6	9 (50.0)	10 (55.6)	
>6	4 (22.2)	5 (27.8)	
Surgery			0.47
Sublobectomy	2 (11.1)	0 (0.0)	
Lobectomy/bilobectomy	16 (88.9)	18 (100.0)	
Differentiation			0.15
Well/moderately differentiated	1 (5.6)	0 (0.0)	
Poorly differentiated	7 (38.9)	2 (11.1)	
Undifferentiated	7 (38.9)	10 (55.6)	
Unknown	3 (16.7)	6 (33.3)	
√ stage	, ,	,	0.57
N0	13 (72.2)	11 (61.1)	
N1	2 (11.1)	4 (22.2)	
N2	3 (16.7)	2 (11.1)	
NX [‡]	0 (0.0)	1 (5.6)	
Summary stage [§]	- ()	. ()	0.74
Localized	9 (50.0)	7 (38.9)	5.1-1
Regional	9 (50.0)	11 (61.1)	
Dther malignancy ¹	3 (00.0)	11 (01.1)	0.18
No	7 (38.9)	12 (66.7)	0.10
INO	7 (38.9) 11 (61.1)	6 (33.3)	

Values are numbers (percentages), and percentages may not total 100 because of rounding. "2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4 cm (included). So does the expression "4–6 cm". †, others included Asian/Pacific Islander and American Indian/Alaska Native; †, NX indicated that the N stage could not be assessed or the N stage was unknown; §, stage confirmed by the algorithm created by the SEER database. For more information: https://seer.cancer.gov/seerstat/variables/seer/Ird-stage/; 1, whether developed other in situ/malignant tumor before and after the diagnosis of PSC. PSC, pulmonary sarcomatoid carcinoma; SEER, Surveillance, Epidemiology, and End Results.

Table S6 The characteristics of spindle cell carcinoma patients after matching

Characteristics	Surgery (N=20)	Surgery + chemotherapy (N=20)	Р
Age (year)			>0.99
<65	8 (40.0)	8 (40.0)	
65–74	8 (40.0)	8 (40.0)	
≥75	4 (20.0)	4 (20.0)	
Sex			0.74
Female	6 (30.0)	8 (40.0)	
Male	14 (70.0)	12 (60.0)	
Race			0.35
White	16 (80.0)	18 (90.0)	
Black	2 (10.0)	2 (10.0)	
Others [†]	2 (10.0)	0 (0.0)	
Year of diagnosis			0.44
2000–2006	12 (60.0)	8 (40.0)	
2007–2013	1 (5.0)	2 (10.0)	
2014–2020	7 (35.0)	10 (50.0)	
Primary site			0.83
Right upper lobe	7 (35.0)	7 (35.0)	
Right middle lobe	2 (10.0)	1 (5.0)	
Right lower lobe	5 (25.0)	7 (35.0)	
Left upper lobe	1 (5.0)	2 (10.0)	
Left lower lobe	5 (25.0)	3 (15.0)	
Size (cm)			0.73
≤2	4 (20.0)	3 (15.0)	
2–4	3 (15.0)	6 (30.0)	
4–6	6 (30.0)	5 (25.0)	
> 6	7 (35.0)	6 (30.0)	
Surgery			>0.99
Sublobectomy	3 (15.0)	2 (10.0)	
Lobectomy/bilobectomy	17 (85.0)	18 (90.0)	
Differentiation			0.49
Well/moderately differentiated	2 (10.0)	0 (0.0)	
Poorly differentiated	11 (55.0)	11 (55.0)	
Undifferentiated	3 (15.0)	3 (15.0)	
Unknown	4 (20.0)	6 (30.0)	
N stage			0.67
NO	15 (75.0)	13 (65.0)	
N1	3 (15.0)	3 (15.0)	
N2	2 (10.0)	4 (20.0)	
Summary stage [§]			>0.99
Localized	7 (35.0)	7 (35.0)	
Regional	13 (65.0)	13 (65.0)	
Other malignancy ¹	. ,		0.34
No	12 (60.0)	8 (40.0)	
Yes	8 (40.0)	12 (60.0)	

Values are numbers (percentages), and percentages may not total 100 because of rounding. "2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4 cm (included). So does the expression "4–6 cm". †, others included Asian/Pacific Islander and American Indian/Alaska Native; §, stage confirmed by the algorithm created by the SEER database. For more information: https://seer.cancer.gov/seerstat/variables/seer/Ird-stage/; 1, whether developed other in situ/malignant tumor before and after the diagnosis of PSC. PSC, pulmonary sarcomatoid carcinoma; SEER, Surveillance, Epidemiology, and End Results.

 $\textbf{Table S7} \ \text{The characteristics of pseudosarcomatous carcinoma patients after matching}$

Characteristics	Surgery (N=59)	Surgery + chemotherapy (N=59)	Р
Age (year)			0.75
<65	21 (35.6)	25 (42.4)	
65–74	28 (47.5)	25 (42.4)	
≥75	10 (16.9)	9 (15.3)	
Sex			>0.99
Female	25 (42.4)	25 (42.4)	
Male	34 (57.6)	34 (57.6)	
Race			0.84
White	53 (89.8)	53 (89.8)	
Black	4 (6.8)	3 (5.1)	
Others [†]	2 (3.4)	3 (5.1)	
Year of diagnosis			0.73
2000–2006	9 (15.3)	7 (11.9)	
2007–2013	25 (42.4)	29 (49.2)	
2014–2020	25 (42.4)	23 (39.0)	
Primary site			0.85
Right upper lobe	19 (32.2)	17 (28.8)	
Right middle lobe	4 (6.8)	3 (5.1)	
Right lower lobe	9 (15.3)	12 (20.3)	
Left upper lobe	18 (30.5)	15 (25.4)	
Left lower lobe	9 (15.3)	12 (20.3)	
Size (cm)			0.86
≤2	6 (10.2)	8 (13.6)	
2–4	15 (25.4)	16 (27.1)	
4–6	16 (27.1)	17 (28.8)	
>6	22 (37.3)	18 (30.5)	
Surgery	,	,	>0.99
Sublobectomy	6 (10.2)	5 (8.5)	
Lobectomy/bilobectomy	53 (89.8)	54 (91.5)	
Differentiation	(11)		0.29
Well/moderately differentiated	0 (0.0)	3 (5.1)	0.20
Poorly differentiated	36 (61.0)	36 (61.0)	
Undifferentiated	9 (15.3)	10 (16.9)	
Unknown	14 (23.7)	10 (16.9)	
N stage	14 (20.7)	10 (10.0)	0.88
NO	46 (78.0)	44 (74.6)	0.00
N1	8 (13.6)	11 (18.6)	
N2	4 (6.8)	3 (5.1)	
NX [‡]	1 (1.7)	1 (1.7)	
Summary stage [§]	1 (1.7)	1 (1.7)	>0.99
Localized	23 (39.0)	22 (37.3)	∕∪.∃∃
	23 (39.0) 36 (61.0)		
Regional Other malignancy ¹	30 (01.0)	37 (62.7)	0.85
	24 (E7 C)	20 (54 0)	0.85
No	34 (57.6)	32 (54.2)	
Yes	25 (42.4)	27 (45.8) ause of rounding. "2-4 cm" of tumor size in	

Values are numbers (percentages), and percentages may not total 100 because of rounding. "2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4 cm (included). So does the expression "4–6 cm". †, others included Asian/Pacific Islander and American Indian/Alaska Native; †, NX indicated that the N stage could not be assessed or the N stage was unknown; §, stage confirmed by the algorithm created by the SEER database. For more information: https://seer.cancer.gov/seerstat/variables/seer/Ird-stage/; 1, whether developed other in situ/malignant tumor before and after the diagnosis of PSC. PSC, pulmonary sarcomatoid carcinoma; SEER, Surveillance, Epidemiology, and End Results.

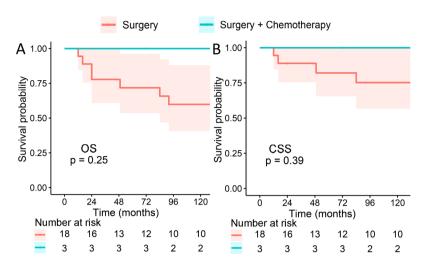


Figure S1 Survival analyses of pulmonary blastoma patients before matching. (A) Overall survival; (B) cancer-specific survival. OS, overall survival; CSS, cancer-specific survival.

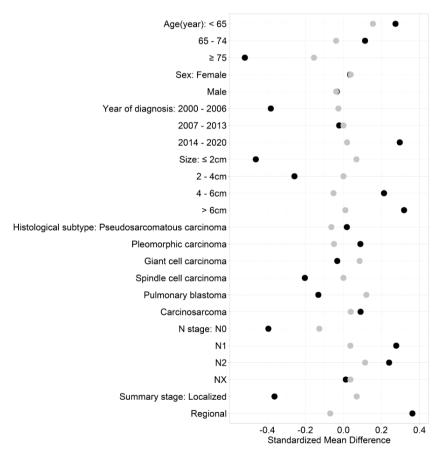


Figure S2 SMD of the pulmonary sarcomatoid carcinoma patients before and after matching. The black dot indicated the SMD before matching, and the grey dot indicated the SMD after matching. NX indicated that the N stage could not be assessed or the N stage was unknown. "2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4cm (included). So does the expression "4–6 cm". SMD, standardized mean difference.

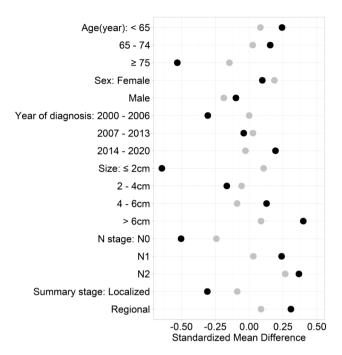


Figure S3 SMD of the pleomorphic carcinoma patients before and after matching. The black dot indicated the SMD before matching, and the grey dot indicated the SMD after matching. "2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4cm (included). So does the expression "4–6 cm". SMD, standardized mean difference.

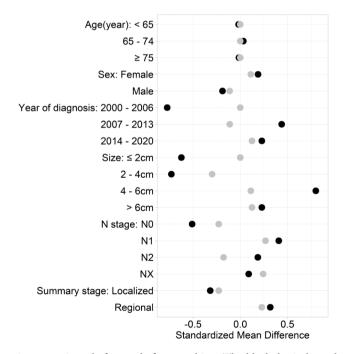


Figure S4 SMD of the giant cell carcinoma patients before and after matching. The black dot indicated the SMD before matching, and the grey dot indicated the SMD after matching. NX indicated that the N stage could not be assessed or the N stage was unknown. "2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4cm (included). So does the expression "4–6 cm". SMD, standardized mean difference.

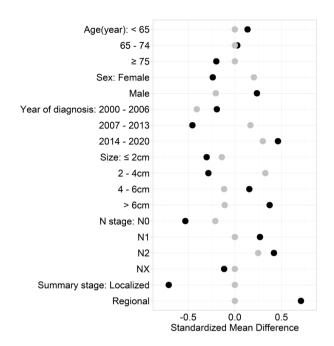


Figure S5 SMD of the spindle cell carcinoma patients before and after matching. The black dot indicated the SMD before matching, and the grey dot indicated the SMD after matching. NX indicated that the N stage could not be assessed or the N stage was unknown. "2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4cm (included). So does the expression "4–6 cm". SMD, standardized mean difference.

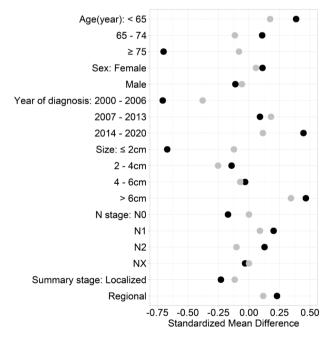


Figure S6 SMD of the carcinosarcoma patients before and after matching. The black dot indicated the SMD before matching, and the grey dot indicated the SMD after matching. NX indicated that the N stage could not be assessed or the N stage was unknown. "2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4cm (included). So does the expression "4–6 cm". SMD, standardized mean difference.

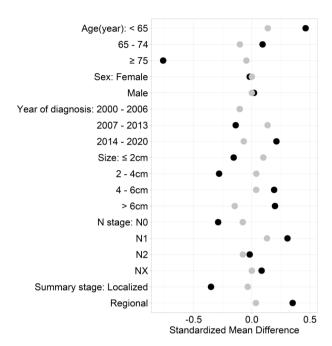


Figure S7 SMD of the pseudosarcomatous carcinoma patients before and after matching. The black dot indicated the SMD before matching, and the grey dot indicated the SMD after matching. NX indicated that the N stage could not be assessed or the N stage was unknown. "2–4 cm" of tumor size indicates that the tumor size was between 2 cm (not included) and 4cm (included). So does the expression "4–6 cm". SMD, standardized mean difference.

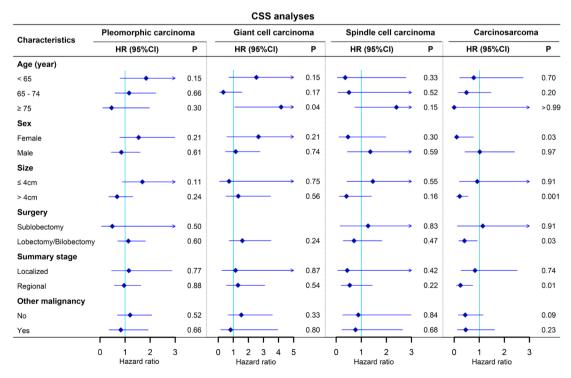


Figure S8 Subgroup analysis of cancer-specific survival in different subtypes of PSC. PSC, pulmonary sarcomatoid carcinoma; CSS, cancer-specific survival; HR, hazard ratio; CI, confidence interval.