

Supplementary table 1: Cox proportional hazard model analysis of prognostic factors for early local recurrence of soft tissue sarcoma

	Patients	Local recurrence	%	Univariable analysis				Multivariable analysis			
				HR	95 % CI	p-value	p-value ^b	HR	95 % CI	p-value	p-value ^b
Age											
< 64 years	275	40	15%	Reference				Reference			
≥ 64 years	402	89	22%	1.8	1.2 - 2.6	0.002	0.002	1.6	1.0 - 2.5	0.047	0.047
Sex											
Male	369	67	18%	Reference							
Female	308	62	20%	1.2	0.8 - 1.7	0.36	0.36				
Depth											
Superficial	267	54	20%	Reference							
Deep	402	74	18%	0.9	0.7 - 1.3	0.77	0.77				
Not available	8	1	13%								
Location											
Lower extremity	422	72	17%	Reference				Reference			
Upper extremity	164	30	18%	1.1	0.7 - 1.7	0.7		0.8	0.5 - 1.3	0.42	
Trunk	91	27	30%	1.9	1.2 - 3.0	0.005	0.03	1.8	1.1 - 2.9	0.02	0.03
Size											
< 5 cm	194	35	18%	Reference							
≥ 5 cm	475	91	19%	1.2	0.8 - 1.7	0.45	0.44				
Not available	8	3									
< 8 cm	373	66	18%	Reference							
≥ 8 cm	296	60	20%	1.3	0.9 - 1.8	0.16	0.16				
Not available	8	3									
Malignancy grade											
Low-grade	100	12	12%	Reference				Reference			
High-grade	558	112	20%	1.9	1.04 - 3.4	0.04	0.02	1.2	0.6 - 2.5	0.64	0.63
Not available	19	5									
Vascular invasion											
No	464	81	17%	Reference				Reference			
Yes	113	29	26%	1.8	1.2 - 2.7	0.008	0.01	1.5	0.96 - 2.3	0.07	0.07
Not available	100	19									
Necrosis											
No	226	36	16%	Reference							
Yes	368	72	20%	1.4	0.9 - 2.0	0.14	0.13				
Not available	83	21									
Growth pattern											
Pushing	26	1	3.8%	Reference							
Infiltrative	174	37	21%	6.5	0.9 - 47.2	0.07	0.01				
Not available	477	91									
Histology											
UPS	165	43	26%	Reference				Reference			
Leiomyosarcoma	146	23	16%	0.5	0.3 - 0.9	0.01		0.5	0.3 - 0.8	0.006	
Liposarcoma	70	7	10%	0.3	0.1 - 0.7	0.004		0.3	0.1 - 0.7	0.006	
MPNST	30	3	10%	0.3	0.1 - 1.1	0.07		0.5	0.1 - 1.6	0.24	
Myxofibrosarcoma	112	21	19%	0.6	0.4 - 1.1	0.09		0.6	0.4 - 1.1	0.12	
Synovial sarcoma	43	10	23%	0.7	0.4 - 1.1	0.34		0.9	0.4 - 1.9	0.73	
Other	111	22	20%	0.7	0.4 - 1.1	0.14	0.02	0.8	0.4 - 1.3	0.26	0.04
Surgical procedure ^a											
Local excision	561	101	18%	Reference							
Amputation	25	1	4.0%	0.2	0.05 - 1.6	0.13	0.047				
Final surgical margin											
R0 Wide	377	41	11%	Reference				Reference			
R0 Marginal	250	66	26%	2.9	1.9 - 4.2	< 0.001		2.9	1.9 - 4.4	< 0.001	
R1	49	22	45%	5.6	3.3 - 9.4	< 0.001	< 0.001	4.2	2.2 - 7.8	< 0.001	< 0.001
Not available	1	0									
Radiotherapy											
No	416	87	21%	Reference							
Yes	261	42	16%	0.7	0.5 - 1.1	0.11	0.1				
Chemotherapy											
No	586	108	18%	Reference							
Yes	91	21	23%	1.2	0.7 - 1.8	0.54	0.55				

Abbreviations: UPS, undifferentiated pleomorphic sarcoma; MPNST, malignant peripheral nerve sheath tumor

^a Not applicable to the 91 patients with tumours located to the trunk wall.^b Overall likelihood ratio test.

Supplementary table 2: Cox proportional hazard model analysis of prognostic factors for early metastasis of soft tissue sarcoma

	Patients	Metastasis	%	Univariable analysis				Multivariable analysis			
				HR	95 % CI	p-value	p-value ^b	HR	95 % CI	p-value	p-value ^b
Age											
< 64 years	275	75	27%	Reference							
≥ 64 years	402	115	29%	1.2	0.9 - 1.6	0.18	0.18				
Sex											
Male	369	105	28%	Reference							
Female	308	85	28%	1.0	0.8 - 1.4	0.87	0.87				
Depth											
Superficial	267	50	19%	Reference							
Deep	402	139	35%	2.1	1.5 - 2.9	< 0.001	< 0.001	Reference			
Not available	8	1						1.4	0.9 - 2.1	0.09	0.09
Location											
Lower extremity	422	127	30%	Reference				Reference			
Upper extremity	164	34	21%	0.7	0.6 - 0.97	0.03		0.8	0.5 - 1.2	0.2	
Trunk	91	29	32%	1.1	0.7 - 1.6	0.72	0.06	0.8	0.5 - 1.3	0.31	0.31
Size											
< 5 cm	194	20	10%	Reference				Reference			
≥ 5 cm	475	167	35%	4.3	2.7 - 6.8	< 0.001	< 0.001	2.1	1.2 - 3.6	0.006	0.006
Not available	8	3									
< 8 cm	373	66	18%	Reference				Reference			
≥ 8 cm	296	121	41%	2.9	2.1 - 3.9	< 0.001	< 0.001	1.7	1.1 - 2.5	0.009	0.009
Not available	8	3									
Malignancy grade											
Low-grade	100	6	6.0%	Reference				Reference			
High-grade	558	183	33%	6.7	3.0 - 15.2	< 0.001	< 0.001	3.2	1.2 - 8.3	0.02	0.02
Not available	19	1									
Vascular invasion											
No	464	108	23%	Reference				Reference			
Yes	113	64	57%	3.6	2.6 - 4.9	< 0.001	< 0.001	2.4	1.7 - 3.3	< 0.001	< 0.001
Not available	100	18									
Necrosis											
No	226	30	13%	Reference				Reference			
Yes	368	143	39%	3.7	2.5 - 5.5	< 0.001	< 0.001	1.8	1.1 - 2.8	0.02	0.02
Not available	83	17									
Growth pattern											
Pushing	26	4	15%	Reference							
Infiltrative	174	54	31%	2.3	0.8 - 6.4	0.1	0.07				
Not available	477	132									
Histology											
UPS	165	50	30%	Reference				Reference			
Leiomyosarcoma	146	46	32%	1.0	0.7 - 1.5	0.97		1.1	0.7 - 1.7	0.64	
Liposarcoma	70	13	19%	0.5	0.3 - 0.9	0.03		0.5	0.3 - 1.1	0.09	
MPNST	30	10	33%	1.1	0.5 - 2.1	0.86		1.8	0.9 - 3.6	0.1	
Myxofibrosarcoma	112	21	19%	0.6	0.3 - 0.9	0.03		0.6	0.3 - 1.0	0.06	
Synovial sarcoma	43	21	49%	1.5	0.9 - 2.5	0.13		1.2	0.7 - 2.2	0.52	
Other	111	29	26%	0.8	0.5 - 1.3	0.38	0.01	1.2	0.7 - 2.1	0.6	0.04
Surgical procedure ^a											
Local excision	561	150	27%	Reference				Reference			
Amputation	25	11	44%	1.9	1.05 - 3.5	0.04	0.06	1.7	0.8 - 3.5	0.19	0.18
Final surgical margin											
Wide	377	93	25%	Reference				Reference			
Marginal	250	78	31%	1.4	1.04 - 1.9	0.03		1.5	1.0 - 2.3	0.04	
Intralesional	49	19	39%	1.9	1.2 - 3.1	0.01	0.01	1.7	0.8 - 3.4	0.16	0.09
Not available	1	0									
Radiotherapy											
No	416	90	22%	Reference				Reference			
Yes	261	100	38%	1.9	1.4 - 2.6	< 0.001	< 0.001	1.0	0.7 - 1.5	0.95	0.95
Chemotherapy											
No	586	154	26%	Reference				Reference			
Yes	91	36	40%	1.5	1.0 - 2.1	0.03	0.04	0.6	0.4 - 1.0	0.046	0.046

Abbreviations: UPS, undifferentiated pleomorphic sarcoma; MPNST, malignant peripheral nerve sheath tumor

^a Not applicable to the 91 patients with tumours located to the trunk wall.^b Overall likelihood ratio test.