

Figure S1. Recurrence-free survival (RFS) curves and disease-specific survival (DSS) curves after surgical resection of retroperitoneal sarcoma. The log-rank test was used for comparison. The left and right panels show the RFS and DSS curves according to the tumor entity, simple or extended resection, baseline serum CRP level (cutoff 0.5 mg/dl), PD-L1 expression in sarcoma tissue, and PD-L2 expression in sarcoma tissue.

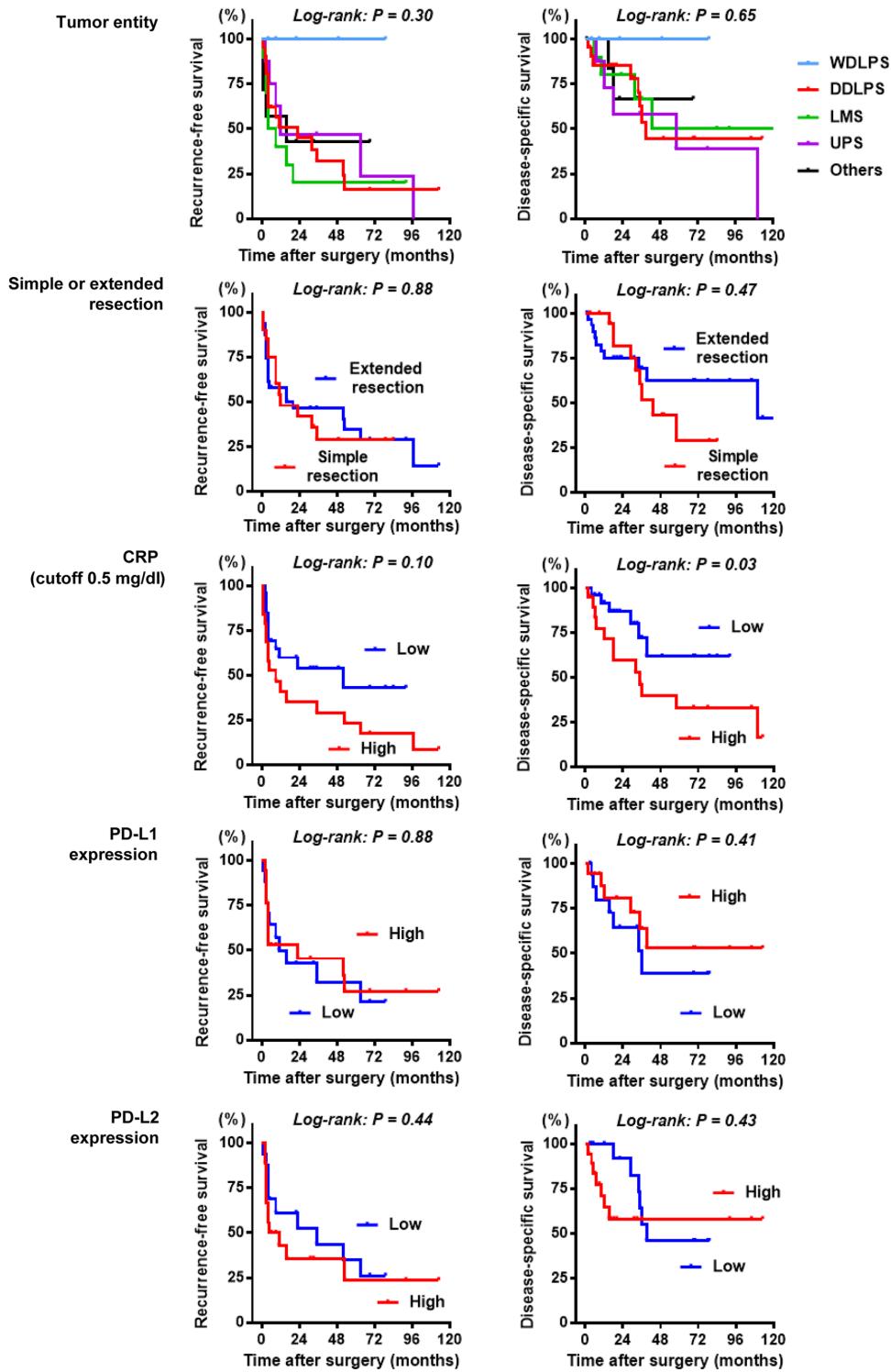


Table SI. Primary and secondary antibodies used for immunohistochemical staining analysis in the present study.

Antigen	Supplier	Catalogue number	Clone	Clonality	Antigen retrieval	Dilution rate	Incubation time	Incubation temperature, °C
PD-L1	Cell Signaling Technology	13684	E1L3N	Rabbit monoclonal	10 mM citric acid, pH 6.0 Autoclave for 20 min	1:100	Overnight	4
PD-L2	Cell Signaling Technology	82723	D7U8C	Rabbit monoclonal	10 mM citric acid, pH 6.0 Autoclave for 20 min	1:200	Overnight	4
PD-1	Abcam	ab52587	NAT105	Mouse monoclonal	1 mM EDTA, pH 8.0 Autoclave for 20 min	1:100	Overnight	4
Ki-67	Dako; Agilent Technologies, Inc.	IR626	MIB-1	Mouse monoclonal	10 mM citric acid, pH 6.0 Autoclave for 20 min	Ready-to-use 1 h	Room temperature	
Anti-mouse and anti-rabbit IgG biotin-conjugated secondary antibodies	Nichirei Corporation	426072	-	Goat polyclonal	-	Ready to use 10 min	Room temperature	

PD-L1, program death ligand-1; PD-L2, program death ligand-2; PD-1, programmed cell death protein 1; ETDA, thylenediaminetetraacetic acid; IgG, immunoglobulin G.

Table SII. Paired pathology of biopsy tissues and surgically resected tissues in 10 patients with retroperitoneal sarcoma.

Age at surgery, years	Sex	Pathology		
		Biopsy tissue	Resected tissue	Concordance
62	M	High-grade sarcoma (subtype, not determined)	LMS	Yes (partially)
70	M	LMS or Rhabdomyosarcoma	DDLPS	No
53	F	DDLPS or UPS or Malignant solitary fibrous tumor	UPS	Yes (partially)
54	M	DDLPS	DDLPS	Yes
72	M	DDLPS	DDLPS	Yes
65	M	Inflammatory tissue	DDLPS	No
59	M	High-grade sarcoma (subtype, not determined)	Sarcoma, NOS	Yes
57	M	High-grade sarcoma (subtype, not determined)	Sarcoma, NOS	Yes
78	F	LMS	LMS	Yes
46	M	DDLPS or fibromyxoid sarcoma or myxofibrosarcoma	DDLPS	Yes (partially)

LMS, leimyosarcoma; DDLPS, de-differentiated liposarcoma; UPS, undifferentiated pleomorphic sarcoma; NOS, not otherwise specified; M, male; F, female.

Table SIII. Resected organs, major vessels, and major muscles in 31 patients.

Resected organs, major vessels, muscles	N	%
Total	31	100
Number of resected organs, major vessels and major muscles		
1	18	58
2	6	19
3	6	19
4	1	3
Concomitant procedure		
Total nephrectomy	15	48
Patial nephrectomy	1	32
Total cystectomy	2	6
Partial cystectomy	2	6
Colectomy	6	19
Rectal resection	2	6
Small bowel resection	1	3
Pancreaticoduodenectomy	1	3
Hystero-oophorectomy	1	3
Parital hepatectomy	1	3
Resection of psoas muscle	11	35
Segmental resection of IVC	2	6
Resection of iliac artery	3	10

IVC, inferior vena cava.