

Supplementary Material

Table S1. Thimet oligopeptidase (THOP1) expression and tumor growth delay in the patient-derived sarcoma xenografts as determined by enzyme-linked immunoassay (ELISA) and immunohistochemistry (IHC).

Xenografts	THOP1 IHC SCORE	THOP1 ELISA (ng/g total protein)	Tumor Growth Delay (day 29)	
			CBR-049	CBR-050
UZLX-STs84 ^{UPS}	0	22.67 ± 3.15	52.95	29.28
UZLX-STs216 ^{MFS}	1	143.27 ± 50.82	77.65	n/d
UZLX-STs234 ^{eOS}	1	197.60 ± 37.26	47.39	n/d
UZLX-STs211A ^{UPS}	1	224.04 ± 59.37	59.72	n/d
UZLX-STs22 ^{LMS}	2	26.84 ± 1.80	71.34	10.81
UZLX-STs7 ^{SynSa}	2	74.81 ± 13.55	75.75	31.38
UZLX-STs128 ^{LMS}	2	203.86 ± 22.06	81.89	15.46
UZLX-STs204 ^{DDLPS}	2	299.36 ± 6.38	78.01	n/d
UZLX-STs89 ^{MFS}	3	29.98 ± 8.04	94.78	87.24
UZLX-STs185 ^{IS}	3	171.31 ± 23.71	86.39	59.57

DDLPS: dedifferentiated liposarcoma; eOS: extraskeletal osteosarcoma; IHC: immunohistochemistry; IS: intimal sarcoma; LMS: leiomyosarcoma; MFS: myxofibrosarcoma; n/d: not done; SynSa: synovial sarcoma; UPS: undifferentiated pleomorphic sarcoma; 0: negative; 1: weakly positive; 2: intermediate positive; 3: strongly positive.

Table S2. Detailed description on the number of mice/tumors included in each experiment. Data represent number of mice/tumors at begin of the experiment (day 1) and number mice/tumors at the day of statistical analysis (day 36/day 29) between brackets.

Xenografts	Control	Doxo	CBR-049	CBR-050	Aldoxo
UZLX-STs7 ^{SynSa}	12 (4)	12 (11)	10 (9)	8 (4)	n/d
UZLX-STs22 ^{LMS}	7 (3)	7 (4)	8 (6)	8 (4)	n/d
UZLX-STs84 ^{UPS}	9 (4)	9 (8)	10 (6)	10 (3)	n/d
UZLX-STs89 ^{MFS}	11 (9)	11 (11)	11 (10)	11 (10)	n/d
UZLX-STs128 ^{LMS}	10 (8)	10 (9)	10 (9)	10 (7)	n/d
UZLX-STs185 ^{IS}	9 (5)	9 (8)	10 (8)	10 (7)	n/d
UZLX-STs204 ^{DDLPS}	10 (9)	12 (12)	12 (12)	n/d	12 (12)
UZLX-STs211A ^{UPS}	10 (10)	12 (12)	12 (11)	n/d	12 (12)
UZLX-STs216 ^{MFS}	10 (10)	12 (11)	12 (12)	n/d	12 (9)
UZLX-STs234 ^{eOS}	10 (10)	11 (11)	12 (12)	n/d	11 (7)

DDLPS: dedifferentiated liposarcoma; eOS: extraskeletal osteosarcoma; IS: intimal sarcoma; LMS: leiomyosarcoma; MFS: myxofibrosarcoma; n/d: not done; SynSa: synovial sarcoma; UPS: undifferentiated pleomorphic sarcoma.

Table S3. Relative tumor volumes compared to baseline (%) at the day of statistical analysis presented as average \pm standard deviation. DDLPS: dedifferentiated liposarcoma; eOS: extraskeletal osteosarcoma; IS: intimal sarcoma; LMS: leiomyosarcoma; MFS: myxofibrosarcoma; n/d: not done; SynSa: synovial sarcoma; UPS: undifferentiated pleomorphic sarcoma; * $p < 0.05$ compared to control; # $p < 0.05$ compared to doxorubicin (doxo); ** $p < 0.005$ compared to control; ## $p < 0.005$ compared to doxo; *** $p < 0.0005$ compared to control; ### $p < 0.0005$ compared to doxo.

	Xenograft model	Control	Doxo	CBR-049	CBR-050	Aldoxo
Day 36	UZLX-ST57 ^{SynSa}	1801 \pm 1269	135 \pm 108**	187 \pm 235*	998 \pm 317##	n/d
	UZLX-ST522 ^{LMS}	1098 \pm 824	962 \pm 542	190 \pm 28*#	604 \pm 275	n/d
	UZLX-ST584 ^{UPS}	2800 \pm 1398	1579 \pm 1087	486 \pm 503*#	1799 \pm 130	n/d
	UZLX-ST589 ^{MFS}	898 \pm 556	154 \pm 190**	51 \pm 20***##	238 \pm 249**	n/d
	UZLX-ST5128 ^{LMS}	775 \pm 338	508 \pm 154	62 \pm 43***##	661 \pm 389	n/d
	UZLX-ST5185 ^{IS}	2804 \pm 984	938 \pm 381**	444 \pm 252***##	1340 \pm 822	n/d
Day 29	UZLX-ST5204 ^{DDLPS}	559 \pm 350	276 \pm 162	123 \pm 43***##	n/d	125 \pm 49***##
	UZLX-ST5211A ^{UPS}	657 \pm 275	502 \pm 209*	265 \pm 90***##	n/d	275 \pm 119***##
	UZLX-ST5216 ^{MFS}	786 \pm 569	491 \pm 333	176 \pm 242***##	n/d	82 \pm 54***###
	UZLX-ST5234 ^{eOS}	453 \pm 219	451 \pm 284	238 \pm 79**#	n/d	257 \pm 72*#

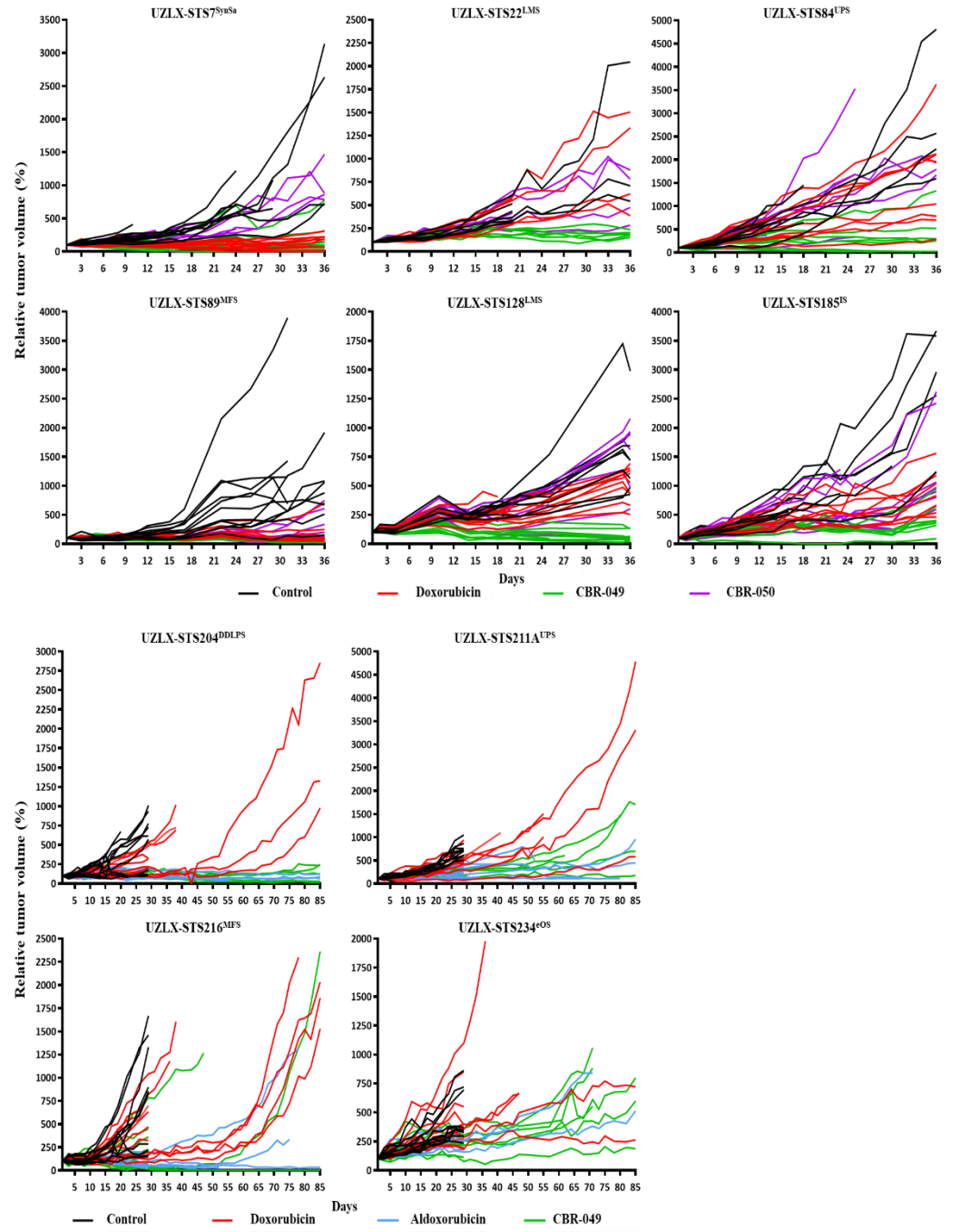


Figure S1. Individual relative tumor growth curves of all ten xenograft experiments.

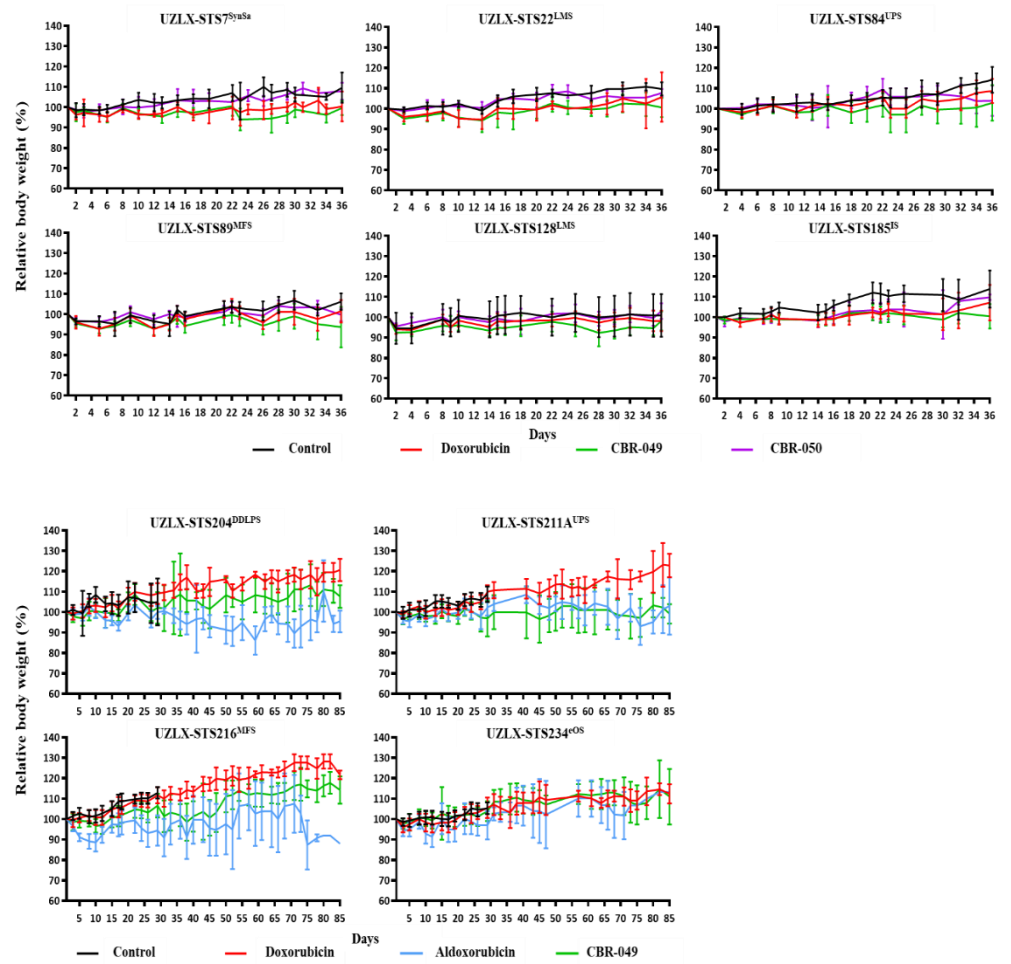


Figure S2. Relative body weight (%) compared to baseline in all ten patient-derived sarcoma xenografts included in this study, presented as average \pm standard deviation.