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SUPPLEMENTAL DATA

OncoImmune machine-learning model predicts immune response and prognosis in leiomyosarcoma

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Table S1. Genes affecting monocyte differentiation

RBP7	CDA	RPL11	CSF3R	PRDX1	PDE4B
RPL5	TMED5	CTSS	S100A11	S100A4	RPS27

LMNA	MNDA	RCSD1	SELL	RGS2	CD55
G0S2	FAM49A	RAB10	QPCT	CYP1B1	ZFP36L2
BCL11A	ACTR3	CXCR4	CD302	ITGA4	RPL37A
SLC11A1	RPL32	CRTAP	RPL29	EIF4E3	RPL35A
BST1	NAAA	PLAC8	HSD17B11	RPL34	ANXA5
RPS3A	TMEM154	MARCH1	HMGB2	FYB1	RPL37
MAP3K1	VCAN	MEF2C	ARRDC3	CAST	REEP5
TNFAIP8	HBEGF	CD14	RPS14	TNIP1	CCDC69
RNF130	RACK1	SERPINB1	LY86	TMEM170B	ATXN1
RIPOR2	LST1	CNPY3	HSP90AB1	PLA2G7	OGFRL1
FYN	VNN2	RNASET2	CREB5	CPVL	PTPN12
TFEC	GSTK1	SLC25A6	TIMP1	IL2RG	SH3BGRL
RPL39	G6PD	ASAH1	PTK2B	RAB11FIP1	RPL7
PAG1	RPL30	TRPS1	DENND3	RPS6	HACD4
DNAJA1	ALDH1A1	KLF4	TXN	HSPA5	RAPGEF1
IFITM2	TALDO1	EIF4G2	RPS13	CD44	MS4A6A
FTH1	SLC3A2	FERMT3	ATG16L2	JAML	SORL1
NRGN	FLI1	APLP2	CELF2	ALOX5	VSIR
DDIT4	RPS24	ENTPD1	ADD3	MXI1	CD4
CLEC2B	CLEC12A	METTL7A	NR4A1	ZNF385A	CD63
LYZ	AC020656.1	BTG1	PLXNC1	LTA4H	TXNRD1
SELPLG	ALDH2	ERP29	DYNLL1	ULK1	ITM2B
IRS2	RAB20	SLC7A7	RPS29	GNG2	SIPA1L1
RIN3	HSP90AA1	PDIA3	BCL2A1	ANPEP	CPPED1
RPS15A	YPEL3	CORO1A	ITGAX	RPL13	ASGR1
PER1	RPL23A	EVI2B	RPL19	PECAM1	CD300E
CD300LF	SLC9A3R1	SECTM1	CST3	SULF2	CTSZ
GPX4	PRAM1	ICAM1	ICAM3	CDKN2D	C19orf38
RAB3D	CALR	CAPNS1	FTL	CD37	RPL13A
RPS11	MYADM	RPS9	LILRA5	LILRB1	ADA2
BID	SDF2L1	CSTB	TNFRSF18	TNFRSF4	RGL1
CAMSAP2	KMO	WNT5A	ARHGAP31	MGLL	SLC7A11
DOCK4	IL3RA	MAOA	SDC2	EGR2	FMNL3
C15orf48	MAF	CD40	IL4I1	FPR3	MAFF
FOXP1	RPS16	FPR1	CLEC4A	HSPA8	MSC
RPL18A	RPS21	TNFAIP3	ARHGAP10	AHR	RPL6
GLUL	ACSL5	TOMM7	TRAF1	SNX10	BNIP3L
CAT	KCNN4	HSP90B1	CCL3	RPS4X	FCGR2A
FAM198B	KCTD12	SERTAD1	NACA	EML4	LDHB
KLHL24	ATF5	MARCKSL1	TMEM123	PLBD1	SULT1A1
TPM4	PTPRE	IL18BP	ARHGAP4	CD48	SCPEP1
ITPRIPL2	MYO1F	TSC22D3	DOCK8	LSP1	CD53
GRN	PYGL	CDKN1A	SCP2	GPR35	UGP2
CEBPD	EIF3L	GPCPD1	SPATA13	ATP1B1	SLC8A1
BIRC3	SRC	NFKBIA	RPL3	NFKB1	HEBP2
SLC25A37	RPS23	DSE	EFHD2	ME1	ABCC3
SDC4	PLP2	IQGAP2	CD274	RAP2B	FSCN1

HSPA1A	HIF1A	GBP2	EPOP	LIPA	FAM45A
PDIA6	IFNGR2	PTPRJ	CDC37	LRRK2	EIF4B
ZFP36L1	PCBP2	PDCD4	SLC2A3	MANF	CHORDC1
IFI6	DUSP2	SOX4	PSMA3	TNIP2	HSBP1
TNFRSF1B	GRK2	STK17B	PLEKHO2	FLVCR2	CRELD2
LAMP1	EVL	JUND	CCL4	NFXL1	SNX18
CXCL8	STIP1	SYNGR2	RAB7B	RPL26	LILRB4
IL1B	C15orf39	CRIM1	EIF3F	ST3GAL2	AC007952.4
TOB1	RPL9	AP1S2	VCP	SLC39A8	MEGF9
GLA	LIMD2	PTPRC	BASP1	HSPB1	IRF2BP2
AGTPBP1	FAM129B	LRRC25	BTG2	MLLT6	BTG3
HSD11B1	METTL9	AES	PGD	SH3KBP1	TUBA1C
CREBL2	H1FX	CD33	DHRS7	ZNF366	GAS7
SPTLC2	FKBP2	CD93	PIK3R5	SDF4	ZFHX3
TRIM8	CD81	CREBRF	ACVR2A	RNF149	KLF3
RHOQ	BAZ1A	EEF1A1	SLC1A3	UTRN	NEAT1
CLEC5A	OAS3	CSTA	NFKBIE	HLA-DQA1	CAPG
IFIH1	YWHAG	PEA15	CCR1	ZFAS1	C1orf122
VPS13C	GSR	LACC1	MARCKS	MTHFD2	HIST1H1D
DNAJB11	TNIP3	NAIP	ABCC1	KYNU	C9orf72
PLXDC2	SLC15A3	FAM129A	MIS18BP1	FOXO3	PPIF
OSGIN1	SPCS2	MAP4K4	SPPL2A	PRKCB	CYP27A1
ETV6	LAPTM5	SLC2A6	ARL8B	EIF3E	ATP13A3
ERAP2	CFLAR	HSPH1	CTSD	RHOF	LBR
SLC16A3	SMAP2	UBE2Z	PRKD3	NRP1	LYST
CSF1R	JDP2	AC008105.3	TPT1	JMJD1C	NAA50
FGD4	AGTRAP	TNFSF13B	IL27RA	SLC1A5	PDE4DIP
SGPL1	GCLM	TMEM106A	RAB13	NQO1	HSPE1
NINJ1	PTP4A2	MMP9	ACADVL	CD9	TNRC6B
NBN	ANKRD44	CTSH	SLC43A2	EEF2	AIF1
SLAMF8	IL7R	ENG	RAB27A	TXNIP	GNA12
ODF3B	ATP2B1	ABHD5	HYOU1	MLEC	OASL
FCER2	CEBPB	FGR	CCL4L2	SERPINA1	CYTOR
CCL23	SEL1L	LILRB3	OLR1	PTAFR	FXYD5
ITGAV	MYO1G	SGPP2	CNBP	ZFP36	BATF3
SLC6A6	ISG15	ZDHHC20	KLF2	FCER1G	IL1R2
PHLDA1	TKT	SAT1	IFIT3	GBP1	ARRDC4
LGALS2	CD83	SELENOK	GSN	IL1RN	HIP1
EHD1	PDIA4	YPEL5	MX1	ORAI1	IFI30
MGST1	PIM3	CES1	SMCHD1	MXD1	TLE3
ADAM17	AC078850.1	SEMA4A	ADGRE5	CD36	MCL1
FBXL5	SLAMF7	MIDN	CUL4A	LITAF	RNF19B
NLRP3	STEAP4	SH3BP5	IL6ST	EMP1	CCL26
RIT1	MED13L	SKIL	SAMD9L	POU2F2	FAM133B
SLC27A3	DUSP6	CFD	PARP14	TUBA1A	GPAT3
RPS10	IFIT2	TRIB1	FN1	TDP2	TNFAIP6
IFIT1	RILPL2	KDM6B	FOSB	CCL5	AOAH

RHOU	CCL17	NCF1	FCN1	INSIG1	FOSL2
AL031316.1	MS4A7	RNASE1	KLF10	F13A1	SAMD9
XAF1	EIF2AK2	SLC5A3	IRF1	S100A8	IRAK3
MRPS6	MAFB	FBP1	S100A12	C5AR1	XIST
MX2	CFP	APOBEC3A	NAMPT	EREG	THBS1
SOD2	CD52	S100A9	S100A6	MGST3	CCDC88A
MDH1	COX5B	COX7C	HLA-B	FAM20C	CSF2RA
CYBB	NDUFA1	COX6C	VIM	MYOF	CCND2
TUBA1B	B2M	SPN	SCIMP	H3F3B	PLD3
CHCHD10	TYMP	CTNNAL1	PFKP	SCD	CD276
CD226	ACP5	APOC1	ACOT7	CD1B	RASGRP3
GALM	NCAPH	CALCRL	PALLD	TREM2	NCOA7
GPNMB	LPL	NET1	A2M	VAT1	PPP1R14A
APOE	SPP1	TNC	CKB	QPRT	CAVIN1
SRGAP1	MATK	ATP5MC3	PNRC1	PTMS	PKIB
ACAT2	LDHA	ATP5F1B	BLOC1S6	ATP5F1A	PRDX2
ANXA11	FLT1	EBP	KTN1	COX8A	RAMP1
HLA-A	IGSF6	DBI	TMEM14C	CACNB4	MFSD12
FASN	CD209	CD200R1	RRP1B	FABP5	PPFIBP1
ALCAM	FADS1	ACSL3	EIF1	UQCRC1	HLA-E
SLC39A10	CD1E	PPIA	PKM	HLA-C	CALM2
KIAA0930	LILRB2	COX6A1	CD1C	NDUFS8	PEBP1
TFRC	SLC25A5	CYFIP1	ATP5ME	DHCR24	NAGPA
MRPL34	ALDH1A2	MSN	NPC2	ADK	COX7B
CALM1	AL138899.1	TRPV2	DNPH1	PPP1R14B	MPEG1
IDH1	ZNF706	CORO1B	SRGN	GGCT	PCM1
ALOX15	RAB7A	EPB41L2	PRDX5	KIAA0100	FADS2
MRC1	MRAS	DUSP1	MZT2B	HOMER2	HMG20B
TUBB	TMEM160	APBB1IP	FIS1	TREM1	TMEM91
SPINT2	PLSCR1	PGP	PPP1R7	IER5L	ARHGAP18
TTC3	MTRNR2L8	CXXC5	ETS2	DNMT1	COTL1
NUCKS1	PYCARD	LYN	SGK1	JUNB	JAK1
GM2A	PILRA	GPSM3	HCLS1	EMP3	CKLF
TLR2	LGALS3	GRINA	CASP4	EPSTI1	CXCL16
HLA-F	CARD16	OAS2	RNF213	IFITM3	FOS
IER5	DAZAP2	STAT1	REL	DMXL2	PPP1R18
APOL6	PID1	IER3	CKAP4	IRF7	MT2A
NFKBIZ	SFPQ	SERPINB9	NBPF19	RASSF5	CASP1
IFI44	CCNL1	NUMB	ATP2B1-AS1	PLAUR	CCL22
TNFSF10	RNF144B	GLRX	HMOX1	IER2	SAMSN1
SP110	TNFAIP2	FABP4	HLA-DRB5	NABP1	PLIN2
MT1X	ID2	ACSL1	VAMP8	NME1	SEC11C
HLA-DRB1	APRT	CLEC10A	HLA-DPA1	LIMS1	SDCBP
AQP9	C1orf54	PIK3AP1	FNDC3B	C1orf162	TLR4
ATP5IF1	PPT1	RPS8	LAMTOR2	IARS2	SMIM14
RPS18	RPL10A	HMGN3	BRI3	EIF4EBP1	MTDH

RPL7A	LMO2	CCDC85B	CLEC7A	ATP5MC2	GLIPR1
TMPO	ARL6IP4	BRI3BP	GTF3A	HMGB1	EID1
FAM96A	ANP32A	MRPS34	NDUFB10	ROGDI	COX4I1
TMEM256	NAA38	TIMP2	SIRPA	HELZ2	ATP5F1D
NDUFS7	RPS28	STX10	NDUFB7	REX1BD	VASP
AP2S1	TSPO	IRAK2	LUCAT1	LPAR1	DGAT2
GGT5	NFE2L2	HCST	LSM4	VCL	AKT1S1
APEX1	CMPK2	AC073611.1	AHNAK	RAB31	LINC01943
GTF2I	CD74	DDX58	ADAR	HERC5	IFI44L
SERPINB8	HEXB	AKAP9	SLC43A3	EIF5	PPP1R15B
PITPNA	RAB5A	SGTB	KCNE1	PARP9	BST2
ZC3H12A	STK17A	B4GALT5	DOT1L	RSAD2	DTX3L
DNTTIP2	RASGEF1B	SQSTM1	PNP	GAPT	PTGER2
CCL2	TLK1	SCARB2	MTF1	CD82	KLF6
PLEK	LY6E	AKR1B1	ISOC2	PHPT1	AC092069.1
OAS1					

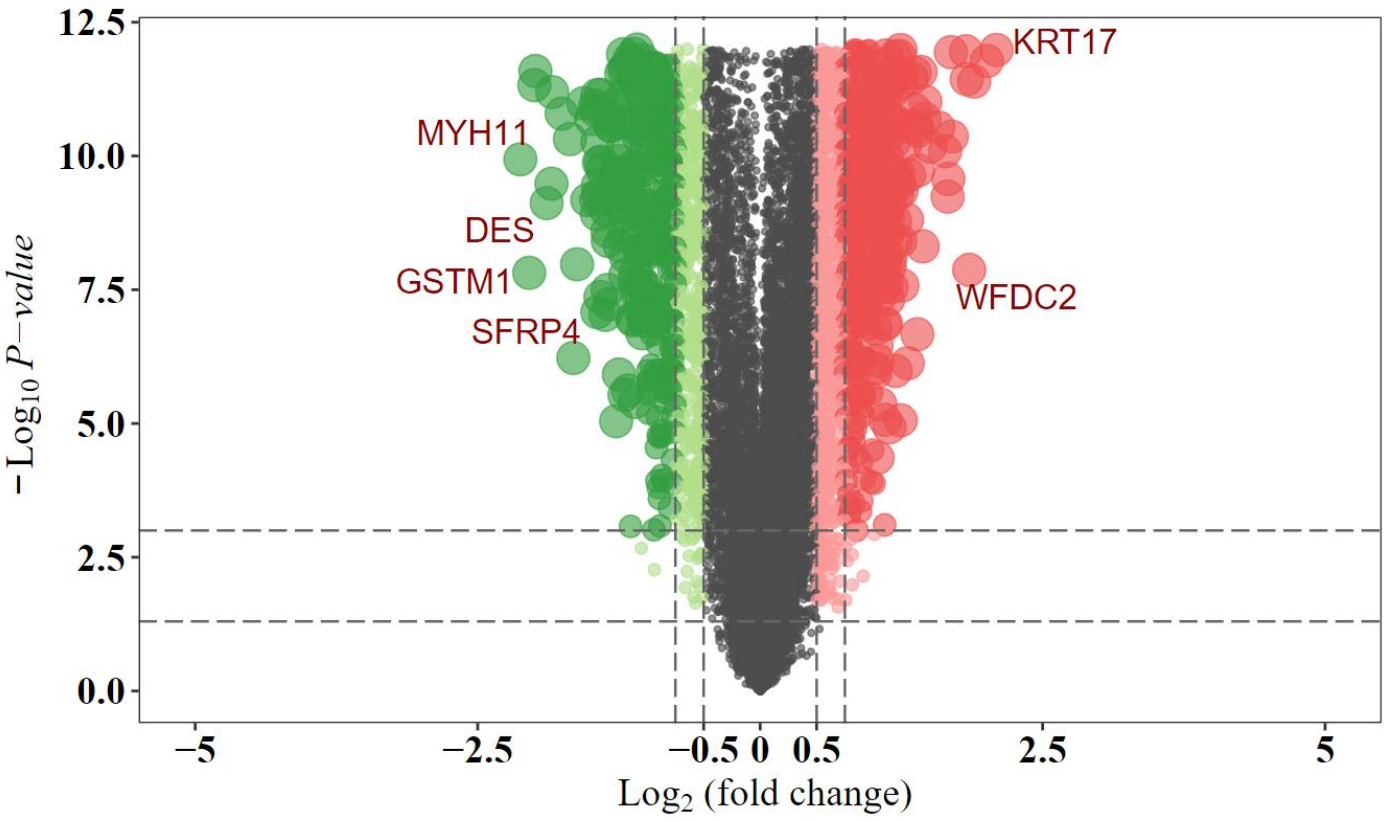

Figure S1. The differential expressed genes between normal smooth muscle and leiomyosarcoma.

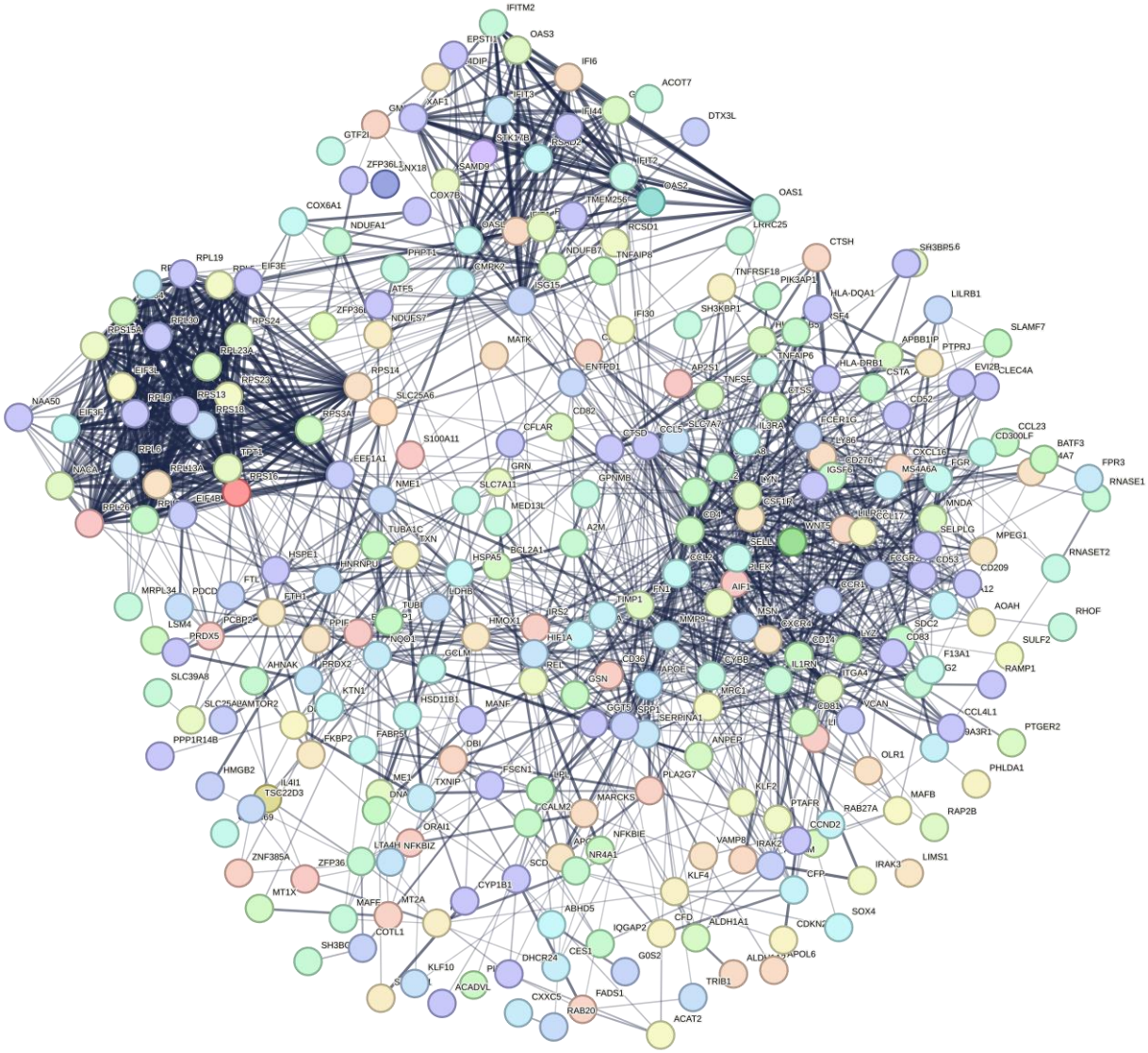

Figure S2. The interaction between 311 genes related differentiation of monocytes and leiomyosarcoma.

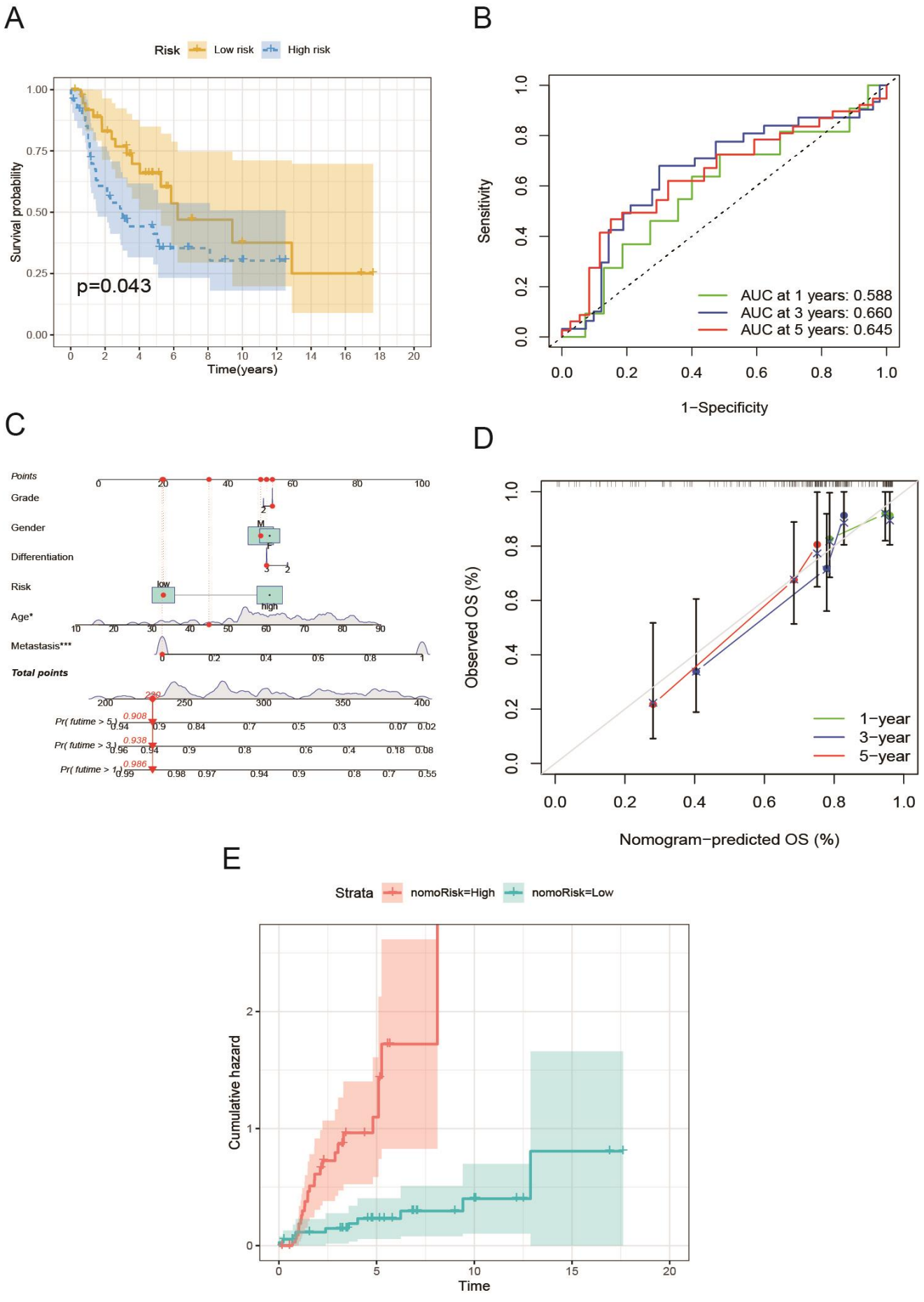

Figure S3. External validation the prognostic risk model. (A-B) The KM curve and time-dependent ROC curve in GSE159847 cohort. (C) Nomogram prediction of 1, 3, and 5-year overall survival of LMS patients

from GSE159847. (D) Validation of the nomogram. (E) The cumulative risk curve based on nomogram.