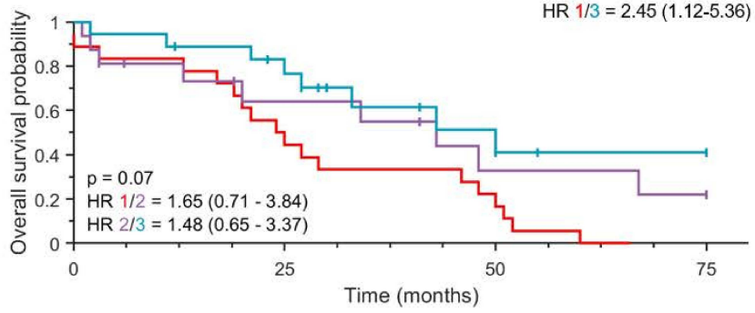
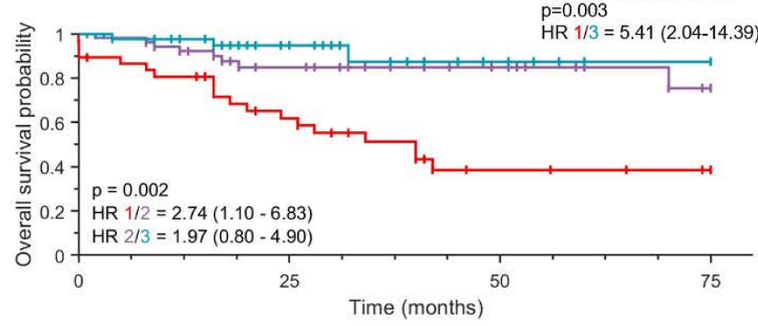
A



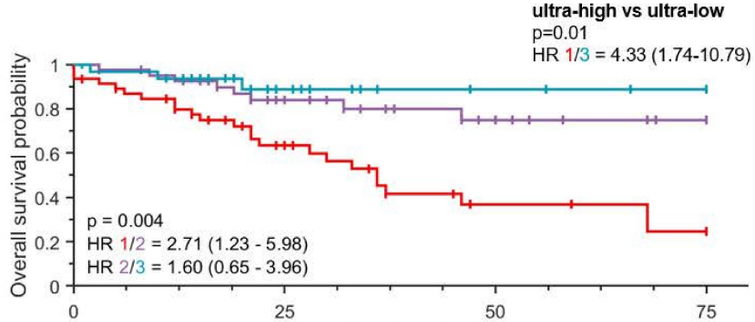
ultra-high risk	18 (0)	10 (0)	5 (0)	0 (0)
intermediate risk	16 (0)	7 (4)	3 (5)	2 (5)
ultra-low risk	18 (0)	13 (2)	5 (6)	2 (8)

B



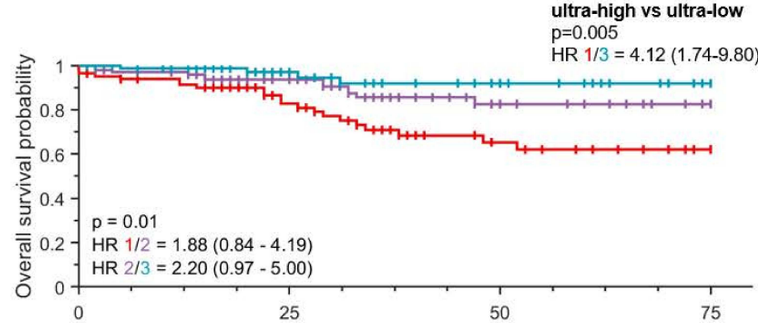
ultra-high risk	39 (0)	22 (7)	9 (14)	6 (17)
intermediate risk	57 (0)	27 (23)	14 (36)	6 (43)
ultra-low risk	44 (0)	22 (20)	7 (34)	3 (38)

C



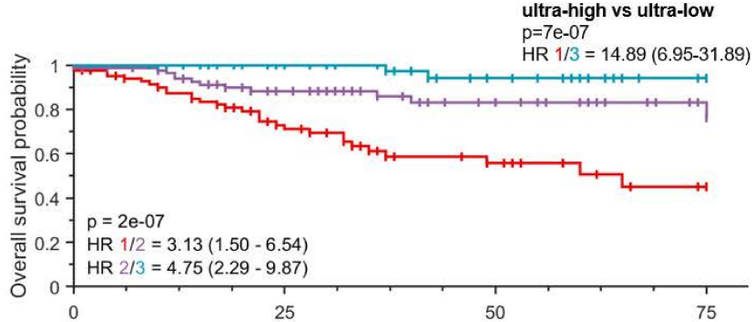
ultra-high risk	49 (0)	24 (13)	10 (20)	7 (21)
intermediate risk	47 (0)	24 (17)	13 (26)	7 (32)
ultra-low risk	33 (0)	14 (16)	5 (25)	3 (27)

F



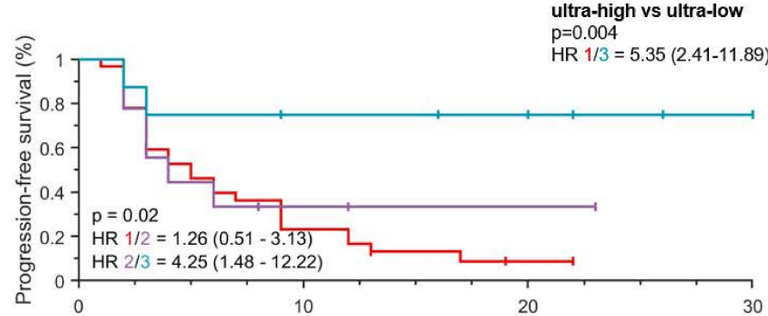
ultra-high risk	85 (0)	48 (28)	23 (45)	11 (56)
intermediate risk	99 (0)	67 (26)	25 (62)	14 (73)
ultra-low risk	77 (0)	44 (31)	26 (47)	13 (60)

D

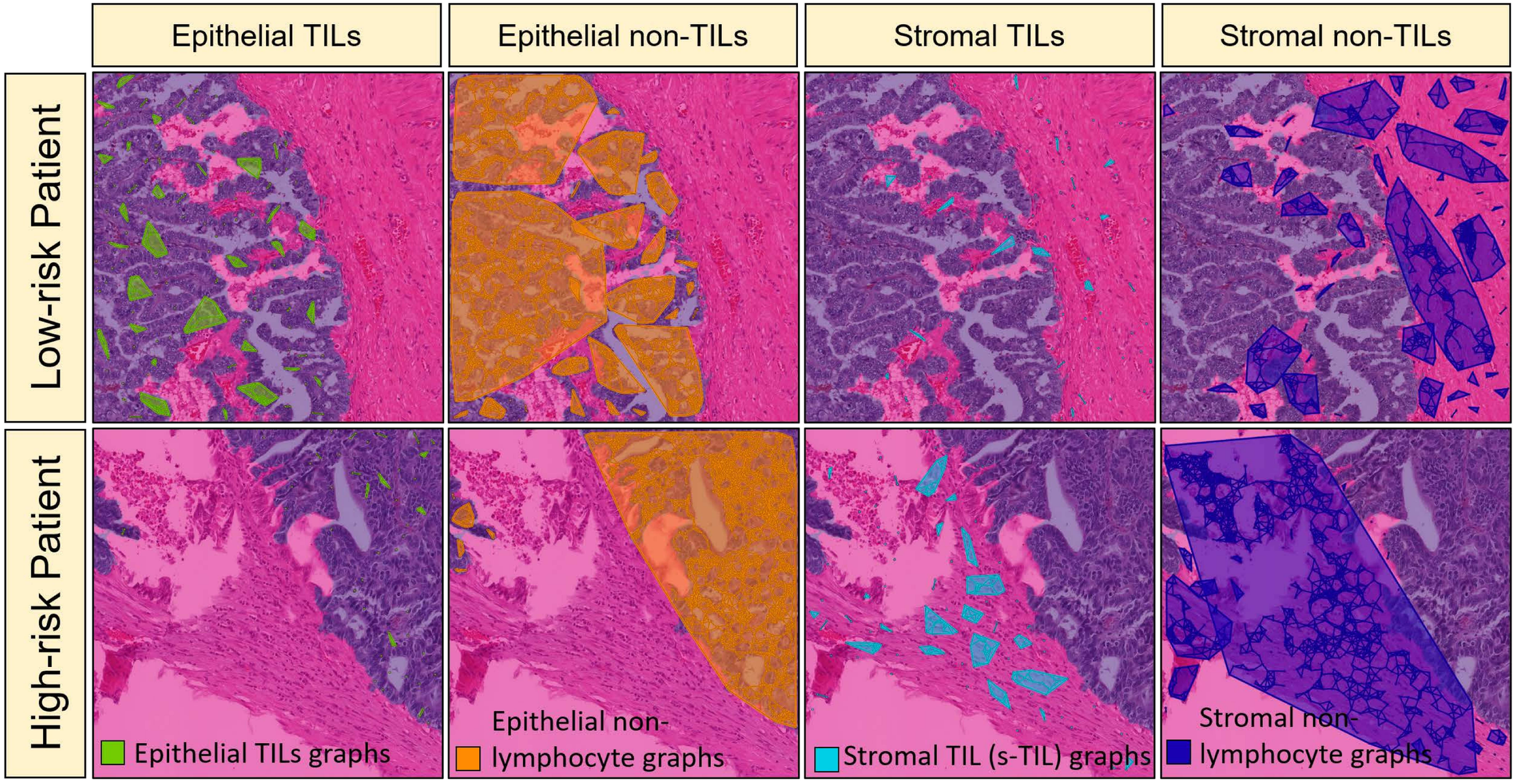


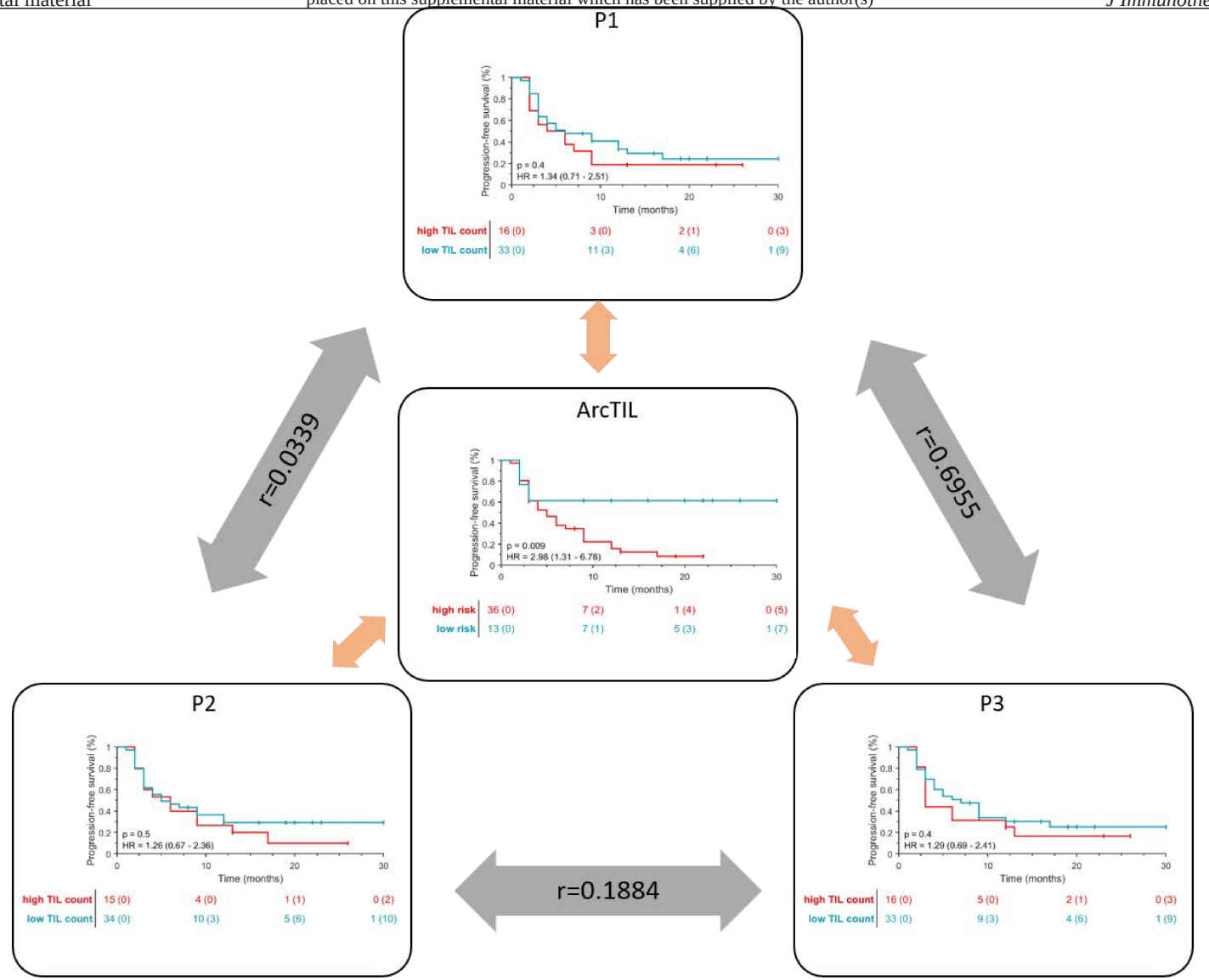
ultra-high risk	86 (0)	44 (23)	18 (41)	7 (50)
intermediate risk	88 (0)	50 (30)	28 (50)	13 (65)
ultra-low risk	70 (0)	47 (23)	24 (44)	8 (60)

E



ultra-high risk	32 (0)	7 (1)	1 (3)	0 (4)
intermediate risk	9 (0)	2 (1)	1 (2)	0 (3)
ultra-low risk	8 (0)	5 (1)	4 (2)	1 (5)


Epithelial TILs
Epithelial non-TILs
Stromal TILs
Stromal non-TILs
Low-risk Patient
High-risk Patient
Epithelial TILs graphs
Epithelial non-lymphocyte graphs
Stromal TIL (s-TIL) graphs
Stromal non-lymphocyte graphs
Surrounding stromal Region
Epithelial nests

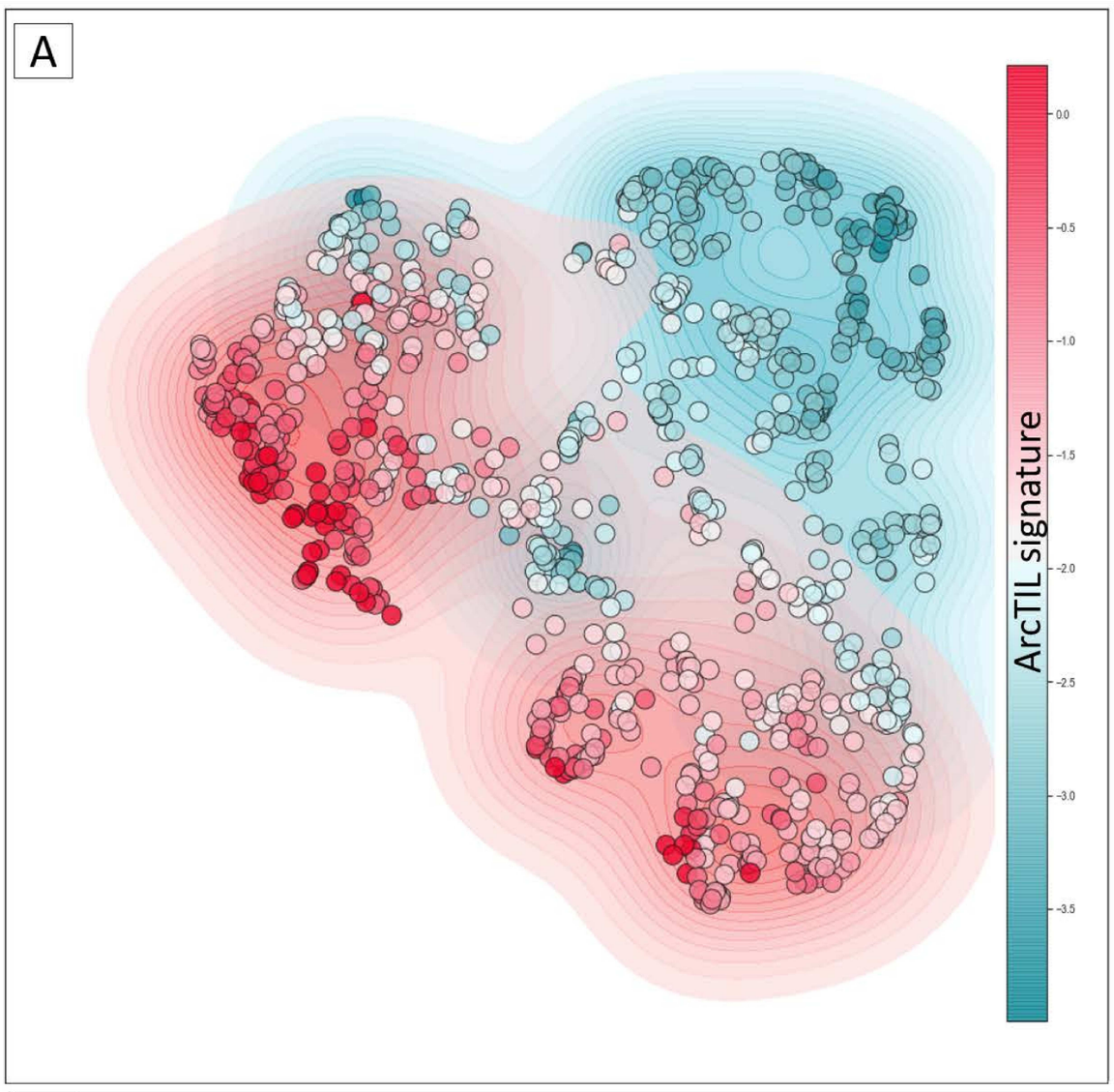

P1
Progression-free survival (%)
p = 0.4
HR = 1.34 (0.71 - 2.51)
Time (months)
high TIL count 16 (0) 3 (0) 2 (1) 0 (3)
low TIL count 33 (0) 11 (3) 4 (6) 1 (9)
ArcTIL
Progression-free survival (%)
p = 0.009
HR = 2.98 (1.31 - 6.78)
Time (months)
high risk 36 (0) 7 (2) 1 (4) 0 (5)
low risk 13 (0) 7 (1) 5 (3) 1 (7)
P2
Progression-free survival (%)
p = 0.5
HR = 1.26 (0.67 - 2.36)
Time (months)
high TIL count 15 (0) 4 (0) 1 (1) 0 (2)
low TIL count 34 (0) 10 (3) 5 (6) 1 (10)
P3
Progression-free survival (%)
p = 0.4
HR = 1.29 (0.69 - 2.41)
Time (months)
high TIL count 16 (0) 5 (0) 2 (1) 0 (3)
low TIL count 33 (0) 9 (3) 4 (6) 1 (9)
r=0.0339
r=0.6955
r=0.1884

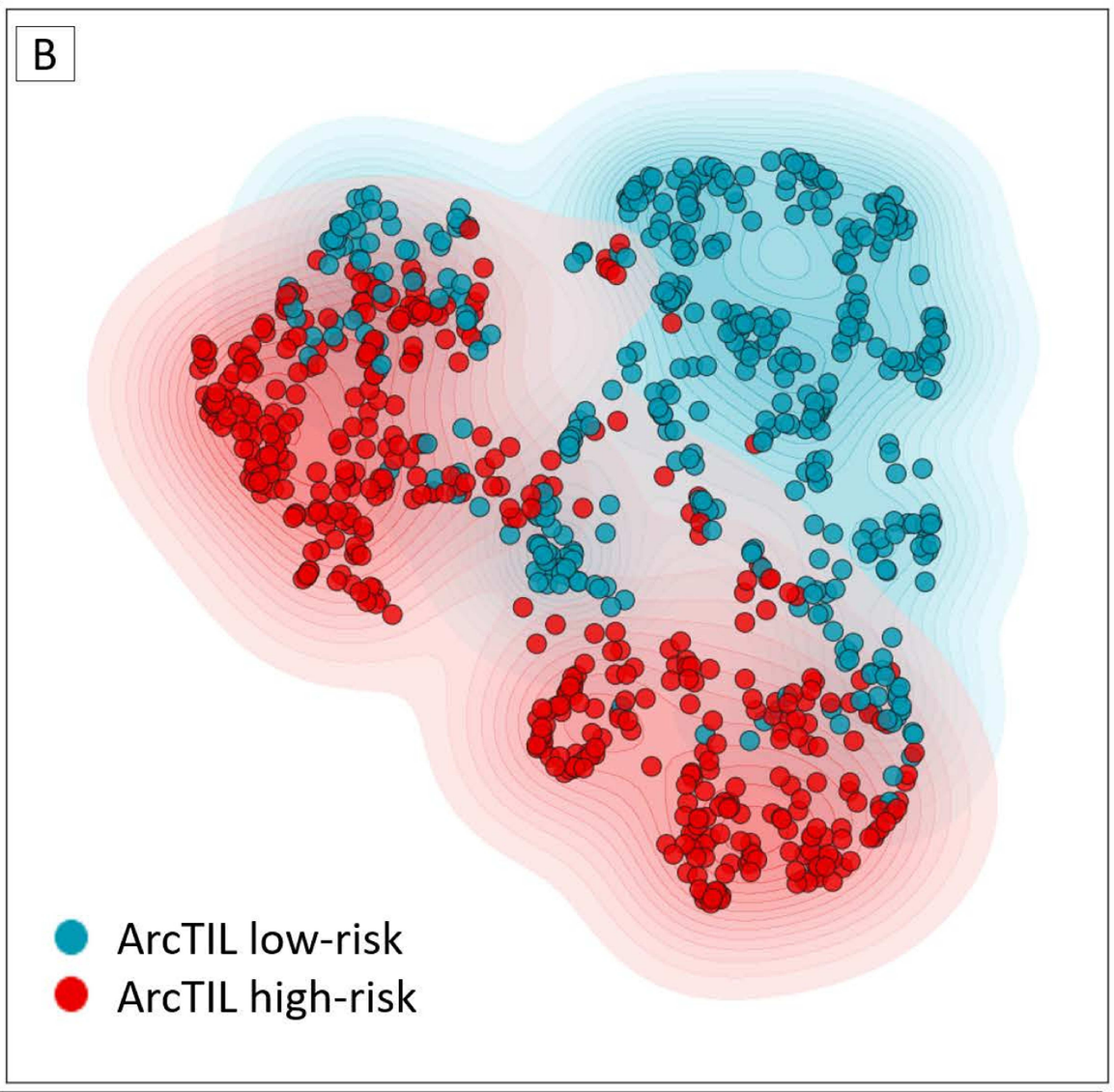
Ovarian cancer

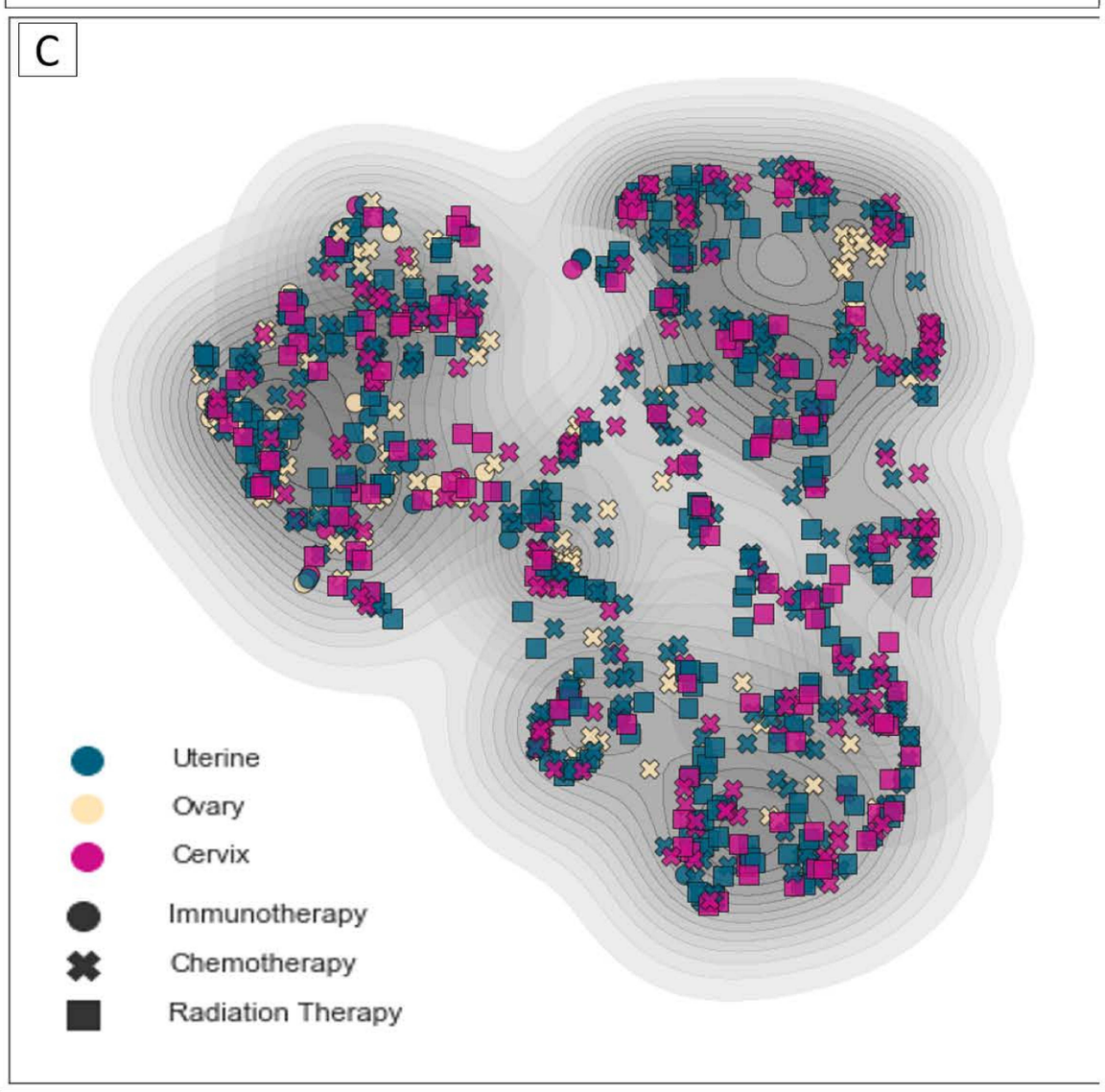
Cervical cancer

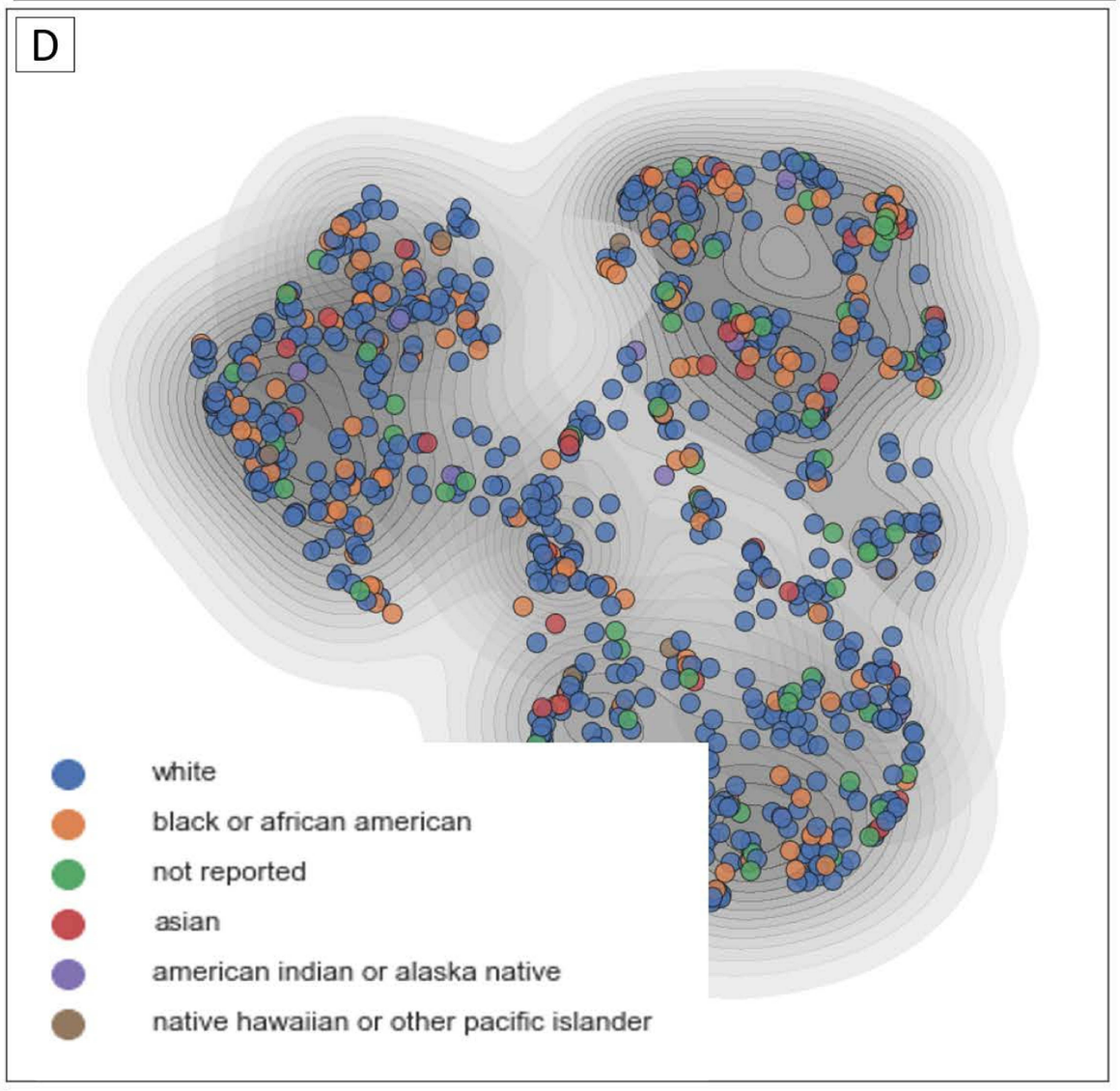
Endometrial cancer

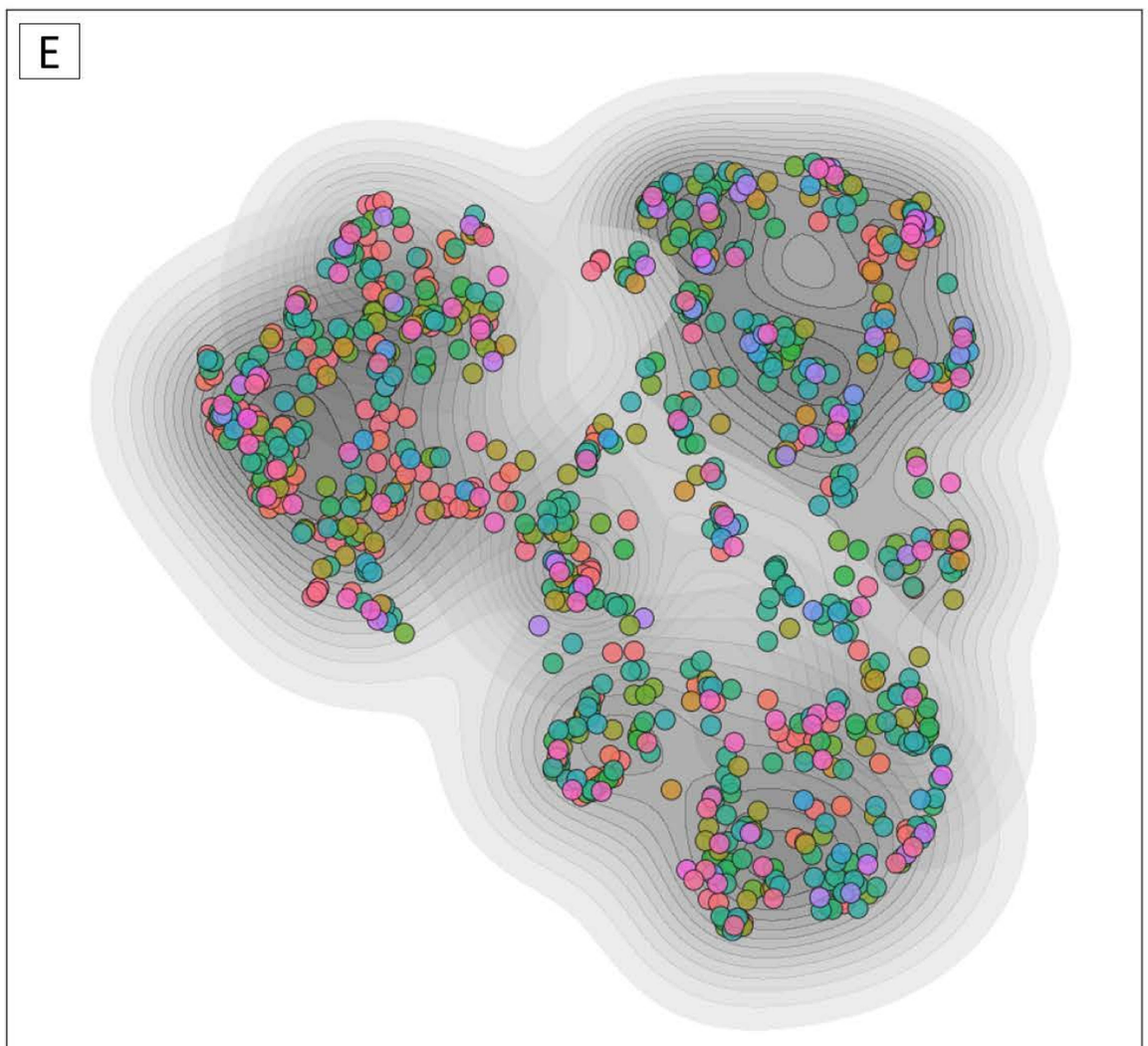
GO:0048514
GO:0001944
GO:0045595
GO:0051249
GO:0050852
GO:0031294
GO:0050776
GO:0002376
GO:0002857
GO:0006959
GO:0050870
GO:0072686
GO:0048522
GO:0050672
GO:0031589
GO:0007155
GO:0022610
GO:1901342
GO:0001525
GO:0030855
GO:0060429
GO:0042127
Epithelial Nests
Surronding Stroma
Tumor Invasive Front
F1
F2
F3
F4
F5
F6
F7


A
ArcTIL signature
0.0
−0.5
−1.0
−1.5
−2.0
−2.5
−3.0
−3.5


B
ArcTIL low-risk
ArcTIL high-risk


C
Uterine
Ovary
Cervix
Immunotherapy
Chemotherapy
Radiation Therapy


D
white
black or african american
not reported
asian
american indian or alaska native
native hawaiian or other pacific islander


E


CCF
Cedars Sinai
Mayo Clinic - Rochester
University of Kansas Medical Center
University of New Mexico
Greenville Health System
Christiana Healthcare
Molecular Response
Proteogenex, Inc.
International Genomics Consortium
Roswell Park
Medical College of Wisconsin
Holy Cross
University of Alabama
International Genomics Conosrtium
MSKCC
Cureline
Gynecologic Oncology Group
Duke
University of Pittsburgh
University of Hawaii
Mayo Clinic
Ontario Institute for Cancer Research
MD Anderson
Asterand
University Health Network
University of North Carolina
Washington University
ABS - IUPUI
Medical College of Georgia
Memorial Sloan Kettering
BLN - Baylor
ABS - Lahey Clinic
University of Miami
ILSBIO
MD Anderson Cancer Center
University of Minnesota
Montefiore Medical Center
Institute of Human Virology Nigeria
University of Oklahoma HSC
Candler
Albert Einstein Medical Center
St. Joseph's Hospital AZ
University of Washington
Barretos Cancer Hospital
University of Kansas
University of Sao Paulo
NCI HRE Branch

Experiment	Training set	n	Number of selected features and geographical region	OC (chemo)	CC (chemo)	CC (radio)	EC (chemo)	EC (radio)	CCF (IO)
E1	OC (chemo)	51	7 · 2 E · 2 S ·3 T	0.69 (52)	0.88 (140)	0.78 (129)	0.79 (261)	0.85 (244)	0.62 (49)
E2	CC (chemo/radio)	134	7 · 2 E · 3 S · 2 T	0.80 (103)	0.85 (71)	0.80 (64)	0.89 (261)	0.81 (244)	0.79 (49)
E3	EC (chemo/radio)	252	· 1 E · 3 S · 4 T	0.79 (103)	0.72 (140)	0.86 (129)	0.90 (141)	0.83 (112)	0.82 (49)
E4	GC (chemo/radio)	292	7 · 3 E · 1 S · 3 T	0.72 (69)	0.72 (94)	0.80 (85)	0.81 (178)	0.87 (159)	0.89 (49)

P1	P2	P3
22	2	22
19	2	10
45	14	61
76	24	190
41	65	112
33	15	37
33	20	37
30	15	21
19	11	27
34	22	40
26	24	33
39	19	28
19	0	10
17	4	15
11	1	27
36	10	28
52	13	13
26	8	23
47	6	60
38	9	39
41	4	36
22	5	22
34	4	17
33	14	25
33	14	35
18	6	22
21	6	14
71	45	49
44	5	51
25	9	17
123	13	54
34	12	10
168	57	258
18	6	20
17	3	21
84	7	69
55	16	50
33	4	10
19	1	3
14	1	9
36	6	17
41	17	18
46	16	54
51	4	18
32	2	12

21	5	19
46	1	40
42	23	79
45	27	61

PTMS
HIST1H3F
HUS1
RAX
CNTN6
TRPC4AP
GGA1
IL1F7
NUDCD3
EHMT1
RCE1
SMPDL3B
CD40
THOC6
NDUFAF1
SDF2L1
MRPS12
BMP8B
SPTLC1
FBXW4
CCNG2
SEPX1
SH3GLB2
WBSCR16
ADRA1D
P2RY11
WBP11
CYP27A1
DYNLRB1
GPR3
NTN1
DDX56
HP1BP3
PHF11
GUSB
KIAA1219
GBX2
SPTAN1
TBRG4
ONECUT2
UBXD2
DNMBP
PPIA
SOD3
MSI1
RAMP3
ACSL5

HPGD
IRF2
TSC2
IQSEC2
TSPAN15
C1orf216
EGFL7
LECT1
ASTN1
ATP6V0C
CRYGC
DHX32
LOC283871
PON1
EIF4E
PAK4
E4F1
HPCAL4
URG4
ZMIZ2
C4BPB
DNAH9
GPX4
XPO4
DTNA
LTF
DLG5
EHF
GABRA3
NT5C2
SEC31B
C9orf31
MOCS3
PIAS4
MRP63
HCFC1R1
C1QL1
GOLGA8A
SLC46A3
GSPT2
MEX3D
MBOAT5
UBTF
ACLY
CREBBP
SLC22A3
C21orf25

NDUFB8
PDCL3
TMEM156
BAAT
BNC1
CDK5RAP2
PMAIP1
WASF3
POLD2
EYA3
TNFSF10
SIPA1L3
TTLL5
HLA-G
SAG
C10orf6
DYRK1B
PARK2
RALA
ECHDC2
IL15RA
PDZD7
PLEKHB1
RAB6A
HCP5
MRPS34
TMED5
EEF1A2
NMUR1
USP5
ZNF510
C20orf149
GLE1L
TM7SF3
CEACAM6
POMGNT1
PRDM8
ACTR5
HIST1H3C
RBBP9
WDR18
CLK4
RSHL1
SERTAD3
RIN1
TNFRSF12A
TOM1L2

ZBED2
C9orf91
PCYOX1
SULT1A1
CRYM
GSTM3
LOH11CR2A
MST1R
NDRG4
POU6F2
BLNK
SCUBE2
SPOCK2
TNFRSF14
PSMC4
STARD13
TMPRSS11D
TRAPPC3
ZNF672
CPEB1
DARS
KIAA0090
KIAA0256
MAPRE1
PSMD8
SYT1
UBD
CDCP1
NFE2
DKFZp547H025
ATXN2L
DPM2
FGR
NIPSNAP3B
OTUD7B
CCNK
EBP
INPP4A
MGAM
MYOHD1
PASK
PLEKHG6
SEMA3D
C7orf42
MYH13
TNFSF14
BANF1

FBXO17
IFT140
MAP3K2
SARS2
CDS1
HERC4
ITPKC
KIR2DL4
PPP5C
RAG2
ROGDI
TAP1
TM7SF2
USP33
ZNF671
APOL3
CHODL
KEL
PTPRN2
UPF3B
CRKRS
DEXI
DLGAP1
EBF2
MOBKL1B
SCAMP4
TUBB1
ENOSF1
FRAT1
SFRS9
BAALC
CXorf1
DLX6
HPS1
IL7
LRRTM2
NUDT9
PPP1R3A
PTPN18
RAB1A
SCT
TM7SF4
USP3
BCAS4
C22orf31
GBL
HEBP1

KCNAB2
STXBP5L
TASP1
CIAPIN1
PCSK6
RHBDL1
RNPS1
RTF1
STK11
UBE1L
IQSEC3
LRP6
LRRTM4
PDE6C
AOF2
BCS1L
CMAS
GAST
GRB10
SAT1
VIPR1
APOBEC3C
CTDSP1
DGCR8
HLA-A
PEPD
PIP3-E
PSG5
SMCP
ANXA13
ARHGAP5
CAPN7
EN1
PAX8
PMS2L5
SNX13
USP1
DRD4
EFNA2
NR1H4
OBFC1
PFTK1
RALY
ARL6IP1
C18orf24
CPNE1
CTNNBL1

CYP2E1
G3BP2
GOLGA2
LTK
PSMB2
UBE1L2
ARC
BFSP2
C10orf10
CLIP3
CYP3A43
GPKOW
GPR56
HN1L
IFT122
LOC4951
MYLC2PL
STRAP
TCL1B
ABCA2
ANXA3
LOC390688
MAPKBP1
NAIP
PAF1
ZER1
APEX2
C13orf18
GOLIM4
IMMT
MAPRE2
NDN
NOS1
PACSIN3
PHYHIP
PMPCA
SLC7A4
TMEM140
CITED2
HDAC11
SPTBN1
XYLT1
ZBTB43
ATP6V0A4
CDKN1B
MYOM2
OBP2A

TRGV3
ZBTB7B
GPR64
NDST2
NLGN1
PIGQ
PRB1
VTCN1
ACP5
ADD2
AHDC1
BSG
C17orf53
CCDC69
CENTA2
FTSJ1
HNF4G
IPO8
OLFM4
SPATA5L1
TAF12
TRAF2
ACP6
CCR3
DDX47
DNASE1L2
MDH2
PCYT1B
RCHY1
SCRT1
TAF10
TBX6
C4BPA
FTCD
GSTM4
NAALAD2
PEO1
SEMA3F
USO1

blood vessel morphogenesis	vasculature development	regulation of cell differentiation
GO:0048514	GO:0001944	GO:0045595
AAMP	AAMP	ABCA1
ACVR1	ACTA2	ABCA5
ACVRL1	ACVR1	ABCG1
ADAM15	ACVR2B	ABL1
ADAM8	ACVRL1	ABL2
ADIPOR2	ADAM15	ACIN1
ADM	ADAM8	ACTN4
ADM2	ADAMTS6	ACVR1
AGGF1	ADIPOR2	ACVR1B
AIMP1	ADM	ACVR2A
AMOT	ADM2	ACVR2B
ANG	AGGF1	ACVRL1
ANGPT1	AHR	ADA
ANGPT2	AIMP1	ADAM8
ANGPT4	AKT1	ADAMTS1
ANGPTL3	ALDH1A2	ADAMTS12
ANGPTL4	AMOT	ADAMTS20
ANGPTL6	ANG	ADAMTS7
ANPEP	ANGPT1	ADAMTS9
ANXA2	ANGPT2	ADCY6
APOB	ANGPT4	ADCYAP1
APOD	ANGPTL3	ADIG
APOE	ANGPTL4	ADIPOQ
APOLD1	ANGPTL6	ADM
ARHGAP22	ANKRD17	ADNP
ARHGAP24	ANP32B	ADRA2B
ATP5B	ANPEP	ADRA2C
ATPIF1	ANXA2	AGER
B4GALT1	AP2B1	AGT
BAK1	APOB	AGTR1
BAX	APOD	AHI1
BCAS3	APOE	AKAP13
BMP4	APOLD1	AKAP5
BMPER	ARHGAP22	AKAP6
C19orf10	ARHGAP24	AKT1
C1GALT1	ARHGEF15	ALOX12
CALCRL	ARID1A	ALOX15B
CAV1	ATP5B	ALX1
CCBE1	ATP7A	AMIGO1
CCL2	ATPIF1	ANAPC2
CCM2	B4GALT1	ANKRD1
CD34	B9D1	ANKRD17
CDC42	BAK1	ANKRD2

CDH13
CDH2
CEACAM1
CHD7
CIB1
CITED1
CLIC4
COL15A1
COL18A1
COL3A1
COL4A1
COL4A2
COL8A1
COL8A2
CSPG4
CTGF
CTNNB1
CUL7
CX3CL1
CXCL17
CXCR3
CXCR7
CYP1B1
CYR61
DAB2IP
DLL1
DLL4
E2F7
E2F8
ECM1
ECSCR
EDN1
EDNRA
EFNA1
EFNB2
EGF
EGFL7
EGR3
EIF2AK3
ELK3
ENG
ENPEP
EPAS1
EPGN
EPHA1
EPHA2
EPHB1
BAX
BCAS3
BMP4
BMPER
BMPR2
C19orf10
C1GALT1
C5orf42
CALCA
CALCRL
CAV1
CCBE1
CCL2
CCM2
CD34
CDC42
CDH13
CDH2
CDH5
CDX2
CDX4
CEACAM1
CHD7
CIB1
CITED1
CLIC4
COL15A1
COL18A1
COL1A1
COL1A2
COL3A1
COL4A1
COL4A2
COL5A1
COL8A1
COL8A2
CRKL
CSPG4
CTGF
CTNNB1
CUL7
CX3CL1
CXCL17
CXCR3
CXCR7
CYP1B1
CYR61
ANKRD27
ANKRD54
ANP32B
ANXA1
AP1AR
AP3B1
AP3D1
APBB1
APC
APC2
APCS
APOA1
APOB
APOE
APOLD1
APP
AQP3
AR
AREG
ARF1
ARF6
ARHGAP35
ARHGAP4
ARHGDIA
ARHGEF1
ARHGEF2
ARHGEF7
ARNT
ARNTL
ARPC2
ARSB
ASAP1
ASB4
ASCL1
ASCL2
ASPM
ASXL1
ASXL2
ATAT1
ATF1
ATF5
ATOH1
ATOH8
ATP11C
ATP6AP1
ATP8A2
AURKA

EPHB2
EPHB3
EPHB4
ERAP1
EREG
ESM1
ETS1
ETV2
EYA1
FAM105B
FAP
FGF1
FGF10
FGF18
FGF2
FGF6
FGF8
FGF9
FGFR1
FGFR2
FIGF
FLT1
FLT4
FMNL3
FN1
FOLR1
FOXC1
FOXC2
FOXF1
FOXH1
FOXN1
FZD4
FZD5
FZD8
GBX2
GDF2
GJA1
GJA5
GJC1
GLMN
GNA13
GPI
GPLD1
GPR124
GPR4
GPR56
GPX1
DAB2IP
DCTN5
DDIT3
DHCR7
DLL1
DLL4
DLX3
DNM2
DYNC2H1
E2F7
E2F8
ECM1
ECSCR
EDN1
EDNRA
EFNA1
EFNB2
EGF
EGFL7
EGR1
EGR3
EIF2AK3
ELK3
ENG
ENPEP
EPAS1
EPC1
EPGN
EPHA1
EPHA2
EPHB1
EPHB2
EPHB3
EPHB4
ERAP1
EREG
ERRFI1
ESM1
ESX1
ETS1
ETV2
EYA1
FAM105B
FAP
FBXW7
FBXW8
FGF1
AVIL
AXIN1
AXIN2
AXL
B2M
B4GALT1
BAD
BAG5
BAI3
BAIAP2
BAMBI
BARHL2
BAX
BBS12
BCL11A
BCL11B
BCL2
BCL6
BCL6B
BCL9L
BDNF
BEND6
BGLAP
BHLHA15
BHLHB9
BHLHE41
BIN1
BIRC2
BMP10
BMP2
BMP4
BMP5
BMP6
BMP7
BMPR1A
BMPR1B
BMPR2
BNIP2
BOC
BRAF
BTC
BTG1
BTK
C10orf116
C10orf125
C10orf54
C10orf58

GREM1
HAND1
HAND2
HAS2
HDAC7
HEG1
HES1
HEY1
HEY2
HHEX
HIF1A
HIF3A
HMOX1
HOXA1
HOXA3
HOXA7
HOXB13
HOXB3
HPGD
HPSE
HRG
HS6ST1
HSPG2
HTATIP2
ID1
IL18
IL8
ITGA5
ITGAV
ITGB1
ITGB1BP1
ITGB3
JAG1
JAM3
JMJD6
JUN
JUNB
KDR
KLF5
KRIT1
LAMA5
LEF1
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CSF1R
CSF2

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UNC5D
UNCX
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UST
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VEGFC
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WNT7B

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YWHAH
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ZEB2
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ZFPM2
ZHX2
ZHX3
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ZNF268
ZNF335
ZNF385A
ZNF488
ZNF536
ZNF664-FAM101A
ZNF675
ZNF703
ZNF706
ZSWIM6

regulation of lymphocyte activation	T cell receptor signaling pathway	lymphocyte costimulation
GO:0051249	GO:0050852	GO:0031294
PIK3R1	PDE4D	PIK3R1
TNFAIP8L2	PIK3R1	CD86
BTNL2	BTNL2	PAK2
PARP3	PDE4B	
TYROBP	PAK2	
CD86	HLA-DRB4	
IL4		
TNFSF13		
FGL1		
ZBTB1		
PAK2		
IL20RB		

regulation of immune response	immune system process	positive regulation of natural killer cell mediated immune response to tumor cell
GO:0050776	GO:0002376	GO:0002857
UFD1L	CHI3L1	PVR
GAL	SAR1B	PVRL2
PSMC4	PRTN3	
RELB	SYNCRIP	
CACNB3	PDZD11	
CYFIP1	SPACA3	
DENND1B	IRF2	
LAMP1	PSMC4	
PSMA6	MAGT1	
IL27RA	RELB	
CD80	HDAC9	
MAD2L2	CUL4A	
PVR	CACNB3	
IRAK2	CYFIP1	
PSMD10	DENND1B	
KLRC1	MX1	
ENPP3	ORMDL3	
PSMD8	LAMP1	
CMKLR1	IFI44L	
RC3H2	SLC37A4	
NRAS	GDI2	
PSMA2	TNFSF15	
SYK	EXOSC4	
HEXIM1	PSMA6	
RBM14	TMEM14C	
C20orf196	IL27RA	
SYK	CAPZA1	
STAT6	NDUFC2	
WIPF2	RPL30	
PSMA5	SEC22B	
	SAA1	
	CD80	
	CD320	
	MPEG1	
	PMS2L1	
	PRDX4	
	IRAK2	
	AP2A2	
	PSMD10	
	RAB7A	
	CPNE3	
	ENPP3	
	F11R	

PSMD8
APP
CMKLR1
CCT8
RC3H2
CSF2
NRAS
PRG2
PSMA2
PAFAH1B2
SYK
CCR9
PRDX3
C6orf57
IFI44
POU1F1
QPCT
IGF2R
CKLF
HEXIM1
RBM14
VCP
NUDCD1
RAB5B
PMS2L2
GGH
PRG2
IFNA16
SYK
STAT6
WIPF2
BLNK
PSMA5
SEC13
SEMA3C
BPI
CST7
ITGAV
CCL27

humoral immune response	positive regulation of T cell activation	mitotic spindle
GO:0006959	GO:0050870	GO:0072686
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PDZD11	SYK	ABL1
RPL30		ABR
IFNA16		ACTN4
BLNK		AKAP13
BPI		ALMS1
		ALS2
		ANLN
		APC
		ARAP3
		ARF6
		ARFGEF1
		ARFIP2
		ARHGAP10
		ARHGAP27
		ARHGAP29
		ARHGAP4
		ARHGAP5
		ARHGDIA
		ARHGEF11
		ARHGEF12
		ARHGEF2
		ARHGEF3
		ARHGEF7
		ARL8A
		ATG4B
		AURKA
		AZI1
		BCAR1
		BCL2L11
		BCR
		BIN1
		BIRC5
		BRCA2
		BUB1
		CAPZB
		CCDC88A
		CCNB2
		CD2AP
		CDC27
		CDC42
		CDC42BPA
		CDC42EP1

CDC42EP2
CDC42EP4
CDK1
CDK5RAP2
CENPE
CENPF
CENPJ
CEP192
CEP250
CEP57
CEP72
CKAP5
CLASP1
CLIP1
CLIP2
CNTRL
CNTROB
CRIPAK
CSNK1D
CTTN
CYTH2
DLG1
DLGAP5
DOCK2
DOCK4
DST
DYNC1H1
DYNLL2
ECT2
EPB41
EPB41L2
ESPL1
EZR
FARP1
FBXO5
FGD4
FGD6
FLNA
FLNB
FSCN1
GEMIN4
GSN
HDAC6
HOOK3
INCENP
ITSN1
KATNA1

KATNB1
KIF11
KIF15
KIF1B
KIF20B
KIF22
KIF23
KIF2C
KIF3B
KIF3C
KIF4A
KIF5B
KIFAP3
KLC1
KNTC1
KPTN
LATS1
LLGL1
LMNB1
LRPPRC
MAP1S
MAP3K11
MAPRE1
MARCKS
MARK4
MID1
MID1IP1
MYH10
MYH9
MYO1E
MYO9B
NCK1
NCK2
NDC80
NEDD9
NEK2
NET1
NF1
NIN
NOTCH2
NUMA1
NUSAP1
OPHN1
PAFAH1B1
PALLD
PCGF5
PCM1

PCNT	
PDLIM5	
PIF1	
PKD2	
PLEKHG2	
PLK1	
PPP4R2	
PRC1	
PREX1	
PXN	
RAB3GAP1	
RABGAP1	
RACGAP1	
RALBP1	
RANBP9	
RAPGEF5	
RAPGEF6	
RASA1	
RASA2	
RASAL2	
RFC1	
RHOF	
RHOT2	
RICTOR	
ROCK1	
SAC3D1	
SASS6	
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SMC4	
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SOS1	
SPTAN1	
SPTBN1	
SSH2	
STAU1	
STK38L	
SUN2	
SYNPO	
TAOK2	
TBCD	
TIAM1	
TLK1	
TOP2A	

TPX2
TRIO
TSC1
TTK
TUBA4A
TUBD1
TUBGCP2
TUBGCP3
TUBGCP5
TUBGCP6
UXT
VCL
WASF1
WASF2
WASL
YWHAE

positive regulation of cellular process	negative regulation of lymphocyte proliferation	cell-substrate adhesion
GO:0048522	GO:0050672	GO:0031589
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EPHB3	F6SF82	ACTN3
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GPR65	LGALS7	ADAM9
KARS	LGALS9	ADAMTS12
NFATC2IP	LOC100066399	ADAMTS13
POU6F2	PDCD1LG2	AKIP1
PSME4	TNFRSF21	ANGPT1
		ANGPTL3
		ANTXR1
		ARHGAP6
		ARHGEF7
		AXL
		BCAM
		BCL2
		BCL2L11
		BVES
		CCL21
		CD34
		CD44
		CD63
		CD96
		CDK5
		CNTN2
		COL13A1
		COL17A1
		COL3A1
		COL5A3
		CORO1A
		CTGF
		CTNNB1
		CTTN
		CUZD1
		DAG1
		DDR1
		DEFB118
		DLC1
		ECM2
		EDA
		EFNA1
		EMP2

EPB41L5
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EPHA1
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FER
FERMT2
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FGB
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FXC1
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FZD7
GAS6
HOXD3
HPSE
ID1
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JAM3
JUB

KIF14
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LYPD3
LYPD5
LYVE1
MADCAM1
MARCKS
MERTK
MICALL2
MKLN1
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MSLNL
MUC4
MYO1G
NID1
NID2
NPNT
OTOA
PARVA
PARVG
PDPK1
PEAK1
PIP5K1A
PKD1
PPARD
PPFIA1
PPFIA2
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PXN
RAB1A
RAC1
RADIL
RCC2
RHOD
SGCE
SIGLEC1
SMAD6
SNED1
SORBS1
SORBS3
SRC
SRCIN1
SRF

SRGAP2
STRC
STRCP1
TAOK2
TECTA
TEK
TESK2
THBS3
THY1
TIAM1
TMEM8B
TNFRSF12A
TNN
TNXB
TRIP6
TRPM7
TSC1
TTYH1
TYRO3
VAMP3
VCAM1
VCL
VTN
VWA2
VWF
WHAMM
ZYX

cell adhesion	biological adhesion	regulation of vasculature development
GO:0007155	GO:0022610	GO:1901342
ASTN1	AATF	ACVRL1
CDK5R1	ABL1	ADM
CEL	ABL2	ADM2
CNTN4	ACAN	ADRB2
NCAM2	ACE2	AGGF1
NINJ2	ACHE	AGT
NLGN1	ACTB	ALOX12
NLGN2	ACTG1	AMOT
NLGN3	ACTN1	ANGPT2
NLGN4X	ACTN2	ANGPT4
NLGN4Y	ACTN3	ANGPTL3
NRXN1	ADA	ANGPTL4
NRXN2	ADAM12	ANXA3
NRXN3	ADAM15	APOH
RET	ADAM17	AQP1
TNR	ADAM2	ASB4
	ADAM22	BAI1
	ADAM23	BAI2
	ADAM8	BAI3
	ADAM9	BMP4
	ADAMTS12	BMP7
	ADAMTS13	BRCA1
	AGGF1	BTG1
	AIMP1	C13orf15
	AIRE	C19orf10
	AJAP1	C3
	AKIP1	C3AR1
	ALCAM	C5
	AMBN	C5AR1
	AMBP	C6
	AMELX	CCBE1
	AMICA1	CCL11
	AMIGO1	CCL2
	AMIGO2	CCL24
	AMIGO3	CCL5
	AMTN	CCR2
	ANGPT1	CCR3
	ANGPTL3	CD34
	ANTXR1	CELA1
	ANXA1	CHI3L1
	ANXA9	CHRNA7
	AOC3	CIB1
	APBA1	CMA1

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DNAJB6
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ELMO2
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EMILIN2
EMP2
EMR1
EMR2
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EPHB4
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EZR
F11R
F2RL1
FADD
FAP

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FBLN5
FBLN7
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FER
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FERMT2
FERMT3
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FGFRL1
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FKBP1B
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FLRT2
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FYN
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GAS6
GATA1

GATA3
GCNT1
GLDN
GLI3
GNAS
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NKX2-6

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GLI2

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OSR1
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OXTR
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JUN
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MAPK1
MARVELD2

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SEMA3E
SEMA4C

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UPK2
UPK3A
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regulation of cell population proliferation

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blood.v	GO:0048514	-492.5274251	-315.8190508	200.8085335	-1007.966206	-171.6518984
vascula	GO:0001944	-401.6006367	-314.4968188	262.06133	-789.9139612	-22.51441848
regulati	GO:0045595	-802.6344428	-704.7038512	-375.3899981	-1008.459306	-625.6083011
regulati	GO:0051249	-2059.681434	-1055.965202	-2323.290465	-1859.177106	-1195.778053
T.cell.re	GO:0050852	-3114.860263	-1099.248708	-2208.293219	-2249.715246	-2453.736863
lympho	GO:0031294	40.61187283	1382.012486	-529.0318644	-215.977681	980.8650216
regulati	GO:0050776	2853.593807	3048.843628	2811.752314	3347.2125	2825.758772
immun	GO:0002376	2545.23554	2118.187008	2673.403556	2534.908179	2702.494723
positive	GO:0002857	-1021.085882	-1167.435894	1474.322515	1048.501604	-1434.192715
humora	GO:0006959	34.73691593	617.0781046	-971.6093466	-803.0302389	-80.59187748
positive	GO:0050870	238.9420738	2067.337051	-1228.621797	1978.977987	906.4797321
mitotic.	GO:0072686	1389.403704	2322.82883	2016.83561	2053.742405	1658.08396
positive	GO:0048522	209.6480645	-297.4756732	534.403952	328.3853223	1108.027291
negativ	GO:0050672	-1200.504814	-1243.211747	-1119.091134	-1474.778766	-738.2618844
cell.sub	GO:0031589	70.08632875	-195.4876597	437.698461	-529.6616535	372.0282885
cell.adh	GO:0007155	-3855.751669	-3842.351699	-3624.178329	-4338.66542	-4607.027866
biologic	GO:0022610	-1138.036479	-1141.786516	-634.4789425	-1520.725742	-811.8888437
regulati	GO:1901342	-499.1832361	-660.1535903	227.2845032	-974.9024974	62.44933732
angioge	GO:0001525	-496.1672663	-364.4000801	234.8492727	-1032.335899	-145.5894571
epitheli	GO:0030855	-591.678643	-197.9109671	-35.98191635	-745.6358359	-364.874151
epitheli	GO:0060429	-667.8627404	-394.135853	-215.1870517	-738.7844828	-460.5582402
regulati	GO:0042127	-714.3169803	-663.1766053	-310.4121859	-703.4428933	-280.4601755

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-269.6311391	-559.7971114	-426.1174822	-440.1077598	123.0341586	312.0968969	292.9731323
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-551.1852371	-859.3592454	-667.0829998	-699.5862744	-448.7113767	-378.3993944	-361.1417767
-1716.988938	-3147.088888	-1563.920791	-1954.635191	-2868.11186	-1472.876484	-1355.91963
-2576.160312	-3407.35328	-1352.581302	-3043.093435	-2682.011397	-2752.974339	-2921.786884
326.2145121	-2942.585268	1334.826268	-1570.924766	-1323.026792	818.3590268	712.4875737
2661.254299	2682.387963	2902.002817	2895.907322	2454.929277	3068.30078	2675.922441
2362.669135	2006.124499	2777.397008	2240.44797	2115.823393	2818.15857	2482.479723
-1990.862203	-830.7366192	-20.12693113	-339.8361509	306.3504863	508.8058009	465.7954441
-867.6453216	-1257.00034	373.8846492	-815.1174103	-675.0539254	-1108.631365	-315.3744219
938.1836186	1722.170127	696.1728276	1678.502264	1282.213001	-39.37913131	139.144814
2675.78972	2257.043751	1701.403074	2420.424262	2215.593517	2001.351608	2290.424028
-140.2610948	-94.87807337	-905.9988084	-264.2206978	-18.59962801	555.7684031	134.6542942
-1862.896194	-3422.631777	162.8675951	-1930.423306	-1235.813374	-240.14264	-1696.325942
332.7389797	-252.0200352	304.3155682	258.912548	190.9878379	611.5633761	912.5325321
-4364.856223	-4519.642233	-4439.970505	-4349.993548	-3979.177561	-4329.47559	-4479.867002
-916.4221206	-1394.076702	-1033.232237	-1058.735192	-911.1076862	-473.3269818	-533.5268835
-280.8865646	-1013.52542	-507.6589724	-578.3714323	7.486420638	289.5058711	422.9465782
-364.9468849	-721.489347	-484.3484949	-417.7106293	12.9772884	355.5391474	355.2721945
-199.4592524	-293.1806855	-277.7696828	-324.4028219	137.788028	-17.96738806	-93.67658195
-570.6490318	-459.0160662	-441.8545972	-619.0240308	-189.2989297	-244.5198794	-314.9479709
-515.2328675	-666.6298582	-519.6305952	-698.0906679	-518.3265576	-172.1294624	-350.0257647

TCGA.23.1118	TCGA.23.1119	TCGA.23.1120	TCGA.23.1121	TCGA.23.1122	TCGA.23.1123	TCGA.23.1809
-420.4655201	-398.2612625	-257.6821025	-263.133333	-326.1555897	-666.7844924	-509.5640417
-318.1864813	-267.538966	-125.6051536	-106.6651889	-198.6888967	-564.2509025	-358.2036469
-728.0914306	-730.1667904	-621.4080758	-604.1620972	-589.3331414	-860.0432978	-764.0862287
-1152.056898	-1693.603982	-859.4896366	-1928.363877	-1433.820882	-792.7871388	-1341.278188
-2077.062785	-3017.723075	-2746.465073	-1553.016275	-2737.004434	-2574.906391	-1443.848251
1433.255458	89.04295559	635.7616195	-559.0972651	381.9380708	1402.622	655.9596129
3083.766626	2791.316558	2942.820573	2942.053177	2520.430931	3032.482991	2762.121183
2558.361042	2547.949199	2634.331719	2431.05411	2433.70815	2639.650218	2444.128792
-460.6687158	-1276.927696	-1353.464452	311.6300588	-987.9276133	-1218.388312	731.5867368
-716.1454896	-312.2334743	-644.9854639	-172.5878726	-1026.092477	-1410.344179	-1020.748056
1588.653345	-1253.328746	2729.333709	1808.824782	1167.887709	1660.160163	-2920.295061
2164.515128	1685.270629	1826.783779	2398.997266	2470.529863	1988.103631	2339.28246
559.712679	503.1272973	966.3979747	-608.9158773	808.5080797	538.8063046	1190.781316
-1561.187932	-2353.262966	-622.5878207	-1833.616611	-1281.849676	-1338.573921	-3223.194414
59.99624417	49.60198804	354.0153797	167.9147256	300.5937502	-209.0024782	-235.16011
-4301.891428	-4259.101707	-4234.72348	-3319.766429	-4520.32519	-4608.965857	-4080.987552
-1077.057156	-976.1416208	-845.2271623	-1103.899832	-963.5895501	-1237.302094	-1128.436818
-427.0783666	-395.7468327	-299.4031047	-579.6420153	-393.3737052	-506.7818851	-403.1217814
-328.3780508	-363.4881637	-268.1643859	-308.4810571	-310.0723089	-694.6143372	-588.0895814
-450.9176632	-381.7000768	-357.600801	98.79000927	-329.9212371	-592.0948064	-263.7723701
-643.3710162	-601.2262217	-533.5949516	-266.5163743	-434.8517109	-792.5808498	-501.5065642
-441.9615576	-635.0218197	-334.9191706	-648.2565032	-374.1668247	-557.2320912	-406.4402915

TCGA.23.2072	TCGA.23.2077	TCGA.23.2078	TCGA.23.2079	TCGA.23.2081	TCGA.23.2084	TCGA.25.1312
-136.8122751	-562.1354967	185.6116426	-464.8580165	-77.15358743	-487.7047732	-508.0459736
67.34474762	-427.8047586	284.7387873	-293.19213	116.2336475	-298.0463875	-340.4026329
-541.7079311	-736.7151463	-444.3638484	-660.7281576	-607.1393742	-831.9414425	-779.6135824
-1338.162515	-867.5771427	-1446.289641	-368.356893	-2009.615949	-1068.127066	-1214.964622
-2140.543672	-1801.179122	-2479.318365	-899.2001787	-2969.269355	-2385.604408	-2468.817862
928.605369	2290.863628	676.8806716	2762.816681	-506.4765048	1953.536679	512.5102522
2957.539721	2801.94939	2743.813712	2494.859235	2756.250776	3239.633244	3017.030076
2380.142615	2798.613151	2566.187225	2541.658897	2579.93356	2819.341977	2496.477081
133.0191459	-1459.014567	363.2839671	-2315.897427	-822.1004341	124.2698423	676.3026834
-1182.329251	-475.1383372	-804.62917	-472.3189529	-263.7451464	-591.8885192	-399.1525863
-79.63401557	926.4512545	790.5614019	-1472.652517	888.0230841	1687.114886	-1691.686119
1451.908916	1700.90095	2377.188151	2102.07113	2002.17996	2159.580863	1860.698673
921.5195534	1051.810015	1430.356865	974.8875681	-95.75823466	1685.174175	63.97832187
-556.4872353	-1082.660609	-1087.522763	-232.9089221	-755.8926744	-481.7435502	-1307.783206
657.2058971	-62.06058434	408.9083582	80.95523357	627.073355	342.561522	-135.0799374
-4457.709339	-4301.971457	-3760.509988	-4607.683555	-4800.151434	-4475.891801	-4322.920406
-863.3269009	-1180.532766	-614.0198824	-925.9232872	-890.3449508	-1078.459658	-1264.959149
-107.4980167	-375.5354085	58.38237011	-308.6661409	-191.4673612	-365.185774	-414.5369732
-129.826613	-621.7786668	170.9970599	-536.0305916	-105.496411	-442.4958305	-518.6986621
-132.0312147	-592.0292522	-197.6025496	-500.7485647	-323.3072366	-545.4847835	-397.2028709
-303.0987321	-688.3814505	-364.9059707	-645.8693808	-360.3035348	-567.1791845	-512.5954978
-355.7765132	-464.4240554	-465.2142056	-471.4639649	-642.5443061	-476.5352624	-500.8345733

TCGA.25.1313	TCGA.25.1314	TCGA.25.1315	TCGA.25.1316	TCGA.25.1317	TCGA.25.1318	TCGA.25.1319
-339.3000816	-535.3357268	-754.7332362	-467.2133153	-114.4331065	-176.0185869	-603.286838
-203.6882647	-404.8584349	-571.2332555	-294.8430369	24.69833798	-18.10772623	-547.9576164
-593.841028	-774.9096437	-944.2693758	-541.4625397	-521.0380295	-552.0632342	-822.6635803
-1319.509853	-1185.933054	-2496.026273	-2372.250674	-1569.986329	-1531.04908	-1240.566771
-3363.129866	-2149.968746	-3108.67189	-2803.403867	-1543.738108	-3202.964788	-3104.06916
1302.965783	884.849774	-1237.456081	-1287.11599	407.136665	-528.5494069	234.1272073
2730.224779	2317.82038	2881.390192	2723.360015	2568.007666	2757.621164	3036.684308
2674.478134	2542.985046	2582.993391	2381.490984	2404.581959	2609.104998	2985.640626
-70.6977695	-881.2540236	-1515.760538	-3033.777868	91.88568625	736.1159569	-2087.02237
-267.6401306	158.2156932	-834.4839275	616.6446749	1.003843474	-712.6016498	-725.2260113
-1677.229805	335.352537	1221.337571	-467.6824082	213.5416865	146.1472609	1398.585556
1655.993145	1734.431419	1788.631324	2090.244119	1879.429007	1776.687007	1746.923269
1066.529883	572.5611512	-39.22785836	-357.0452862	-510.4297453	134.4189502	-807.4366868
-135.5973065	-912.2994347	-2160.312172	-3053.372362	-2011.028646	-1298.458347	-1020.123964
190.009045	-27.61965824	-296.916887	-354.9590989	152.504459	149.5061452	-288.1361258
-3945.117427	-4501.331341	-4204.299255	-2655.259886	-3940.378022	-4762.649155	-4103.176487
-911.7968966	-1159.597993	-1516.749359	-1103.016503	-896.304263	-912.0639866	-1245.899638
-379.0832464	-323.942372	-926.4866886	-607.3304315	-380.2985357	-36.48283678	-475.5097203
-373.3009211	-525.3209602	-834.2654808	-471.5716423	-203.1662514	-103.4618676	-675.3837222
-490.7142718	-616.9655111	-430.4152831	-231.1535802	-4.916650548	-291.1129039	-557.5782222
-571.6711745	-655.9718466	-510.5426892	-415.0309131	-220.5695831	-413.0387877	-697.3142407
-471.7083841	-582.7891712	-787.9553959	-663.6840349	-626.7634752	-427.0877088	-599.8158987

TCGA.25.1320	TCGA.25.1321	TCGA.25.1322	TCGA.25.1323	TCGA.25.1324	TCGA.25.1325	TCGA.25.1326
13.2447493	-574.3444263	-90.80180712	-287.6811965	-965.5833225	-608.6529004	-48.81598321
157.5744539	-490.9914343	100.1605269	-125.3000178	-775.5762314	-410.5901338	140.7076379
-511.6172178	-809.2014973	-628.0121756	-676.712571	-767.9466802	-842.4862565	-595.5056847
-1488.377853	-1039.890653	-1321.302154	-1939.268212	-3088.919799	-1920.961415	-955.5508318
-2985.727056	-2165.241466	-3035.497233	-2880.167669	-2940.439207	-3378.199404	-3270.134798
238.9964211	579.1669396	404.9779311	-641.9907227	-1930.598894	-1076.179714	1258.140518
2936.18776	2883.925906	2898.447609	2937.702876	2739.359977	3089.471549	2988.716582
2743.761691	2748.620796	2681.401909	2372.519886	2358.054556	2620.857368	2613.267479
1691.217228	345.7685141	-213.5501761	-487.6800252	-259.0818506	-1364.434505	657.0111685
-374.293224	-251.5433356	-408.221014	-340.9945995	-798.0702285	-110.2137037	-558.8828479
1205.894306	814.9776096	1607.640099	-1001.189435	2070.850477	1207.131105	-832.7190188
2081.081513	1939.810322	2315.587771	1728.585175	2122.810936	2129.438837	1685.619793
-234.3817893	830.7166529	120.2022923	333.0195915	-1062.398178	821.1288915	823.234025
-1262.846792	-1265.618134	-930.7386314	-1654.100267	-2966.694404	-2075.165587	-971.4378685
372.5796134	-131.581644	185.5018511	159.5886664	-375.1746922	148.6132366	432.2718242
-4057.823485	-4348.389988	-4241.663302	-4349.912926	-4192.85221	-4700.588489	-4619.207937
-808.9140158	-1237.64279	-927.6820843	-1147.547287	-1255.178038	-1204.838489	-802.3948518
212.6876446	-712.8343726	-64.15685863	-504.7571727	-1008.2103	-751.8772033	30.45400895
19.36624774	-562.0609607	-117.2466531	-272.5741056	-1045.942333	-602.0008677	-38.02476324
-184.704789	-576.6018083	-183.8750122	-189.0370239	-419.936947	-574.6424905	-289.0641363
-462.1653517	-595.7615299	-457.5643667	-366.5324641	-636.9739816	-771.8477152	-443.6473973
-416.2553929	-698.2970049	-292.5823263	-504.8052728	-880.7574405	-764.4751723	-455.3902823

TCGA.25.1328	TCGA.25.1329	TCGA.25.1623	TCGA.25.1625	TCGA.25.1626	TCGA.25.1627	TCGA.25.1628
-36.47772871	-202.7590368	237.2703122	-199.1504515	505.7298209	-389.2823871	95.93497824
134.5292393	38.04355187	355.5533051	-15.17811649	619.9876043	-254.197445	222.2392464
-384.2501563	-541.0359347	-386.7775293	-501.7221839	-181.1198736	-625.6538211	-397.0047574
-1090.691561	-1147.391293	-189.7462462	-789.6760488	-753.4844458	-1262.931596	-259.3574942
-2487.284303	-2788.635864	-624.3491232	-1968.184964	-1875.495131	-1719.419782	-794.8196535
404.0178578	890.8275881	2796.442211	2385.981259	2734.9178	1051.63538	2981.073022
2380.490507	2893.216664	2975.835784	2782.017215	2830.367283	3276.757237	2477.539983
2182.533364	2647.100893	2781.540002	2514.031558	2667.097355	2648.352665	2659.320631
-981.0329825	2147.448288	-864.9967809	-1069.196239	-194.2919377	-422.1783878	-495.6258851
-605.1885768	443.468826	-196.2473825	480.6737853	-437.5470565	-811.418924	-847.7759474
-1583.251602	-1609.111228	1514.358069	27.12784224	300.2312052	1176.887604	1540.731452
1383.836082	1930.725612	2318.487716	1684.989925	2173.667394	2263.16842	2336.390466
-389.4212778	707.3641348	367.519585	739.4921625	979.1670895	-164.8736125	966.0897401
-953.1267015	-643.2350432	-249.625524	-375.2119859	-664.3219044	-1998.030482	-1408.246081
526.6842169	382.1692753	484.2745879	343.7503778	809.8533277	-315.254218	534.1935351
-3573.157277	-4285.705784	-4932.6734	-4277.646161	-4224.109759	-4249.613158	-4356.585057
-554.9665392	-859.8997091	-487.3386745	-745.7780343	-177.2248009	-1144.558883	-574.3075889
10.00288379	-75.37575947	326.1312746	-81.52376664	629.2121318	-666.2661437	-5.500317392
-105.3937782	-241.1988348	258.0956335	-173.1765284	491.0964516	-506.5236874	66.98605862
-102.2534213	-245.4441069	-103.8962646	-352.4434879	-6.436273476	-261.8651378	-132.56089
-291.9762333	-519.3971105	-303.0930668	-436.055119	-177.6953792	-342.3726251	-351.7736339
-497.2711618	-594.0246794	-205.7699947	-450.5678038	-158.8512537	-549.9710718	-346.599686

TCGA.25.1630	TCGA.25.1631	TCGA.25.1632	TCGA.25.1633	TCGA.25.1634	TCGA.25.1635	TCGA.25.1870
-340.8471674	-286.3445381	-354.3710028	-35.87610858	-548.6615769	-213.0396187	-402.7238093
-212.08458	-145.3017939	-250.1745663	173.1608722	-404.6616952	41.84305084	-238.2167948
-652.468676	-714.3449963	-590.3424323	-374.8608497	-645.0415153	-368.3829444	-635.3400637
-834.0081934	-1051.897098	-2870.03059	-593.0950276	-2684.207875	-657.3053486	-1082.383679
-2640.469866	-2110.81066	-3131.322335	-1615.641717	-2893.616676	-1743.557295	-2356.440998
1181.700226	1266.991934	-1857.850965	2781.393558	-1460.579658	2385.359252	1536.527398
3065.289291	2986.16289	2731.803432	2401.604111	2520.395913	3049.228552	2712.515157
2792.017741	2704.772154	2429.621168	2593.099414	2110.185704	2746.44724	2598.498432
-994.8212214	-548.3899915	1789.885085	423.6919068	-210.0477446	-1549.202244	-1839.023821
116.4474287	-166.8141379	-506.949635	-107.2870909	-124.2432503	-1182.964453	-296.6410849
1699.499098	-70.88322069	2215.197144	-2444.071358	1084.81771	2625.410967	1919.68775
1937.236619	2068.207231	1801.071313	1730.873444	2209.480978	2381.69314	1564.432852
775.6649842	-59.58661078	-554.5017192	759.0255307	299.4594394	908.9281266	481.0911959
115.991068	-599.453433	-2993.886584	-675.2432506	-1102.188985	-651.4484352	-966.1839954
447.8700783	229.5647654	-63.47021094	640.4367269	-181.7532795	250.4594022	-59.66178439
-4061.644416	-4547.29079	-4581.081491	-4228.668334	-4409.494104	-4177.362347	-4364.776676
-868.6823459	-1095.120742	-1133.520133	-472.6202615	-1161.572169	-761.543928	-1082.215656
-236.1029469	-480.5887949	-705.3218062	234.1148781	-1224.493532	-142.5108833	-435.4888897
-311.6438627	-342.8612349	-440.8261693	-84.95121653	-517.9148289	-312.1224243	-467.7736705
-437.2097579	-250.4228094	-266.0951165	-81.58495561	-218.2630995	-126.2166257	-275.2037133
-460.7795551	-347.4981895	-309.2741622	-156.5045669	-280.6431018	-431.5725342	-540.0259009
-81.03052096	-535.681939	-496.1073495	-350.2710552	-799.8943092	-460.6023915	-620.0418856

TCGA.25.1871	TCGA.25.1877	TCGA.25.1878	TCGA.25.2042	TCGA.25.2391	TCGA.25.2392	TCGA.25.2393
-525.9340074	-725.8635056	-633.3172039	806.3398121	-580.6963589	-690.3410489	-763.4642636
-420.8666885	-582.9412431	-529.4783775	979.7528534	-446.6502618	-505.221798	-538.4569997
-730.503829	-659.8706972	-816.4398171	-158.3997074	-791.1899442	-722.3564264	-822.3987547
-2697.14074	-820.1751809	-157.9078558	-1284.550707	-622.6200188	-952.9124689	-2025.704543
-2919.655562	-2131.513333	-1419.6079	-2346.545611	-1577.86213	-3769.732409	-2648.678027
-1625.422443	1008.074328	1103.691916	1830.690092	1733.421141	2310.491718	-866.7841511
2128.941494	2856.732648	2985.784502	2391.743005	2872.278016	2836.296133	2914.228299
2079.815631	2658.822858	2903.764591	2361.592067	2791.612903	2978.479207	2352.042462
-1931.763774	-3638.541037	-2986.438012	150.5234694	-197.7944934	-837.0822752	-1456.884863
-303.8813723	786.5596948	-611.1225081	-688.3453989	332.9004399	666.9103856	-322.3779743
-1627.742203	-1622.528946	869.1844305	-833.0650281	1359.928156	-1006.580255	-21.8771031
2354.546532	1681.61013	1260.126444	1991.550361	1986.27934	1900.627259	2243.735786
-595.8474182	673.3648167	918.9634763	722.6079738	866.2913986	1591.662018	1257.135302
-3530.601778	-2433.243814	-155.0829841	-1784.148757	-458.9398941	-809.7034518	-3072.96371
-95.19068999	-378.9141728	-93.35571197	958.094237	-76.43336853	-180.4925557	-568.5059503
-4448.103541	-4391.635695	-4067.405851	-4479.578989	-4494.118862	-4381.30947	-4198.071574
-1340.601902	-1342.997991	-958.9170586	-240.3271054	-1123.03172	-1047.742958	-1233.885822
-842.2005075	-585.231752	-367.7222872	1087.02398	-360.9401878	-508.2052695	-737.0747589
-650.9795078	-785.8963546	-560.1060165	835.8764682	-693.6498769	-669.3750538	-873.9849129
-116.3685758	-282.9409838	-775.7389051	181.8189681	-547.3536026	-638.8071645	-277.0390247
-431.7630059	-488.6965526	-807.4565446	-32.86514208	-505.9239724	-620.6864679	-546.6035209
-744.0356807	-678.627955	-436.5033052	-163.5442307	-267.5122264	-373.3156645	-564.7661892

TCGA.25.2396	TCGA.25.2397	TCGA.25.2398	TCGA.25.2399	TCGA.25.2400	TCGA.25.2401	TCGA.25.2404
-700.727721	-601.773762	199.0991157	-178.2135724	-778.2209699	129.2190716	33.70002298
-534.698108	-474.6164995	341.0039265	-45.69050607	-526.0335147	269.8891298	215.2529446
-797.3085682	-874.7894615	-291.4476432	-624.6142631	-765.3558649	-539.6264	-584.9977942
-1541.719453	-1431.517194	-1728.778604	-915.5914863	-1259.280116	-839.383529	-1334.27908
-3249.863767	-2977.631462	-2788.974539	-2068.453742	-2098.316129	-2813.235745	-2263.460955
840.0163596	250.8908378	140.9493696	1130.060961	1385.258272	1468.763956	1259.420189
3002.768552	2884.502498	2770.664179	2775.634317	2992.180228	3321.834602	2571.671333
2791.690351	2648.441868	2527.306493	2804.895387	2575.602146	2872.39156	2728.088539
-1138.894959	743.1285653	-73.50798635	-1630.142331	-2815.772301	-815.3900492	-512.4044738
-262.1212442	-756.8069083	-967.2428872	-886.6882916	-332.4935595	-34.24727152	-330.9631019
443.9633261	903.5373055	-1039.237908	-1223.288097	488.8988102	1754.24396	450.1800337
2163.61547	1646.078206	2208.403136	2143.675821	2118.62528	2004.735046	2297.156703
348.3668143	653.7508229	60.88206915	795.4089935	1007.370317	879.7446917	548.293222
-698.3287699	-2003.573438	-1471.024424	-864.94376	-1608.672789	619.7949803	-45.11772962
52.3989806	-0.21231174	498.4907505	223.4104201	-462.0424626	400.7867177	541.0990494
-4377.393099	-4472.826579	-4026.847181	-4732.210559	-3795.894266	-4628.655597	-4630.356443
-1103.957044	-1146.949028	-529.8563335	-903.5559867	-1396.976918	-633.3209834	-791.0104419
-550.5610974	-599.3542163	65.28924639	-311.8715394	-911.2518192	285.2368494	110.024066
-747.3384903	-658.1733275	123.5834495	-170.6721885	-854.9874928	149.9892637	39.07351924
-567.2723182	-606.8775735	96.21068408	-387.098029	-445.9942298	-335.7918012	-278.1573347
-750.2702836	-642.3289646	-168.4100725	-447.5445721	-527.0295438	-526.6643606	-306.548225
-351.5465527	-587.9192658	-520.8000371	-299.2318298	-514.4439177	-223.0611442	-321.277419

TCGA.25.2408	TCGA.25.2409	TCGA.57.1582	TCGA.57.1583	TCGA.57.1585	TCGA.57.1586	TCGA.57.1992
65.10382751	-374.7627056	-494.4155839	-473.1536531	349.180087	-867.1506029	-500.2092018
193.8883789	-232.9935958	-289.1870628	-316.0843823	494.6686713	-716.2986143	-279.5535184
-612.8865503	-601.2936104	-739.2083613	-692.4923124	-350.9563172	-815.8850073	-751.4244654
-1228.135567	-763.4866393	-652.6384331	-1706.896075	-691.386066	-1383.003955	-1352.499723
-2238.638395	-2648.49285	-999.6138258	-2253.844442	-1289.106858	-1822.285815	-1778.705074
1431.035791	1056.885459	2208.977955	-257.0810958	1783.597689	1052.995616	768.6814058
2542.078027	2637.654263	2714.93146	3034.301591	2747.937694	2742.211953	3038.762847
2305.979806	2764.775025	2505.891266	2867.342068	2667.984164	2463.01134	2776.250195
-1116.393072	-2027.093765	1101.365513	-2108.235023	-763.8397611	-679.8421675	-274.8629091
-618.8580445	-80.92208927	-952.5201941	-435.2968298	6.033601371	-547.22085	424.1915775
724.7903763	1386.11714	-649.1642983	2013.070729	-247.7099993	1472.432296	-513.373873
2004.002834	1761.26873	2130.002784	2231.212129	2294.479271	1774.953237	2026.655592
240.5356238	1386.140464	-339.8546357	193.8896849	784.5654038	1101.32643	722.9068151
-469.2617897	-482.8055422	-2898.578917	-2906.238814	-873.1820533	-305.1867043	226.9071326
624.6051881	324.3435408	-7.304360485	-90.34274629	417.8917953	-229.3200998	-46.21467594
-4427.916559	-4137.951467	-4383.415836	-4084.190032	-4509.125377	-3976.458265	-4484.071753
-718.9499426	-759.5412568	-1196.673442	-1175.98296	-560.4925105	-1230.34216	-1278.486023
163.3217873	-294.9031165	-602.7619362	-478.7238833	277.6787998	-906.5373708	-418.5718592
52.36856529	-416.8078892	-523.7054382	-530.096875	306.4967481	-917.373151	-471.8136399
-170.9234512	-364.3093727	-430.4949671	-455.0943979	-101.9691603	-533.0487674	-342.1363769
-359.1863489	-484.9422641	-573.0701611	-597.2946131	-296.8957287	-602.3425951	-320.9986256
-261.9073601	-448.3818504	-686.5325334	-453.8226996	-266.6269253	-670.5431256	-581.1172569

TCGA.57.1993	TCGA.57.1994
-879.0833382	-695.245162
-689.9927984	-602.1406113
-789.8332771	-713.4929905
-1339.161349	-1207.801913
-2747.59586	-2548.383924
-12.80904785	1524.076515
3102.359759	3090.799412
2561.917034	2742.029158
228.4342314	-614.0651142
-35.12228101	-655.7184146
-775.2993013	1604.325929
2420.685158	2299.559856
731.6599669	1459.256617
-265.4016294	-1189.056397
-95.90369817	-76.70371912
-4388.155648	-3991.062173
-1284.123756	-1009.427766
-868.7996347	-442.9184655
-959.0161086	-750.3672919
-468.2090729	-540.91154
-541.955401	-681.2047533
-413.8519961	-265.2234762

	F1	F2	F3	F4	F5	F6	F7
GO:0048514	0.903872	0.032873	0.910962	0.340714	0.488109	0.387975	0.606973
GO:0001944	0.889716	0.026818	0.960757	0.26923	0.439029	0.460484	0.644998
GO:0045595	0.606973	0.044602	0.982157	0.14602	0.3362	0.510837	0.638592
GO:0051249	0.460484	0.074304	0.455066	0.418159	0.569984	0.151047	0.510837
GO:0050852	0.349859	0.516604	0.297311	0.423321	0.13872	0.540005	0.868549
GO:0031294	0.413035	0.222034	0.285045	0.314208	0.771245	0.120628	0.89679
GO:0050776	0.710443	0.392912	0.265372	0.246654	0.297311	0.178179	0.840475
GO:0002376	0.903872	0.551902	0.510837	0.606973	0.164191	0.439029	0.717116
GO:0002857	0.683974	0.925162	0.582194	0.439029	0.091732	0.975021	0.285045
GO:0006959	0.124968	0.79185	0.819549	0.882651	0.996431	0.476953	0.65143
GO:0050870	0.460484	0.243024	0.493739	0.444338	0.657889	0.854489	0.918058
GO:0072686	0.540005	0.254027	0.697162	0.349859	0.184016	0.812602	0.677416
GO:0048522	0.771245	0.136351	0.075767	0.208782	0.36861	0.967888	0.798752
GO:0050672	0.289095	0.875595	0.186987	0.444338	0.939386	0.982157	0.363865
GO:0031589	0.625861	0.01797	0.7508	0.588344	0.499404	0.79185	0.677416
GO:0007155	0.784965	0.664373	0.363865	0.833486	0.072863	0.812602	0.690557
GO:0022610	0.960757	0.04854	0.690557	0.265372	0.471428	0.65143	0.95363
GO:1901342	0.826511	0.029379	0.613241	0.281034	0.670882	0.600734	0.925162
GO:0001525	0.833486	0.009601	0.882651	0.359158	0.594525	0.433756	0.545937
GO:0030855	0.235878	0.3362	0.193035	0.18108	0.20556	0.261552	0.449684
GO:0060429	0.407948	0.100672	0.108314	0.327287	0.331724	0.15361	0.476953
GO:0042127	0.805669	0.418159	0.439029	0.625861	0.387975	0.812602	0.281034

Variables	D_0-D_1	D_2	D_3	D_4	D_5	D_6-D_8
Age (per year increase)	1.04 (1.02-1.06) 8.3e-4	1.04 (1.01-1.07) 5.7e-3	1.00 (0.97-1.02) 0.94	1.04 (1.01-1.07) 2.1e-2	1.03 (1.00-1.06) 4.3e-2	1.00 (0.97-1.02) 0.77
Stage (2 vs. 1)	2.39 (0.03-5.98) 0.82	1.04 (0.33-3.26) 0.94	0.73 (0.29-1.84) 0.50	0.55 (0.07-4.2) 0.56	2.16 (0.78-5.96) 0.14	0.64 (0.08-5.05) 0.67
Stage (3 vs. 1)	0.67 (0.09-5.00) 0.70	1.86 (0.71-4.91) 0.21	1.03 (0.35-3.04) 0.96	3.58 (1.67-7.67) 0.001	4.33 (2.10-8.91) 6.8e-5	1.40 (0.61-3.21) 0.42
Stage (4 vs. 1)	1.52 (0.20-11.35) 0.69	5.33 (1.98-14.31) 9.2e-4	4.06 (1.75-9.43) 0.001	13.00 (5.40-31.32) 1.1e-8	7.10 (3.00-16.80) 8.0e-6	1.66 (.68-4.03) 0.26
Race (African vs. Caucasian)	2.38 (0.93-6.11) 0.07	0.24 (0.03-1.83) 0.17	1.59 (0.65-3.91) 0.31	0.93 (0.38-2.26) 0.87	1.24 (0.62-2.46) 0.55	NA
ArcTIL risk score (continuous)	1.51 (1.22-1.87) 1.6e-04	1.95 (1.36-2.78) 2.5e-4	1.98 (1.42-2.76) 5.2e-5	1.92 (1.36-2.71) 2.1e-4	2.57 (1.89-3.49) 1.6e-9	1.42 (1.09-1.85) 7.8e-3
F1	1.05 (0.83-1.32) 0.68	1.31 (0.90-1.91) 0.16	0.91 (0.61-1.34) 0.63	0.91 (0.64-1.31) 0.62	1.16 (0.84-1.59) 0.37	1.15 (0.88-1.51) 0.32
F2	0.86 (0.55-1.33) 0.49	0.83 (0.39-1.76) 0.63	0.42 (0.16-1.07) 0.07	0.49 (0.25-0.98) 0.04	0.33 (0.17-0.64) 1e-3	0.77 (0.45-1.30) 0.32
F3	1.27 (0.84-1.93) 0.25	3.14 (1.32-7.48) 0.01	1.37 (0.63-3.00) 0.43	0.93 (0.45-1.95) 0.86	2.32 (1.19-4.56) 0.01	1.22 (0.72-2.09) 0.46
F4	0.99 (0.83-1.18) 0.88	0.63 (0.46-0.86) 0.003	0.73 (0.54-0.98) 0.04	0.59 (0.45-0.76) 4e-5	0.77 (0.61-0.98) 0.03	0.90 (0.73-1.11) 0.33
F5	0.72 (0.55-0.96) 0.23	0.99 (0.61-1.61) 0.97	0.49 (0.32-0.76) 0.01	0.83 (0.54-1.29) 0.41	0.44 (0.31-0.63) 9e-6	1.07 (0.78-1.45) 0.69
F6	1.47 (0.97-2.24) 0.70	3.03 (1.47-6.24) 0.003	1.05 (0.59-1.87) 0.88	2.06 (1.10-3.87) 0.02	1.60 (0.88-2.92) 0.12	1.17 (0.75-1.85) 0.49
F7	1.52 (1.07-2.15) 0.02	1.00 (0.58-1.73) 0.99	0.83 (0.49-1.42) 0.50	0.98 (0.58-1.66) 0.94	0.99 (0.63-1.55) 0.96	1.42 (0.97-2.07) 0.07

Variables	D_1	D_2	D_3	D_4	D_5	D_6-D_8
Age (per year increase)	1.04 (1.02-1.06) 8.2e-4	1.03 (0.99-1.06) 5.0e-2	0.99 (0.97-1.03) 0.99	1.05 (1.00-1.09) 2.9e-3	1.02 (0.99-1.06) 0.16	1.00 (0.97-1.03) 0.81
Stage (2 vs. 1)	2.37 (0.22-3.29) 0.96	2.54 (0.70-9.22) 0.15	1.10 (0.37-3.22) 0.86	1.02 (0.13-8.09) 0.98	2.55 (0.90-7.24) 0.07	0.81 (0.08-7.81) 0.71
Stage (3 vs. 1)	1.17 (0.12-11.39) 0.89	4.22 (1.41-12.59) 0.01	1.67 (0.54-5.14) 0.37	3.29 (1.467.38) 3.9e-3	5.06 (2.26-11.34) 8.1e-5	1.47 (0.62-3.53) 0.86
Stage (4 vs. 1)	3.17 (0.32-30.82) 0.32	3.34 (0.86-12.72) 0.078	3.23 (1.11-9.37) 0.03	7.49 (2.58-21.70) 2.1e-4	5.71 (2.23-17.61) 2.8e-4	1.42 (0.55-1.68) 0.38
Race (African vs. Caucasian)	6.16 (2.21-17.21) 5.2e-4	0.35 (0.04-2.80) 0.32	1.18 (0.47-3.01) 0.72	0.67 (0.27-1.65) 0.38	0.97 (0.47-1.98) 0.93	NA
ArcTIL risk score	1.33 (1.04-1.71) 2.5e-2	2.29 (1.48-3.53) 2.0e-4	2.06 (1.40-3.04) 2.5e-4	1.59 (1.09-2.31) 1.5e-2	2.45 (1.76-3.40) 9.2e-8	1.37 (1.04-1.81) 2.3e-2