

Table S1 The DEGs between the high- and low-risk groups

Gene	Group1mea	Group2mea	LogFC	P	FDR
GSTA1	119.30957	53.407518	-1.159595	2.22E-07	1.98E-06
CADM3	0.5114032	1.110377	1.118514	0.0001441	0.0005107
WSCD2	1.0979913	0.4998583	-1.135275	9.20E-06	4.80E-05
STK32A	0.2989113	0.6327758	1.0819768	0.0002828	0.000716
CIDE	0.0201461	0.1187589	2.5594629	0.0006198	0.0018094
CSF3	1.3249028	2.7058229	1.0301809	2.47E-05	0.0001123
CCL23	0.4834595	1.0264201	1.0861545	4.08E-07	3.31E-06
TNFSF8	0.6018465	1.4836162	1.4836845	1.21E-08	1.73E-07
ORM1	1.4788369	4.0196725	1.442615	0.0005261	0.0015686
FRMPD2	0.0289142	0.0618396	1.0667539	0.028764	0.0495973
IL13	0.0160907	0.0348177	1.1135932	1.42E-05	0.0001781
AGT	1.0566248	2.3984332	1.182629	0.0000545	0.0018913
PGC	5.287444	14.261942	1.4315281	0.0068703	0.0140788
TEX15	0.1639878	0.0770998	-1.088789	0.0008372	0.0023361
C20orf141	0.0345975	0.1393559	2.0100354	0.0008345	0.0023298
ACOD1	0.0368043	0.0855847	1.2459829	5.26E-06	2.98E-05
MSLN	10.286876	31.556362	1.617126	0.0004684	0.001422
SERPINC1	0.0601158	0.2965276	2.3023501	0.0111534	0.0219257
VNN1	1.5490393	3.8359364	1.3074006	1.34E-07	1.30E-06
GABRA5	0.9388006	0.2926749	-1.68152	2.71E-07	2.34E-06
P2RY8	1.0799028	2.210599	1.0337708	8.89E-10	2.05E-08
IFNL1	0.0974198	0.2025459	1.0559621	0.0147453	0.0279398
PPP1R1A	0.1384413	0.3480803	1.3301457	0.021122	0.038149
CS2	1.4196533	2.9289181	1.0448292	0.0260699	0.045686
ALDH8A1	2.0988422	0.2895775	-2.857572	9.24E-05	0.0003466
ADAMTSL4	2.0347758	4.4272104	1.125288	1.33E-12	1.21E-10
PAX5	0.3757392	0.8873543	1.2397788	0.0039217	0.0088838
GPR39	0.5440864	1.0894654	1.0017126	6.65E-10	1.62E-08
ADGRG5	0.4696084	1.0033527	1.0952989	5.37E-11	2.22E-09
SP7	0.1006116	0.0367602	-1.452579	0.0478971	0.0478971
CLDN17	0.5229669	1.0199531	-2.12425	0.0008374	0.0023361
PLA2G2A	1.7828705	20.097408	3.4947356	0.0005887	0.0017327
CNTNAP5	0.1243809	0.0501248	-1.111169	7.48E-08	7.87E-07
CT55	0.2924818	0.1155466	-1.339872	0.0173173	0.0322273
CD22	0.8764953	2.231673	1.3483073	6.56E-06	3.59E-05
PIANP	1.1661974	0.4536655	-1.362111	4.51E-06	2.58E-05
MPPED1	1.5738907	0.4974811	-1.661622	1.64E-12	1.37E-10
SOHLH1	0.5670693	2.757831	-1.039985	2.42E-06	1.52E-05
SCN3A	0.0755368	0.4372819	2.5333125	0.0054617	0.0118135
DRD2	0.6202069	0.2474827	-1.325422	0.0128504	0.0247754
VTN	0.1736664	6.2286499	5.1645288	1.88E-05	8.88E-05
DBH	0.1497589	0.3542038	1.2419376	6.72E-08	7.21E-07
FCN3	2.030187	5.2274859	1.3645046	2.56E-08	3.20E-07
SERPIND1	1.0064797	2.107477	1.0661988	0.0102982	0.020451
PAX3	0.3297332	0.1299508	-1.343333	3.04E-09	5.51E-08
CCKBR	0.5454668	0.1943434	-1.488883	0.0007384	0.0020985
STEAP4	2.0782922	4.6456707	1.1604884	4.11E-05	0.0001728
CPN2	0.0288832	0.0593193	1.0382728	0.0113382	0.022238
PCP4	0.9534578	5.5791387	2.5488015	0.0006471	0.0018737
GOLTI4	0.1489176	3.5540095	1.2549336	6.02E-05	0.0002039
ATP1A4	0.0147854	0.0604297	2.0308896	3.21E-09	5.75E-08
MAP1LC3C	0.2243277	0.5450135	1.2806841	1.52E-08	2.09E-07
NPTX1	0.5228219	2.2119027	2.0809695	0.0180774	0.033396
MROHB2	0.0032195	0.0091915	1.51347	0.0007627	0.0021561
CA4	0.2843025	0.6227929	1.1313259	0.0018923	0.0047507
NESR1	1.339885	0.3883474	-1.786689	5.89E-08	6.46E-07
SEMA6D	3.394652	1.7872838	-1.138467	3.06E-10	8.67E-09
FCN2	0.0295632	0.0693072	1.2292006	6.24E-06	3.45E-05
INSM1	1.0240897	2.508997	1.2927531	0.027377	0.0475647
NUGGC	0.3880954	0.8082881	1.0584584	1.16E-08	1.67E-07
GSD2	0.105171	0.0302553	-1.797478	1.34E-05	6.66E-05
GRID2	0.0313682	1.011242	-1.484641	0.000625	0.0018231
CTAG2	9.2477952	3.4118323	-1.438563	0.0160524	0.0301461
SORCS3	0.1587759	0.0743521	-1.094546	0.0020648	0.0051278
CCL25	0.1470561	0.4807973	1.7090265	0.0060054	0.0128516
MUCL3	0.0940217	0.2219138	1.238934	0.0008972	0.0024794
RGL3	0.8105624	1.6804438	1.0518471	1.03E-08	1.51E-07
SCG5	2.0525708	4.4616272	1.120138	0.0274333	0.0476438
EMILIN3	2.9174184	1.123392	-1.376831	1.09E-10	3.79E-09
ADHIC	4.6539977	10.232949	-2.150706	0.0256877	0.0451052
SLC17A3	0.0060179	0.0129816	1.1091307	0.0089736	0.0181639
RETN	0.7017673	1.4824505	1.0789192	2.71E-05	0.0001216
XKR4	0.404557	1.0182649	1.0482975	0.0038909	0.0088309
MLPH	2.5026448	5.2133661	1.0587616	1.90E-09	3.79E-08
CAPN8	0.8835729	2.258471	1.3539254	1.15E-06	7.98E-06
AQP4	3.3079876	7.2956026	1.1410733	0.004581	0.0101492
ADCY2	0.5535574	0.2255663	-1.295181	9.90E-07	7.02E-06
SLCSA11	0.28141	0.119367	-1.237269	0.0054716	0.0118334
LRRIT4	0.2675385	0.0692394	-1.950081	4.87E-05	0.000199
CCL14	0.1344315	0.1627892	1.0976397	2.27E-05	0.0001047
PAX1	0.3951162	0.155655	-1.343925	0.0005598	0.0043187
IL5RA	0.1196455	0.2549315	1.0913434	2.27E-05	0.0001048
GPR149	0.6518866	2.0182985	-1.578319	6.35E-05	0.0002466
IL1RL1	0.3603949	1.6073213	2.157008	6.37E-05	0.0002506
ANXA13	0.0948724	0.7648273	3.0110733	0.0003347	0.0010592
BHMT2	0.3884797	1.237061	1.6710054	4.15E-08	4.82E-07
KCNV1	0.1084423	0.0537609	-1.012298	0.0036036	0.0082726
AOC1	1.0058303	2.1078967	1.0674172	6.15E-07	4.70E-06
NTR1	0.2856177	0.5997247	1.0702152	0.0092096	0.0185709
CCDC38	0.1348066	0.0470407	-1.518909	6.83E-08	7.28E-07
CYP21A2	0.0440292	0.0944784	1.1015237	0.0001009	0.0003747
SELE	1.0779568	2.1753804	1.0129559	0.0001475	0.0005207
S100A7	96.997287	304.17124	1.6638182	0.0026976	0.0064402
ZBTB16	0.1483667	0.3550944	1.2590352	2.82E-06	1.73E-05
ORM2	0.6491734	2.6314422	2.0191778	3.08E-05	0.0001352
BRIS3	0.0234084	0.0104029	-1.170035	0.0002318	0.000755
GPIHBP1	0.5306399	1.090285	1.0389003	0.0003318	0.0010513
NROB2	0.1567234	1.5188267	3.2766649	8.18E-05	0.0003113
HRASL5	0.5447098	2.6297247	-1.050558	5.06E-12	3.35E-10
SLC6A17	1.6299339	3.3685413	1.0459223	0.0001811	0.0006120
NR4A3	1.0782567	2.3099094	1.0991355	0.0006408	0.0018609
ITIH5	0.6259142	1.3904584	1.1515238	0.0001234	0.0004459
HNF1B	0.1838927	0.5626309	1.6133249	3.36E-06	2.01E-05
LINGO4	0.0245577	0.0617063	1.3292147	1.63E-05	7.88E-05
DIO1	0.0867225	0.2442391	1.4938166	1.93E-05	9.08E-05
UBXN10	0.615684	1.3361742	1.117893	1.72E-07	1.59E-06
IL26	0.0473022	0.0996557	1.0750458	6.97E-09	1.10E-07
LAI2	0.2628627	0.5292187	1.0095548	1.90E-09	3.78E-08
FOSB	7.4376511	17.942147	1.2704336	1.32E-05	6.55E-05
OTX2	0.7495933	0.3498659	-1.099306	2.31E-05	0.0001063
OTOG	0.0485864	0.0210895	-1.204209	0.0004104	0.0012656
SPINK1	1.1273931	9.005926	2.997884	0.0008288	0.0023181
NLRP7	0.4461963	1.0882159	1.2862142	3.31E-07	2.77E-06
MS4A1	1.3341422	3.7888473	1.5050848	0.0005229	0.0015609
NPY4R	0.0317115	0.1033198	1.2050309	5.77E-08	6.35E-07
GKN2	0.3856659	1.0732085	1.4218772	0.0001663	0.0005773
ATRN1	0.6588255	0.3018433	-1.126097	5.54E-08	6.14E-07
S100A7P	1.7840619	4.7492349	1.4125294	0.0047102	0.0103972
SFTPD	28.733238	63.010375	1.1328688	3.63E-05	0.000156
PLN	1.8326553	4.0171271	1.1322877	3.27E-07	2.75E-06
SLC25A48	0.3206197	0.1464824	-1.120135	5.86E-06	3.28E-05
FCRL2	0.3314166	0.9555507	1.5278868	1.42E-06	9.65E-06
CXCL2	7.7923941	15.868674	1.0085427	1.14E-08	1.65E-07
ASC14	0.6322416	0.1958661	-1.767802	2.87E-05	0.0001275
SYT9	0.3172504	0.1187185	-1.418077	4.51E-05	0.0001868
CALHM1	0.0482480	0.1009234	1.0660129	0.0153393	0.0289444
VAX1	0.3424188	0.1543036	-1.149991	1.31E-07	1.27E-06
MYO7B	0.1046111	0.2222806	1.0873462	2.72E-06	1.68E-05
HPR	0.0597692	0.170914	1.5157953	0.0059913	0.0182878
ZNF683	0.735847	1.6212147	1.1395975	1.65E-08	2.24E-07
SERPINA5	0.2718396	0.6365837	1.2275947	1.29E-05	1.25E-06
CCL16	0.0181041	0.0608021	1.7478059	1.21E-05	6.06E-05
NPY4R2	0.0270375	0.0640713	1.2447186	3.27E-05	0.0001425
DLX6	3.7905823	1.6939424	-1.162034	3.86E-14	7.05E-12
BEST2	0.2045201	0.0644462	-1.666089	0.002366	0.003471
OTOP3	2.5085762	0.7720377	-1.700126	4.79E-05	0.0001965
FLRT1	0.4106705	0.1719986	-1.255585	0.0004662	0.0014169
H2BFWT	0.4080163	0.1915233	-1.091107	1.09E-08	1.58E-07
KRT31	17.981514	6.6792147	-1.428763	8.55E-06	4.52E-05
MYBPHL	0.1148553	0.2664442	1.2140159	0.005567	0.0120261
FXYD2	0.1102049	0.4000492	1.8599896	0.0005839	0.0017207
FRRS1L	0.642227	0.316132	-1.022556	3.50E-08	4.19E-07
XAGE2	0.4809168	2.1562429	2.1646604	0.009531	0.0191264
CCDC198	0.0041808	0.0167982	2.0064615	0.0048026	0.0105733
FGF18	0.2855725	0.5761673	1.0126531	0.0004234	0.0013011
SLC7A3	0.3257648	0.0981679	-1.730507	0.00017	0.0005888
ANKRD63	0.1108615	0.0416234	-1.413291	1.90E-05	8.96E-05
KRT77	1.5890283	4.779851	-1.731368	3.60E-09	6.34E-08
CD79B	2.2613714	5.1670529	1.1921437	7.07E-07	5.28E-06
ART3	0.1591688	0.653372	2.0373466	0.0262297	0.04