

Figure S1. Prognostic significance of differentially expressed mRNAs. (A-T) The overall survival analysis of patients with papillary thyroid carcinoma in the high- vs. low-expression groups based on 20 mRNAs: (A) ADGRD1; (B) ALDH2; (C) ANO5; (D) ASIC1; (E) DCAF8L1; (F) DPP6; (G) ERFE; (H) FEZF1; (I) FLRT3; (J) GABRP; (K) GABRR1; (L) GSX2; (M) IRS4; (N) ISM2; (O) ITIH3; (P) LAMC3; (Q) MACROD2; (R) PCDH8; (S) PDE1B; and (T) RGN. Red and blue curves indicate high- and low-expression groups, respectively.

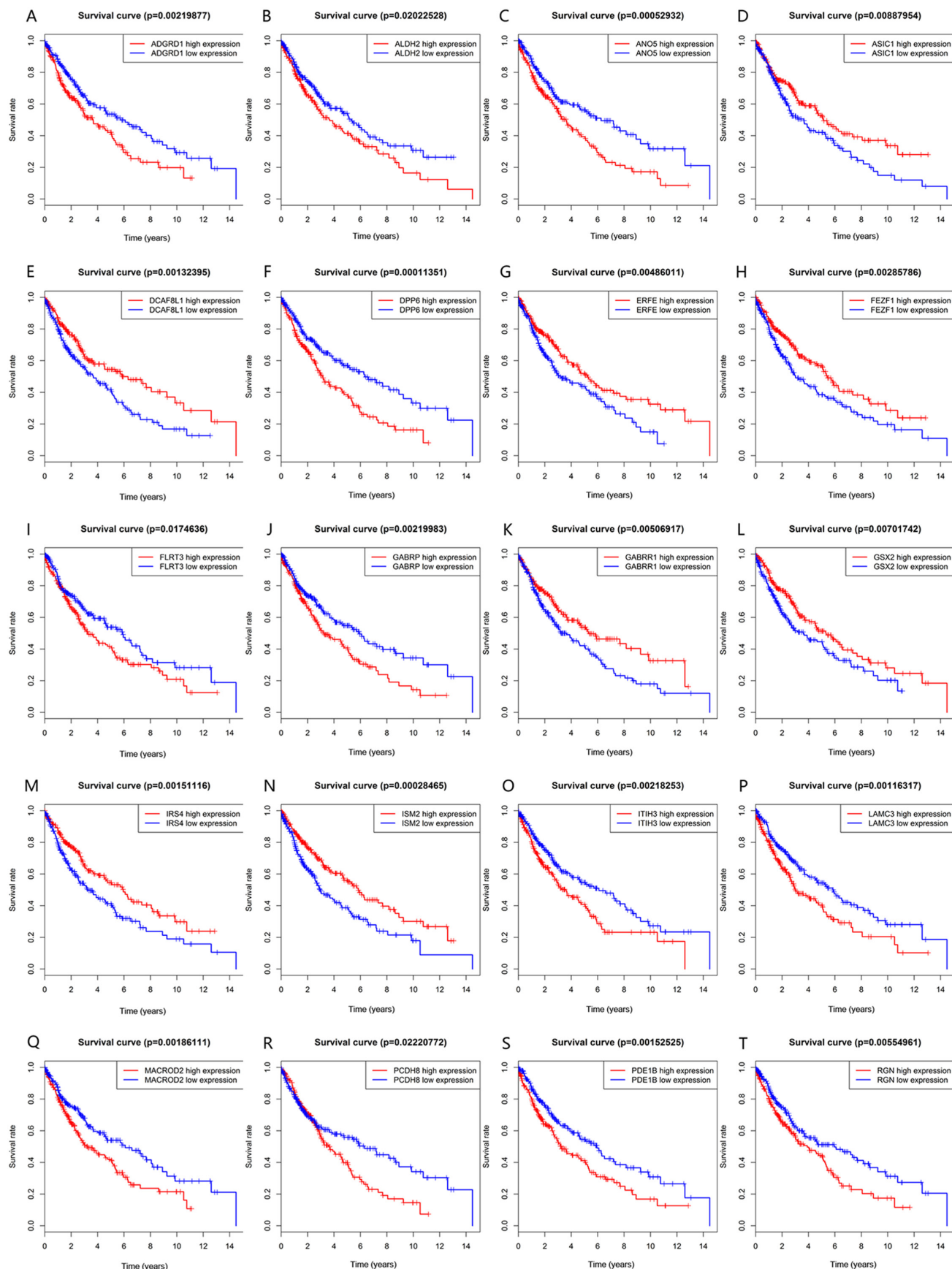


Table SI. Univariate cox regression analysis between OS and the expression levels of DEMs.

Gene symbol	Coef	P-value
TMEM207	0.871183	0.089839
ROBO4	1.187816	0.018967
RGCC	1.174477	0.030873
CLIC5	1.118812	0.005731
CSRNPI	1.281143	0.001171
MYZAP	1.157521	0.003444
TCF21	1.133391	0.004544
EMCN	1.09347	0.102207
MCEMP1	1.107544	0.007598
GPIHBP1	1.120922	0.002917
JAM2	1.124088	0.071622
FHL5	1.139469	0.007265
SPAAR	1.168955	0.013258
FCN3	1.131605	0.001541
PCDH12	1.193543	0.019679
WFS1	1.346369	0.002291
AK1	1.167934	0.075573
AOC3	1.15304	0.00452
A2M	1.134167	0.018793
ADGRD1	1.129087	0.006127
RETN	1.142893	0.000552
CCM2L	1.138948	0.066154
FZD4	1.223376	0.008551
PDLIM2	1.06423	0.470565
GLDN	1.165102	0.006705
ENG	1.159116	0.055327
DRAM1	1.165192	0.026613
DES	1.079883	0.023722
CLDN5	1.168531	0.003774
MCM4	0.896603	0.228698
ANGPTL1	1.09573	0.045408
GADD45B	1.132019	0.058555
SHROOM4	1.115196	0.058406
ADCY4	1.114783	0.137421
SORBS1	1.13582	0.04239
FLT4	1.197572	0.012098
CCDC141	1.145445	0.001161
CITED2	1.169637	0.021559
SLC5A9	1.094529	0.023086
PKNOX2	1.183334	0.001149
LRRK2	1.092731	0.029231
CXCL2	1.089558	0.01878
MND1	0.917533	0.32016
AKAP2	1.14372	0.005915
CLEC4M	1.139758	0.006802
GPR4	1.143388	0.122293
HELLS	0.798163	0.008661
PDE2A	1.198402	0.003065
KIF15	0.880784	0.136385
ALOX5AP	1.093777	0.095382
EME1	0.904408	0.171996
ASF1B	0.870461	0.080258
RFC4	0.835094	0.016573
TMEM125	1.102738	0.01553
KLF6	1.217628	0.012638

Table SI. Continued.

Gene symbol	Coef	P-value
LONRF3	1.145316	0.004044
MAMDC2	1.104078	0.00843
KHDRBS2	1.058127	0.127784
C12orf56	0.947446	0.102732
MYADM	1.225879	0.000289
ARHGAP18	1.16277	0.060254
ALDH2	1.16817	0.02783
ATP11A	1.157366	0.035548
MSR1	1.088327	0.078568
CHRD1	1.083527	0.012569
MAP1LC3C	1.128816	0.0026
VSIG4	1.103505	0.023792
RASGRF1	1.09574	0.010927
GCOM1	1.163054	0.00095
OLR1	1.06717	0.115703
HSPB7	1.147949	0.003283
PTH1R	1.148466	0.008097
LOXHD1	1.067094	0.16432
ST6GALNAC5	1.027123	0.642879
GPRC5A	1.08096	0.058127
PDE1B	1.224443	0.002306
OR7E47P	1.057475	0.214751
FAM83D	0.859501	0.020587
ZEB2	1.128434	0.078802
ADGRE3	1.078623	0.082995
SGCA	1.133837	0.002276
TMEM236	1.154796	0.016466
C11orf96	1.17322	0.002113
F10	1.151135	0.013161
CHEK2	0.700561	0.000148
CCDC68	1.136789	0.003985
GJA4	1.090765	0.205794
SYNC	1.122024	0.070098
NTN4	1.10703	0.072549
IQSEC3	1.099199	0.037917
SFTPA1	1.03039	0.088092
ITIH3	1.193592	0.000654
MMP19	1.147018	0.011747
CDKL2	1.116393	0.023364
CNRIP1	1.112944	0.129591
DLX6	0.953364	0.072748
FAM72B	0.91084	0.207039
CCDC34	0.835281	0.05823
CCDC173	1.088454	0.094913
HOPX	1.101307	0.031577
PTGIR	1.14487	0.038881
RNASEH2A	0.816685	0.026997
SOD3	1.140876	0.019851
ARC	1.111501	0.010452
COX7A1	1.115141	0.083312
TP63	0.952981	0.066642
RGN	1.080241	0.075615
C2	1.093733	0.137802
SEMA3B	1.112596	0.017982
CENPK	0.871527	0.105665
SSTR1	1.076198	0.018952

Table SI. Continued.

Gene symbol	Coef	P-value
SFTPA2	1.029749	0.096433
ELANE	1.151478	0.00831
GMNN	0.9022	0.283378
OTX1	0.885397	0.008968
ENPP2	1.171666	0.005987
DCDC2	1.110454	0.009527
NLRP12	1.106845	0.025417
SFTA2	1.049086	0.028185
CLIC3	1.128111	0.003959
DSC3	0.964746	0.185308
CCL2	1.110947	0.036147
DNASE1L3	0.961419	0.341055
CRTAC1	1.074675	0.012026
XXYLT1	0.841928	0.022947
KRTAP4-1	0.975837	0.460426
DLX5	0.937305	0.031787
MYL3	1.157333	0.002442
PKP3	1.136064	0.102114
KLF17	1.081617	0.137681
CHIA	1.073101	0.008624
RAET1L	0.989355	0.660054
SLCO2B1	1.123592	0.019575
CARD14	0.948022	0.335081
ABLIM3	1.160795	0.003361
TMEM117	0.883506	0.042558
CSF3R	1.096192	0.049461
ALPL	1.126604	0.005644
TNFRSF10C	1.057559	0.266505
PADI4	1.113081	0.025057
KRT74	0.945973	0.055589
MACROD2	1.108769	0.007785
FANCE	0.818282	0.020483
LAMC3	1.108107	0.050618
IL6	1.065446	0.066665
SFTA3	1.052156	0.022306
ACSS3	1.117776	0.018571
PCDHA12	1.110219	0.002046
SCGB1A1	1.022956	0.218202
P3H4	0.885757	0.112483
GJA5	1.116971	0.024689
SCEL	1.037552	0.245162
FLRT3	1.107121	0.004358
PFN2	0.94183	0.230624
GAREM2	0.956544	0.492517
GRHL1	0.915876	0.132795
HAS1	1.064762	0.073736
B3GNT7	1.116438	0.029298
FAM47E-STBD1	1.15668	0.04441
TGM2	1.180409	0.000683
AGR3	1.042262	0.122403
CLCN2	0.864753	0.031772
MT1A	1.064421	0.039569
SLC16A4	1.120052	0.032122
HIST1H2BH	0.864745	0.000177
PCDHGA12	1.174615	0.0015
GABRR1	0.957039	0.080615

Table SI. Continued.

Gene symbol	Coef	P-value
PTGIS	1.128168	0.007913
CXCR1	1.066862	0.043752
KCTD1	0.890911	0.035172
TTC16	1.053772	0.265502
SFTPB	1.03662	0.059058
SOX2	0.951549	0.041069
FOXD1	0.929985	0.033013
AL645922.1	1.197401	0.02367
HSPB8	1.094783	0.047431
PPBP	1.07996	0.011723
DDO	1.107433	0.039153
SLC8A3	1.096679	0.033274
CLCA2	0.970547	0.131938
ANK2	1.153377	0.006924
MUC1	1.095058	0.031144
FAM83A	1.051688	0.048415
VANGL2	0.947091	0.251654
KCNK17	1.078424	0.107768
MAOB	1.082818	0.086748
TFR2	0.894227	0.028886
WASF1	0.884802	0.02937
KNDC1	1.064912	0.058397
DMRTA2	0.965568	0.102774
APOH	1.111565	0.00071
PTX3	1.093207	0.009263
NKX3-2	0.946371	0.168103
DNAAF1	1.071686	0.080208
DDN	0.904306	0.030508
FAM181B	0.980233	0.479119
ROS1	1.066437	0.019293
HRASLS	0.924146	0.009078
TMPRSS11A	0.969647	0.111147
FEZF1	0.930771	0.003739
RSPH10B	0.929384	0.238303
CLEC4D	1.024355	0.612528
SLC22A31	1.059315	0.03974
B4GALT4	0.881927	0.06749
HIST1H3G	0.920935	0.02338
CHODL	0.938028	0.045941
STRA6	1.073683	0.048338
ANO5	1.096316	0.013625
PAX9	0.948044	0.151603
ASIC1	0.899766	0.071499
TIMP3	1.09595	0.013452
FAM84A	0.940062	0.123607
HIST1H2BO	0.946053	0.250402
ISM2	0.920649	0.011168
PLAU	1.105551	0.064408
BMP5	1.053544	0.076118
DIO2	0.953162	0.208239
TUBB3	1.070464	0.094132
SUSD4	0.90664	0.007249
RGMA	0.892046	0.002128
GREM2	1.08329	0.034488
GRK7	0.931799	0.120721
SNX31	0.956841	0.078712

Table SI. Continued.

Gene symbol	Coef	P-value
LYPD6B	0.954734	0.172747
FAM155B	0.949873	0.121297
UGT1A1	0.936441	0.064322
APCDD1L	1.065109	0.049576
LIPK	1.069302	0.029168
MYEOV	1.065735	0.021168
PCDH19	0.959208	0.073982
MDFI	1.086429	0.142558
SLC9A4	0.955628	0.071113
ADH7	0.971665	0.068225
KLHL13	0.916834	0.019169
DMP1	0.945584	0.232397
GLYATL2	0.94111	0.005819
MMP28	1.096681	0.005744
CCDC177	0.90794	0.001476
SERPINB12	0.969601	0.197053
CRYBB3	0.944956	0.210169
ERFE	0.925059	0.089018
NXF3	1.065244	0.066871
CDK5R2	1.046789	0.159231
DPP6	1.102962	0.002864
MED12L	0.847214	0.001877
ONECUT3	0.889308	0.000278
HIST1H2AJ	0.911333	0.071479
SMC1B	1.049632	0.162101
SLC52A1	0.947614	0.177367
CALML6	0.960042	0.306846
GJB7	0.974496	0.381809
NTRK3	1.08223	0.019914
MRAP2	0.945536	0.027358
SLN	1.085163	0.03508
SMCP	0.9122	0.017728
TRIM15	1.05995	0.062759
OLFM4	1.019906	0.351126
SMIM35	0.897715	0.05022
SLC35G1	0.880774	0.004387
HIST1H4J	0.917276	0.135159
FAM237A	0.940587	0.13283
HPR	1.14323	0.000743
ABCA13	0.964939	0.19146
HES6	0.924919	0.135234
SFRP5	1.039071	0.15297
KIRREL2	1.013566	0.674629
NR0B2	1.086213	0.016832
EPO	0.957771	0.332228
C4orf17	0.937064	0.088202
MS4A8	1.030452	0.17372
SCG5	1.051246	0.302874
SERPIND1	1.080635	0.004244
RIPPLY2	1.041084	0.127705
PNMA5	0.999019	0.97293
GABRP	1.046119	0.056727
PLK5	0.926146	0.105373
SHISA9	0.969748	0.150768
ASCL4	0.942583	0.081969
ARL14	1.05336	0.055035

Table SI. Continued.

Gene symbol	Coef	P-value
CNTNAP4	1.070973	0.021272
CABP7	0.917588	0.177838
PITX3	0.88171	0.00733
RFPL1	0.880165	0.037966
IRS4	0.931018	0.002058
TRIM58	1.138442	3.93E-06
OR2W3	1.164057	4.48E-05
LECT2	0.930028	0.155908
DIRAS1	1.042948	0.184099
C5orf60	0.936407	0.270791
ATP13A5	0.931272	0.005618
PCDH8	1.022128	0.403519
FTHL17	0.987318	0.685324
UGT2B4	1.130902	0.003588
MAGEB1	1.008054	0.785297
SYNPR	0.945075	0.277847
KRTAP2-3	1.012563	0.767601
HES7	0.96308	0.443098
TEX35	0.934133	0.127829
RPRM	0.932452	0.031422
PLA2G4D	1.079637	0.040103
PABPC1L2A	0.952109	0.338286
AADACL2	0.949219	0.052017
NOS2	0.956329	0.079721
L1CAM	1.064715	0.040891
NOBOX	0.961322	0.240922
OTOS	0.853368	0.023501
C10orf82	1.042653	0.128584
C10orf62	0.856966	0.02014
FGF8	0.900472	0.013063
IL36B	0.978918	0.463839
TRPC7	0.934319	0.356203
KCNJ18	1.079254	0.032651
AL035425.2	0.883849	0.005632
AC018554.3	1.001134	0.986043
CPN1	0.875653	0.062323
TBXT	1.063712	0.106445
TRIM48	0.994444	0.914559
XAGE5	0.978725	0.671038
LELP1	0.890561	0.227049
LUZP4	0.875921	0.122646
CSN2	0.980483	0.740882
FRMD7	0.948246	0.264718
MUC7	0.953825	0.300452
FEZF2	0.946093	0.219657
KRT25	0.951879	0.517549
DDX53	1.021319	0.643467
DCAF8L1	0.957137	0.500427
SLC35G3	0.906328	0.053624
REG4	0.921719	0.095867
LCE2B	1.027644	0.654175
PSG8	0.956657	0.512404
PAGE5	0.963956	0.452016
HYPM	0.930002	0.281576
TCERG1L	1.038873	0.160387
PAGE1	0.996124	0.927374

Table SI. Continued.

Gene symbol	Coef	P-value
RPL10L	0.951886	0.339415
CENPVL3	0.920635	0.224267
STAC2	1.051718	0.106534
ASB10	0.947535	0.510057
ARGFX	0.813836	0.036892
GSTA1	0.971608	0.144439
PRR27	1.016038	0.778223
PSG11	0.934758	0.410889
TRIM49C	0.894707	0.10908
TCL1B	0.953281	0.491567
MMP27	0.920821	0.084938
RSPH6A	0.870029	0.046124
GCG	0.87679	0.235133
KRTAP3-2	0.883036	0.147249
CCDC190	0.959015	0.027085
OR8D1	0.835495	0.061087
SULT2A1	0.966153	0.654047
GSX2	0.921819	0.230372
H3.Y	0.962983	0.601426
SAMD7	0.910863	0.266501
LGI1	0.942372	0.204553
PROKR2	0.961562	0.510874
MTNR1B	0.932636	0.302091
MYT1L	1.053572	0.184945
ZNF729	1.029644	0.638454
DEFB132	1.145187	0.253329

Coef, regression coefficient; OS, overall survival; DEMs, differentially expressed mRNAs.