

Supplementary Material

Machine Learning and Bioinformatics Approaches to Identify the Candidate Biomarkers in Severe Asthma

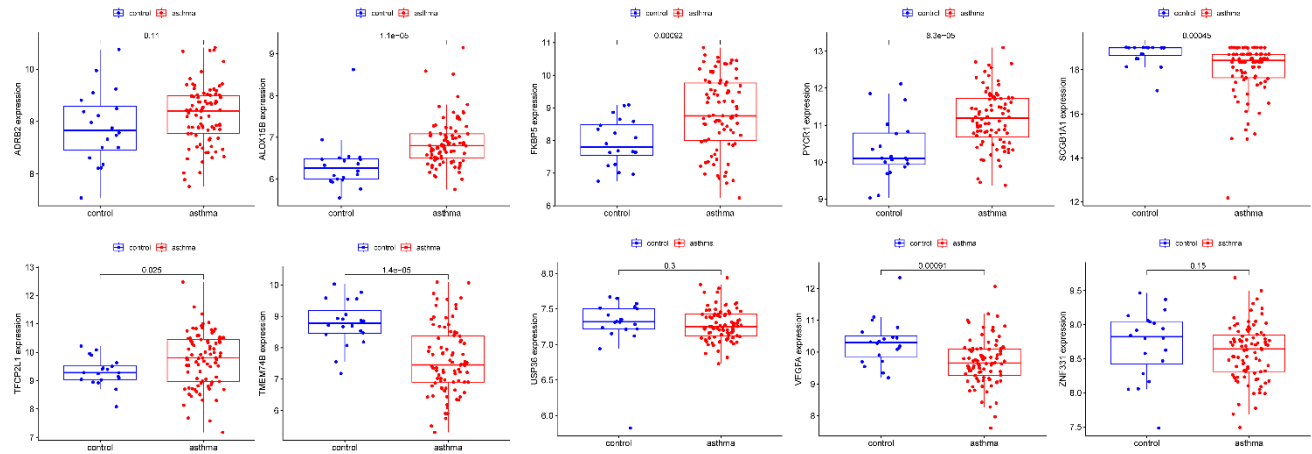
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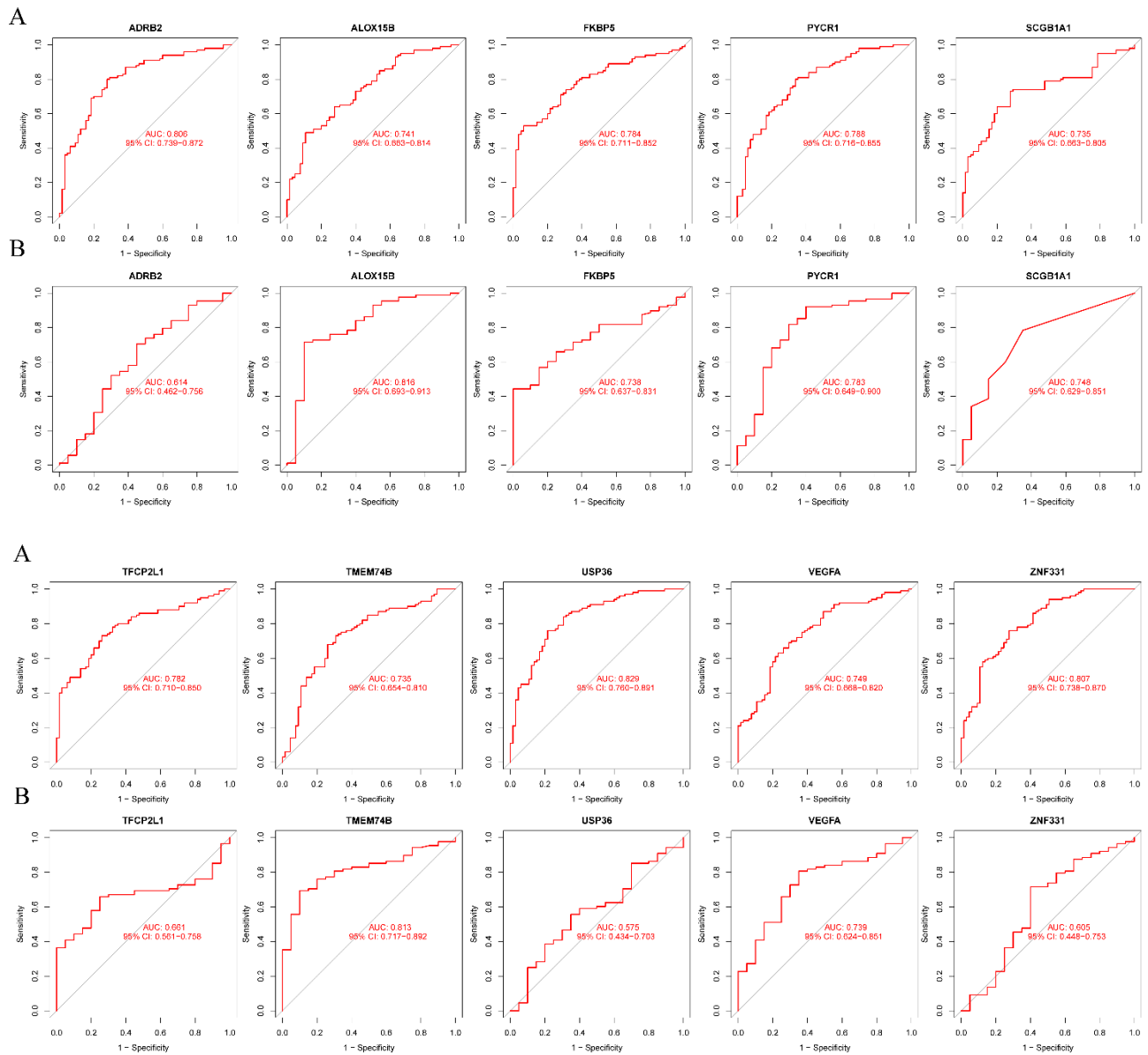
1 Supplementary Figures and Tables

1.1 Supplementary Figures

Supplementary Figure 1 The expression of the other 10 screening genes in the GSE43696 dataset



Supplementary Figure 2 The ROC curves of the other 10 screened genes (A) Represents the combined dataset of GSE130499 and GSE63142 (B) Represents GSE43696 dataset



1.2 Supplementary Tables

Supplementary Table 1: The logFC and P.Value of all DEGs between Severe Asthma and Control

ID	logFC	P.Value
USP36	-0.558226110081119	9.10960839530279e-15
AVPI1	-0.519177019609032	1.10679997403702e-13
ZNF331	-0.72295326466608	7.05558405724713e-13
BCL3	-0.568044770276131	9.86529063893455e-13
ADRB2	0.532940565393	1.72305565146474e-12
KMO	-0.624840325807506	3.79898868287046e-12
KLF9	0.588220359728428	1.00240432772065e-11
TFCP2L1	0.646056142360957	2.26813574040205e-11
S100A14	0.592282463670179	3.43565897433335e-11
FKBP5	0.785086249047042	9.59081538338573e-11
PYCR1	0.681248015922343	1.64638462228979e-10
DDIT4	0.620921801269898	1.98387706090192e-10
FAM83D	0.540001192632082	2.97189885915771e-10
CEACAM5	1.04040760816076	6.51429088157209e-10
CD83	-0.597310229802524	1.12195472268042e-09
PLK2	-0.607015052360488	1.55887873339687e-09
IL1R2	1.05480123500278	2.0644889850224e-09
FUT3	0.562815982995401	3.79689360654806e-09

ACKR3	-0.589927199756906	5.33439531576931e-08
PDE4B	-0.566794601351745	5.89852772076277e-08
TCN1	0.791487050656511	5.89935739817312e-08
SCGB1A1	-1.24692584599296	6.14486294122138e-08
NR4A3	-0.557765841599611	7.21321143745157e-08
PRR4	1.04822481033301	8.5196620413237e-08
VSIG2	0.519689906733657	9.3886655727438e-08
VEGFA	-0.605679023417895	1.16624048064168e-07
NR4A2	-0.524036023904767	1.18639868004796e-07
DPYSL3	0.578821049933847	1.21615301005384e-07
ASCL3	0.50424212335926	1.24706271323983e-07
KRT23	0.626921960617443	1.47130575936049e-07
LGALS7	0.566224404086464	1.80198300447715e-07
SLC2A14	-0.523698215506778	2.26751268465866e-07
UPK1B	0.550532777311433	4.67317115429794e-07
TMEM74B	-0.56121337261734	4.90548197806492e-07
CEACAM6	0.762613356022317	5.388184472659e-07
HBEGF	-0.536962995793241	8.77302286046504e-07
ALOX15B	0.545624312858634	1.00909187543443e-06
PSCA	1.04365013645621	2.15224103188656e-06

TFF3	0.971309692520704	2.36246977338946e-06
C3	-0.766415204175887	3.40471911284524e-06
SCGB3A1	-1.17700399718071	4.32784729445863e-06
CPA3	0.767094358445596	5.03222536809956e-06
TPRXL	0.512014448704486	5.60953434944593e-06
ZBTB16	0.609926774215097	7.7185842113353e-06
SCGB2A1	0.563971134874542	9.67647357820002e-06
KRT1	0.663045709528223	1.10617113971211e-05
PLAC4	-0.687138185964399	1.26238695132809e-05
PTGIR	-0.567651464414023	1.77253413124534e-05
CXCL14	0.590796260602619	1.93629390000452e-05
RGS1	-0.561802183233166	4.07508329567521e-05
NOS2	0.757355820200175	4.11100693636198e-05
TSPAN8	0.548883580514623	4.25681640113887e-05
HLA-DQA1	-1.1670393421275	4.37560521725866e-05
CXCL2	-0.502423805931704	7.40260662410044e-05
DEFA3	1.07814772543176	8.09182977936118e-05
OSM	-0.69024221062601	8.47276206247801e-05
TPSAB1	0.656885649242014	0.000101172857082649
SLAMF7	-0.542583112613853	0.00017049321615442

AGR2	0.595629417869574	0.000200955685620136
TFF1	0.523260263149099	0.000215199671012009
EMP1	0.501696674853747	0.000223029870732971
LGALS2	-0.512166199841371	0.000241162005041468
DEFB1	0.588546486113286	0.000338135065439455
CSH1	-0.597664695839264	0.000563542894391302
CLCA1	0.815685877272969	0.000800173316435088
BPIFB1	0.567392252110047	0.00181734579044445
NR4A1	-0.526861314630631	0.00183563435878941
ALAS2	0.937079845601202	0.00216723676907961
S100A12	0.508085768976684	0.00565931927694261
PPBP	0.566737789483056	0.0110531549282852
HBM	0.546049343250347	0.0145953231987529
SLC22A16	0.521033206988648	0.0274871509597233
HBQ1	0.5125278690629	0.0487746217416106