

**Table 1. Differential gene expression (DEGs) comparison between non-AR and AR from whole blood samples in (A) SSIC and (B) BAMSE cohorts**

<b>A) Differentially Expressed Genes (DEGs) for AR from SSIC</b>				
<b>Gene</b>	<b>logFC</b>	<b>Avg_Expr</b>	<b>P-value</b>	<b>P.eosadj</b>
<i>IL5RA</i>	0.475	13.46	4.01E-07	4.04E-05
<i>PYROXD2</i>	0.202	12.48	2.72E-06	7.11E-05
<i>SIGLEC8</i>	0.575	11.92	2.22E-07	2.25E-04
<i>THBS4</i>	0.390	8.93	2.43E-05	2.64E-04
<i>ALOX15</i>	0.526	8.95	4.59E-07	3.49E-04
	0.411	12.53	9.78E-06	8.25E-04
<i>OLIG2</i>	0.614	9.61	1.16E-06	5.45E-04
<i>ADGRE4P</i>	0.411	11.97	1.16E-05	5.75E-04
<i>CLC</i>	0.189	14.8	1.29E-05	1.06E-03
<i>LINC00323</i>	0.422	7.68	1.98E-06	1.23E-03
<i>CCL23</i>	0.678	9.95	1.30E-05	2.24E-03
	0.604	11.95	7.57E-06	1.33E-02
<i>HES1</i>	0.356	10.84	2.95E-06	2.42E-03
<i>SMPD3</i>	0.356	9.89	1.74E-06	4.53E-03
<i>HRASLS5</i>	0.367	8.07	9.05E-06	5.51E-03
<i>PRSS33</i>	0.595	10.22	2.59E-05	1.05E-02
<i>SLC29A1</i>	0.411	12.47	3.63E-05	1.19E-02
	0.275	13.29	3.30E-05	3.32E-02
<i>TFF3</i>	0.614	10.03	8.55E-06	1.68E-02
<i>CRTH2</i>	0.401	11.96	3.57E-05	1.78E-02
<i>IL17RB</i>	0.345	8.92	3.49E-05	1.90E-02
<i>P2RY2</i>	0.310	9.24	1.47E-05	2.58E-02
<i>RASL11B</i>	-0.286	8.39	8.70E-06	2.88E-02
<b>B) DEGs for AR replicated in BAMSE</b>				
<b>Gene</b>	<b>logFC</b>	<b>AveExpr</b>	<b>P-value</b>	<b>P.eosadj</b>
<i>SLC29A1</i>	0.125	5.496	6.23E-06	9.97E-05
<i>IL5RA</i>	0.366	5.142	6.26E-05	4.27E-04
<i>ALOX15</i>	0.313	5.401	8.64E-05	4.27E-04
<i>SMPD3</i>	0.137	5.424	1.07E-04	4.27E-04
<i>CLC</i>	0.415	5.688	2.13E-04	6.82E-04
<i>HRASLS5</i>	0.109	4.045	1.16E-03	2.70E-03
<i>SIGLEC8</i>	0.148	4.851	1.18E-03	2.70E-03
<i>OLIG2</i>	0.085	4.792	1.87E-03	3.74E-03
<i>P2RY2</i>	0.09	5.772	4.72E-03	8.39E-03
<i>PRSS33</i>	0.069	5.589	8.99E-03	1.44E-02
<i>HES1</i>	0.058	3.107	1.46E-02	2.12E-02

**logFC** - logarithm base 2 of fold change effect size for AR phenotype; **Avg\_Expr** - mean expression across all samples; **P-value** - False discovery rate (FDR) corrected p-value of gene expression to AR; **P.eosadj** - P-value for AR after correcting for eosinophil percentages. In the case of *ALOX15*, *CCL23* and *SLC29A1*, there were dual probes present that tagged to the same gene where expression values of both probes achieved FDR-significance.