## $Supplementary\ table\ S3.\ The\ top\ 10\ genes\ that\ contribute\ most\ positively\ (Severe\ asthma\ class)\ to\ the\ model\ according\ to\ the\ logistic\ regression\ model$

class	gene	Positive											
		8117018	7908861	7967028	7928489	8052581	8154211	7968295	8031152	8055639	7975453		
Healthy	GSM665												
control	386	4.68	6.95	6.01	6.79	4.34	7.01	3.88	3.96	5.72	3.73		
Healthy	GSM665												
control	387	4.03	6.16	6.20	6.86	4.14	6.44	3.32	2.77	5.82	4.00		
Healthy	GSM665	5 40	0.54	0.04	7.45	0.54	7.04	4 40	F 40	0.00	0.00		
control	388	5.42	8.51	6.21	7.45	3.54	7.04	4.40	5.10	6.92	6.02		
Healthy control	GSM665 389	4.49	6.95	6.86	6.92	3.71	5.96	3.71	3.99	6.30	4.78		
Healthy	GSM665	4.43	0.33	0.80	0.32	3.71	3.30	5.71	3.33	0.30	4.70		
control	390	3.38	5.77	6.23	7.28	5.96	6.14	3.64	5.72	5.76	4.06		
Healthy	GSM665												
control	391	5.50	7.04	7.04	7.16	3.07	6.61	3.84	4.33	6.45	4.82		
Healthy	GSM665												
control	392	4.83	6.87	6.44	7.09	4.99	7.07	3.80	3.42	6.67	5.35		
Healthy	GSM665												
control	393	4.72	7.42	5.45	7.04	2.80	6.49	3.73	5.58	6.50	4.21		
Healthy	GSM665												
control	394	3.79	6.39	6.08	6.87	4.69	5.53	3.32	4.41	6.40	3.84		
Healthy	GSM665 395	4.50	7.54	F 70	6 77	0.45	0.07	2.00	F 0.4	0.00	4.50		
control Healthy	GSM665	4.59	7.51	5.78	6.77	3.45	6.97	3.60	5.84	6.39	4.58		
control	396	4.73	6.75	6.08	6.84	3.89	4.98	3.45	5.26	6.80	4.69		
Healthy	GSM665	4.70	0.70	0.00	0.04	0.00	4.00	0.40	0.20	0.00	4.00		
control	397	5.92	7.35	7.62	7.52	3.96	5.11	4.09	5.35	6.59	4.44		
Healthy	GSM665												
control	398	4.39	6.84	6.41	7.05	4.12	5.98	3.58	4.13	6.07	3.58		
Healthy	GSM665												
control	399	4.93	7.63	6.39	7.27	3.17	5.79	3.91	5.67	7.00	4.91		
Healthy	GSM665												
control	400	5.59	6.90	6.26	7.69	4.39	7.16	4.18	5.12	6.14	4.14		
Healthy	GSM665	0.00	7.04	0.40	7.04			0.00	F 40	0.40	4.04		
control	401 GSM665	3.62	7.21	8.48	7.04	5.52	5.55	3.38	5.10	6.10	4.34		
Healthy control	402	5.54	7.36	6.14	7.10	3.93	6.86	3.92	5.44	6.45	4.22		
Healthy	GSM665	3.34	7.30	0.14	7.10	3.33	0.00	3.32	5.44	0.43	4.22		
control	403	3.82	7.17	6.19	6.64	3.72	6.64	3.25	3.78	6.08	4.31		
Severe	GSM665												
asthma	423	5.92	8.19	8.26	8.26	5.43	5.23	4.28	5.00	7.03	5.32		
Severe	GSM665												
asthma	424	6.09	8.07	7.98	8.06	5.23	7.08	4.49	4.45	6.68	4.77		
Severe	GSM665												
asthma	425	6.57	8.36	8.80	8.20	4.33	6.66	5.19	5.65	7.00	5.95		
Severe	GSM665	6.50	7 71	7.05	704	4.40	6.67	4 70	4 10	7 20	E 0E		
asthma Severe	426 GSM665	6.52	7.71	7.35	7.84	4.49	6.67	4.72	4.10	7.29	5.25		
asthma	427	6.34	9.20	8.38	8.51	4.78	8.10	5.13	5.00	7.17	6.31		
Severe	GSM665	0.04	3.20	0.00	0.01	7.70	5.10	0.10	3.00	,.1/	0.01		
asthma	428	6.24	8.41	8.29	8.26	4.84	7.43	4.60	6.44	7.12	6.14		
Severe	GSM665												
asthma	429	5.84	8.11	7.23	8.21	6.60	7.90	4.40	4.81	7.86	5.29		
Severe	GSM665												
asthma	430	7.64	9.05	8.28	8.94	3.89	6.89	6.00	5.91	7.95	6.39		
Severe	GSM665	_	_	_	_	_	_		_	_			
asthma	431	5.51	8.88	5.92	7.52	4.47	7.40	4.17	5.84	6.75	4.75		
Severe	GSM665	7.40	0.01	7.00	0.00	0.04	7 77	5.05	4.40	7.00	F 0F		
asthma	432 CSM665	7.16	8.81	7.98	8.90	3.84	7.77	5.35	4.43	7.86	5.65		
Severe asthma	GSM665 433	6.00	7.55	6.71	8.57	4.16	6.67	5.03	5.39	7.09	5.56		
Severe	GSM665	0.00	7.55	0.71	0.07	4.10	0.07	3.03	3.39	7.03	3.30		
asthma	434	6.00	7.67	7.85	8.23	5.04	6.89	5.04	5.79	7.39	4.74		
Severe	GSM665												
asthma	435	6.06	8.34	6.64	7.86	3.85	6.80	4.44	4.84	7.78	5.54		

Severe asthma	GSM665 436	5.87	8.56	7.66	7.71	4.90	7.75	4.46	5.48	7.31	4.79
Severe	GSM665										
asthma	437	7.70	9.19	9.48	9.51	4.71	6.15	6.29	2.55	8.13	7.08
Severe	GSM665										
asthma	438	6.46	8.85	7.88	7.97	3.97	5.73	4.59	5.14	6.90	5.69
Severe	GSM665										
asthma	439	6.40	7.50	6.69	8.02	3.51	5.99	5.58	5.33	7.78	5.17