

**Supplementary Table S1. Previously Published Lung Cancer Polygenic Risk Score SNPs from Hung et al (2021).**

Chr	Position	rsID	Locus	Gene	Hung et al (2021)		INHALE	
					OR (95% CI)	p-value	MARF white	MARF AA
1	77501822	rs71658797	p31.1	<i>AK5</i>	1.14 (1.09, 1.18)	3.25E-11	0.082	0.025
1	78277321	rs71641333	p31.1	<i>MGC27382</i>	1.14(1.09,1.21)	4.49E-07	0.039	0.015
1	154593749	rs78062588	q21.3	<i>ADAR</i>	0.88(0.84,0.93)	4.60E-07	0.023	0.007
1	168541843	rs114737056	q24.2	<i>XCL2</i>	0.91(0.88,0.94)	5.80E-07	0.100	0.079
2	44962598	rs79368540	p21		1.09(1.06,1.13)	6.13E-07	0.122	0.033
2	139640758	rs7592999	q22.1		0.81(0.74,0.88)	7.35E-07	0.021	0.163
2	173211033	rs1866631	q31.1	<i>MAP3K20</i>	0.94(0.92,0.96)	6.97E-07	0.419	0.430
4	66968056	rs185666783	q13.2	<i>LOC105377262</i>	0.92(0.90,0.95)	9.20E-08	0.472	0.389
4	163086840	rs7676823	q32.2		0.92(0.89,0.95)	6.71E-07	0.364	0.381
5	1000041	rs78154696	p15.33		1.22(1.13,1.32)	7.55E-07	0.020	0.094
5	1249701	rs112333466	p15.33	<i>TERT</i>	1.55(1.32,1.81)	8.11E-08	0.008	0.001
5	1276758	rs56345976	p15.33	<i>TERT</i>	1.10(1.07,1.13)	2.60E-12	0.393	0.294
5	1285917	rs112290073	p15.33	<i>TERT</i>	1.39(1.20,1.61)	1.16E-05	0.009	0.002
5	1287079	rs2853677	p15.33	<i>TERT</i>	1.12(1.09,1.15)	2.66E-18	0.408	0.276
5	1293971	rs2736098	p15.33	<i>TERT</i>	1.14(1.10,1.18)	4.36E-13	0.257	0.102

5	1300154	rs112401627	p15.33		1.30(1.20,1.42)	3.03E-10	0.012	0.002
5	1321972	rs401681	p15.33	<i>CLPTM1L</i>	0.87(0.85,0.89)	3.25E-30	0.436	0.411
5	90954814	rs6875416	q14.3	<i>ADGRV1</i>	0.83(0.78,0.90)	6.99E-07	0.201	0.149
5	150741896	rs114136906	q33.1	<i>DCTN4</i>	1.46(1.27,1.68)	1.17E-07	0.012	0.004
6	410848	rs2316515	p25.3	<i>IRF4</i>	0.92(0.89,0.95)	1.42E-07	0.433	0.312
6	25885586	rs629444	p22.2	<i>HIST1H2APS2</i>	1.11(1.07,1.15)	1.40E-08	0.080	0.342
6	28250019	rs68141011	p22.1	<i>ZKSCAN4</i>	1.09(1.06,1.13)	1.43E-07	0.130	0.224
6	29255716	rs114722608	p22.1	<i>LOC101929006</i>	1.15(1.11,1.20)	7.09E-12	0.083	0.055
6	29510044	rs115123779	p22.1	<i>LOC105375009</i>	1.10(1.07,1.13)	1.91E-09	0.172	0.442
6	29638984	rs138488080	p22.1	<i>SUMO2P1</i>	1.15(1.11,1.19)	5.96E-18	0.124	0.032
6	29791973	rs114192654	p22.1		1.06(1.04,1.09)	5.69E-07	0.358	0.440
6	30106386	rs115993819	p22.1	<i>TRIM31</i>	1.09(1.06,1.12)	9.64E-10	0.247	0.121
6	30170385	rs116534499	p22.1	<i>TRIM15</i>	1.07(1.04,1.09)	2.94E-08	0.443	0.413
6	30897052	rs116629156	p21.33	<i>DDR1</i>	1.07(1.05,1.10)	1.52E-08	0.398	0.471
6	31100075	rs114052224	p21.33		1.06(1.04,1.09)	1.26E-07	0.483	0.448
6	31149800	rs114689412	p21.33	<i>CCHCR1</i>	0.91(0.88,0.94)	3.64E-07	0.100	0.136
6	31353652	rs2596499	p21.33	<i>HLA-B</i>	1.07(1.04,1.10)	3.42E-07	0.277	0.193
6	31466334	rs116822326	p21.33		1.15(1.12,1.19)	5.29E-19	0.185	0.108

6	31660956	rs805262	p21.33	<i>C6orf47</i>	1.07(1.04,1.09)	1.50E-08	0.499	0.127
6	31710997	rs6916278	p21.33	<i>LY6G6F-LY6G6D</i>	0.90(0.86,0.95)	1.15E-04	0.046	0.141
6	32367427	rs115200960	p21.32	<i>C6orf10</i>	1.11(1.07,1.14)	4.77E-11	0.168	0.115
6	32623148	rs3129763	p21.32		1.12(1.09,1.15)	8.48E-16	0.241	0.226
6	32789960	rs116767258	p21.32		0.94(0.92,0.96)	9.10E-07	0.369	0.342
6	32815309	rs7383287	p21.32	<i>HLA-DOB</i>	1.10(1.07,1.13)	1.12E-10	0.219	0.180
6	71674838	rs117534741	q13		1.24(1.14,1.34)	4.68E-07	0.004	0.001
7	130983859	rs6957511	q32.3	<i>LINC-PINT</i>	1.10(1.06,1.14)	9.78E-07	0.432	0.448
8	27487202	rs11780471	p21.2	<i>EPHX2</i>	0.87(0.83,0.91)	1.69E-08	0.009	0.002
8	27539570	rs67749759	p21.2	<i>EPHX2</i>	1.13(1.08,1.19)	2.66E-07	0.086	0.090
8	32552592	rs4236709	p12	<i>NRG1</i>	1.07(1.04,1.10)	5.88E-06	0.195	0.323
9	17934122	rs17185553	p22.2		1.29(1.17,1.43)	8.94E-07	0.093	0.035
9	22083405	rs1333040	p21.3	<i>CDKN2B-AS1</i>	1.10(1.06,1.14)	7.02E-07	0.411	0.374
9	133410109	rs75685923	q34.2	<i>REXO4</i>	1.38(1.22,1.57)	6.16E-07	0.019	0.006
9	133638697	rs2007153	q34.2	<i>DBH</i>	0.96(0.93,0.98)	2.49E-04	0.389	0.488
10	100251945	rs7897454	q24.31	<i>CWF19L1</i>	1.25(1.14,1.36)	6.64E-07	0.050	0.114
10	100912491	rs62621207	q24.31	<i>SLF2</i>	1.16(1.09,1.23)	5.85E-07	0.044	0.009
10	103927874	rs11591710	q24.33		1.07(1.04,1.11)	3.53E-05	0.146	0.238

11	57482553	rs78853063	q12.1	<i>SLC43A1</i>	0.89(0.85,0.93)	4.65E-07	0.053	0.006
11	116128039	rs78334599	q23.3		0.86(0.80,0.91)	7.93E-07	0.008	0
11	118254910	rs1056562	q23.3	<i>MPZL2</i>	1.07(1.04,1.09)	1.92E-08	0.463	0.328
12	889653	rs7953330	p13.33	<i>WNK1</i>	0.92(0.89,0.94)	6.10E-12	0.309	0.201
12	926876	rs7487683	p13.33	<i>RAD52</i>	0.83(0.77,0.89)	6.58E-08	0.035	0.006
13	32398489	rs11571833	q13.1	<i>BRCA2</i>	1.60(1.43,1.80)	6.12E-16	0.006	0.003
13	83706928	rs9602270	q31.1		1.27(1.16,1.39)	3.28E-07	0.048	0.111
15	43469998	rs689647	q15.3	<i>TP53BP1</i>	0.93(0.90,0.97)	2.11E-04	0.110	0.341
15	49084427	rs77468143	q21.1		0.92(0.90,0.95)	1.00E-09	0.254	0.071
15	70139434	rs11855650	q23		1.09(1.05,1.12)	5.60E-07	0.392	0.347
15	74763478	rs79149102	q24.1		1.18(1.11,1.25)	1.54E-07	0.030	0.027
15	78533575	rs3885951	q25.1	<i>HYKK</i>	1.17(1.12,1.23)	4.09E-10	0.098	0.011
15	78588410	rs2229961	q25.1	<i>CHRNA5</i>	1.43(1.30,1.57)	5.01E-14	0.020	0.004
15	78617056	rs8192479	q25.1	<i>CHRNA3</i>	1.28(1.17,1.40)	2.29E-08	0.025	0.003
15	78689081	rs2869551	q25.1	<i>CHRNB4</i>	0.75(0.67,0.84)	5.09E-07	0.020	0.009
15	78694883	rs12593207a	q25.1	<i>CHRNB4</i>	0.85(0.82,0.89)	2.88E-14	0.097	0.117
15	78766388	rs189146505	q25.1	<i>ADAMTS7</i>	0.83(0.78,0.89)	8.34E-08	0.031	0.017
15	78797392	rs7177699	q25.1	<i>ADAMTS7</i>	1.13(1.11,1.16)	5.98E-26	0.432	0.149

15	78818441	rs77719127	q25.1	<i>MORF4L1</i>	1.14(1.10,1.18)	1.79E-13	0.143	0.021
15	78906418	rs76164573	q25.1		0.86(0.81,0.91)	8.83E-07	0.001	0.001
16	26969325	rs9926896	p12.1		2.70(1.90,3.83)	3.06E-08	0.001	0.005
17	72303817	rs17181550	q24.3		0.94(0.92,0.96)	1.98E-07	0.389	0.233
17	74942005	rs1542752	q25.1	<i>OTOP3</i>	1.04(1.01,1.07)	1.24E-02	0.179	0.048
18	23161171	rs79421398	q11.2	<i>CABLES1</i>	1.23(1.14,1.34)	2.75E-07	0.037	0.007
19	40701301	rs4803356	q13.2	<i>ADCK4</i>	0.89(0.85,0.93)	8.31E-07	0.054	0.010
19	40833083	rs2258380	q13.2	CTC-490E21.12	1.08(1.05,1.11)	9.15E-07	0.220	0.150
19	40906287	rs184589612	q13.2	CTC-490E21.13	0.77(0.70,0.85)	3.23E-07	0.019	0.003
20	63895952	rs61541144	q13.33	<i>DNAJC5</i>	0.89(0.85,0.93)	5.61E-07	0.071	0.090
22	28725099	rs17879961	q12.1	<i>CHEK2</i>	0.60(0.52,0.70)	1.54E-10	0.006	0

MARF = minor allele relative frequency