

**eTable 10.** Identification of new pleiotropic loci among respiratory diseases<sup>a</sup>

Locus No.	CHR	Start	Stop	Triat					Sum
				Asthma	COPD	IPF	LC	SNO	
1	1	1123434	1186502	0	0	0	0	0	0
2	1	10525914	10637709	0	0	0	0	0	0
3	1	25197685	25263997	0	0	0	0	0	0
4	1	50839740	51480258	0	0	0	0	1	1
5	1	77967507	78450517	0	0	0	1	0	1
6	1	80784642	80871734	0	0	0	0	0	0
7	1	96621739	97028456	0	0	0	0	1	1
8	1	114303808	114377568	0	0	0	0	0	0
9	1	151908055	152780522	0	0	0	0	0	0
10	1	167405132	167439010	0	0	0	0	0	0
11	1	198598389	198746704	0	0	0	0	0	0
12	1	203058476	203108508	0	0	0	0	0	0
13	2	8438693	8496062	0	0	0	0	0	0
14	2	15889419	15890920	0	0	0	0	0	0
15	2	62903461	63913711	0	0	0	0	0	0
16	2	72035671	72093666	0	0	0	0	0	0
17	2	102287835	103262053	0	0	0	0	0	0
18	2	111861838	112024305	0	0	0	0	0	0
19	2	145467189	146316319	0	0	0	0	0	0
20	2	156991269	157477952	0	0	0	0	1	1
21	2	228692411	228751874	0	0	0	0	0	0

22	2	242680229	242820763	0	0	0	0	0	0
23	3	20578543	20750951	0	0	0	0	0	0
24	3	33015289	33084861	0	0	0	0	0	0
25	3	49109919	49890967	0	0	0	0	0	0
26	3	71498561	71611630	0	0	0	0	0	0
27	3	77573433	77655818	0	0	0	0	1	1
28	3	101011537	101306098	0	0	0	0	0	0
29	3	168647860	169164828	0	0	0	0	0	0
30	3	176813282	176852038	0	0	0	0	0	0
31	3	187632584	188473657	0	0	0	0	0	0
32	3	196367930	196369375	0	0	0	0	0	0
33	4	25342606	25408838	0	0	0	0	1	1
34	4	38731632	38906951	0	0	0	0	0	0
35	4	67801134	67906728	0	0	0	0	0	0
36	4	89745856	90059434	0	0	0	0	0	0
37	4	103001649	103198082	0	0	0	0	0	0
38	4	106513974	107246190	0	0	0	0	0	0
39	4	123013266	123560939	1	0	0	0	0	1
40	4	140856533	140948095	0	0	0	0	0	0
41	4	145227879	145517578	0	0	0	0	0	0
42	5	1276769	1364439	0	0	0	1	0	1
43	5	14572453	14701003	0	0	0	0	0	0
44	5	35803577	35985395	0	0	0	0	0	0
45	5	44406517	44565635	0	0	0	0	0	0
46	5	74952861	75038901	0	0	0	0	1	1

47	5	109739071	110773457	0	0	0	0	0	0
48	5	118676921	118741776	0	0	0	0	0	0
49	5	129573666	132138164	1	0	0	0	0	1
50	5	134436352	134453390	0	0	0	0	1	1
51	5	141394714	141567415	0	0	0	0	0	0
52	5	147790860	147856522	0	0	0	0	0	0
53	5	168904005	168904005	0	0	0	0	0	0
54	5	176536402	176824137	0	0	0	0	0	0
55	6	7546404	7553121	0	0	0	0	0	0
56	6	16588294	16601081	0	0	0	0	0	0
56	6	16588294	16601081	0	0	0	0	0	0
58	6	25450026	29558364	0	0	0	1	0	1
59	6	43107744	43244714	1	0	0	0	0	1
60	6	64139255	64491200	0	0	0	0	0	0
61	6	90808352	91026990	1	0	0	0	0	1
62	6	106629690	106803325	0	0	0	0	0	0
63	6	128269180	128294709	0	0	0	0	0	0
64	6	135624811	135956803	0	0	0	0	0	0
65	6	138125881	138262773	0	0	0	0	0	0
66	6	155028910	155162163	0	0	0	0	0	0
67	7	957722	968469	0	0	0	0	0	0
68	7	20372191	20636508	0	0	0	0	0	0
69	7	22719409	22811384	0	0	0	0	0	0
70	7	28142088	28256240	0	0	0	0	0	0
71	7	99557217	99765662	0	0	0	0	0	0

72	7	105658451	105678920	0	0	0	0	0	0
73	7	116909572	117357607	0	0	0	0	0	0
74	7	128567032	128711874	0	0	0	0	0	0
75	8	8168474	8306241	0	0	0	0	0	0
76	8	10606219	11450422	0	0	0	0	0	0
77	8	27319847	27442127	0	0	0	1	0	1
78	8	71464551	72014069	0	0	0	0	1	1
79	8	74502909	74642586	0	0	0	0	0	0
80	8	78093837	78257162	0	0	0	0	1	1
81	8	81091521	81329123	0	0	0	0	0	0
82	8	109080504	109588327	0	0	0	0	0	0
83	8	128777719	128815029	0	0	0	0	0	0
84	9	5530017	6648728	1	0	0	0	0	1
85	9	8278669	8361957	1	0	0	0	0	1
86	9	34581819	34698396	0	0	0	0	0	0
87	9	126994321	127182293	0	0	0	0	0	0
88	9	128153244	128748180	0	0	0	0	0	0
89	9	136459454	136485294	0	0	0	0	0	0
90	10	8095340	9585398	1	0	0	0	1	2
91	10	75431981	75695724	0	0	0	0	0	0
92	10	94248310	94495241	0	0	0	0	0	0
93	10	104611764	104963051	0	0	0	0	0	0
94	11	1079746	1780061	0	0	1	0	0	1
95	11	27581265	27742447	0	0	0	0	1	1
96	11	61542006	61659296	0	0	0	0	0	0

97	11	65547333	65562257	0	0	0	0	0	0
98	11	75983514	76381814	0	0	0	0	0	0
99	11	88480235	88978545	0	0	0	0	1	1
100	11	128131013	128188042	0	0	0	0	0	0
101	12	998819	1066834	0	0	0	1	0	1
102	12	39421767	39440421	0	0	0	0	0	0
103	12	48184793	48225742	0	0	0	0	0	0
104	12	56358712	56482180	0	0	0	0	0	0
105	12	57242217	57535266	0	0	0	0	0	0
106	12	62658228	63055729	0	0	0	0	0	0
107	12	65761089	65891257	0	0	0	0	1	1
108	12	94544545	94615120	0	0	0	0	0	0
109	12	123447928	123913433	0	0	0	0	0	0
110	13	32866927	33239130	0	0	0	1	0	1
111	13	40233181	40746149	0	0	0	0	1	1
112	13	50753772	51356435	0	0	0	0	1	1
113	13	58252801	58717504	0	0	0	0	0	0
114	13	74039935	74039935	0	0	0	0	0	0
115	13	99769973	100204845	0	0	0	0	0	0
116	14	68727506	68815513	1	0	0	0	0	1
117	14	79453862	79614043	0	0	0	0	0	0
118	14	93010967	93118229	0	0	0	0	0	0
119	14	94672731	94844947	0	0	0	0	0	0
120	14	99733954	99751588	0	0	0	0	1	1
121	14	101349454	101349454	0	0	0	0	0	0

122	15	40655873	40729400	0	0	0	0	0	0
123	15	49285001	50007261	0	0	0	1	0	1
124	15	61032054	61079377	0	0	0	0	0	0
125	15	67307227	67661784	0	0	0	0	0	0
126	15	76473955	77256130	0	0	0	0	0	0
127	15	78714008	79215568	0	1	0	1	0	2
128	15	84703470	85190780	0	0	0	0	0	0
129	16	11031741	11324571	1	0	0	0	0	1
130	16	27217239	27429642	1	0	0	0	0	1
131	16	30097630	31155458	1	0	0	0	1	2
132	16	53797908	53845487	0	0	0	0	1	1
133	16	75303987	75518129	0	0	0	0	0	0
134	17	2253441	2272024	0	0	0	0	0	0
135	17	7437958	7538785	0	0	0	0	1	1
136	17	15868291	16251016	1	0	0	0	0	1
137	17	37390863	38577416	0	0	0	0	0	0
138	17	43208121	44874453	0	0	0	0	1	1
139	17	45805811	46687752	0	0	1	0	1	2
140	17	47260130	47481374	0	0	0	0	0	0
141	17	67881015	67963779	0	0	0	0	1	1
142	18	35127427	35204858	0	0	0	0	0	0
143	18	77551586	77580712	0	0	0	0	0	0
144	19	1004740	1031658	0	0	0	0	0	0
145	19	6580892	6597962	0	0	0	0	0	0
146	19	9125547	9141159	0	0	0	0	0	0

147	19	32167803	32215431	0	0	0	0	1	1
148	19	33718053	33753320	0	0	0	0	0	0
149	19	41336950	41370338	0	0	0	1	0	1
150	19	45392254	45424351	0	0	0	0	0	0
151	19	46219145	46374916	0	0	0	0	0	0
152	20	21380772	21478776	0	0	0	0	0	0
153	20	30854756	31042595	0	0	0	0	0	0
154	20	61979224	62470104	0	0	0	0	0	0
155	21	36421331	36745167	0	0	0	0	0	0
156	22	41408754	42216326	1	0	0	0	0	1

Abbreviations: Locus No., the numerical order of pleiotropic genomic risk locus; AST, Asthma; COPD, Chronic obstructive pulmonary disease; IPF, Idiopathic Pulmonary Fibrosis; LC, Lung Cancer; SNO, Snoring.

<sup>a</sup> We annotated SNPs with  $P < 5 \times 10^{-8}$  in each single-trait GWAS by FUMA for comparison. 0 indicates that the genomic risk locus annotated by FUMA for a single GWAS does not overlap with the locus annotated by CPASSCO results, and 1 indicates that the locus overlaps with the locus annotated by CPASSCO results