

Supplementary Table 9. Germline variants annotated by ACMG

	sample	P/LP	Priority	CHROM	POS
	F_2304860Y4	P	H	11	67163628
	F_510575Y31	P	H	11	67163628
	F_15508763Y13	P	H	5	42719092
	F_3484996Y34	P	H	5	42719092
	F_8117392Y20	P	H	5	42719092
	F_900419Y7	P	H	5	42719092
	F_16292193Y17	LP	H	17	37871613
	F_15508763Y13	P	H	20	31889141
	F_1951831Y15	P	H	20	31889141
	F_510575Y31	P	H	20	31889141
	F_8412667Y10	P	H	20	31889141
	F_10166792Y6	P	M	13	108861645
	F_900419Y7	P	M	13	108861645
	F_1984806Y25	P	H	17	7574017
	F_0017184894Y35	P	M	12	6711144
	F_15703811Y21	P	M	12	6711144
	F_15833122Y14	P	M	12	6711144
	F_1951831Y15	P	M	12	6711144
	F_1984806Y25	P	H	14	81606063
	F_7100021Y24	P	H	14	81609976
	F_16233093Y3	P	H	3	30713619
	F_3484996Y34	P	L	5	138715502
	F_15833122Y14	P	L	7	96339061
	F_1984806Y25	P	L	7	96339061
	F_7100021Y24	P	L	7	96339061
	A_16504321Y1	P	H	10	43601830
	F_3490782Y30	P	L	12	1023218
	F_5705877Y19	P	L	12	1023218
	F_7100021Y24	P	L	12	1023218
	F_7100021Y24	P	H	1	45297968
36 current cases	F_11345654Y23	P	L	1	226550829
	F_7530369Y11	P	L	1	226550829
	F_11345654Y23	LP	H	3	9792813
	F_15206685Y5	P	H	3	9793529
	F_15833122Y14	P	L	7	2289586
	F_8412667Y10	P	H	14	36986635
	A_1241	P	H	14	36986635
	F_6631727Y27	P	H	2	48033981
	F_900419Y7	P	H	2	48033981
	F_1951831Y15	P	L	3	196735687
	F_3044820Y29	P	L	3	196735687
	F_10166792Y6	P	H	16	89986025
	F_15703811Y21	P	H	16	89986025

F_510575Y31	P	H	16	89986025
F_5705877Y19	P	H	16	89986025
F_7017924Y33	P	H	16	89986025
F_7100021Y24	P	H	16	89986025
F_9985603Y18	P	H	16	89986025
F_9784679Y16	P	H	10	89621800
F_9784679Y16	P	M	10	89621853
F_9784679Y16	P	H	10	89621863
F_5869863Y8	P	H	5	156675967
F_7530369Y11	P	M	14	62207575
F_8412667Y10	P	H	9	101594229
F_2304860Y4	LP	H	12	58145017
F_15206685Y5	P	H	15	40494810
F_3490782Y30	LP	H	13	32929396
F_7100021Y24	LP	H	13	32936738
F_8412667Y10	LP	H	13	32914707
F_1984806Y25	P	H	9	34622032
F_7530369Y11	P	M	5	1293863
F_900419Y7	P	M	5	1293863
WGC046639D	P	H	20	31889141
WGC046640D	LP	H	5	112102960
WGC046587D	P	H	15	40494810
WGC046640D	P	H	16	89986025
WGC046613D	P	H	1	45797760
WGC046642D	LP	L	7	6017269
WGC046640D	P	L	12	1023218
WGC046640D	LP	H	8	53543090
WGC046597D	LP	H	1	161332308
WGC046640D	LP	H	1	161332308
WGC046578D	P	H	3	30713619
WGC046639D	P	M	12	6711144
WGC046630D	P	L	7	2289586
WGC046639D	P	L	7	2289586
WGC046578D	P	L	1	226550829
WGC046597D	P	L	1	226550829
WGC046630D	P	L	1	226550829
WGC046642D	LP	H	14	68331859
WGC046642D	P	L	5	138715502
WGC046639D	LP	H	10	89621806
P0000237852N	P	H	2	47657059
P0004890433N	P	H	2	48033981
P0011305141N	P	H	2	48033981
P0015905855N	P	H	2	48033981
P257468N	P	L	7	2289586
P0011305141N	P	M	5	1293863

additional 10
cases (young
never-smokers)

	P0011305141N	P	H	16	89986025
	P0015905855N	P	H	6	161771157
	N18011768	P	L	6	30627867
	N17857998	P	H	2	48033981
additional 18	N17911541	P	L	1	226550829
cases (old never-	N17911541	P	H	16	89986025
smokers)	N17911541	P	H	2	48033981
	N18011768	P	M	14	62207575
	N18011768	P	H	16	89986025
	WGC046609D	P	H	15	40494810
	WGC046609D	LP	H	5	112824111
	WGC046626D	P	L	3	196735687
	WGC046594D	P	H	2	48033981
	WGC046609D	P	M	1	186643541
	WGC046580D	LP	H	1	161332308
	WGC046619D	LP	H	1	161332308
	WGC046580D	LP	L	16	2137908

ID	REF	ALT	GeneName	Func
rs17880039	A	G	RAD9A	exonic
rs17880039	A	G	RAD9A	exonic
rs6183	C	A	GHR	exonic
rs6183	C	A	GHR	exonic
rs6183	C	A	GHR	exonic
rs6183	C	A	GHR	exonic
.	G	A	ERBB2	splicing
rs6141383	G	A	BPIFB1	exonic
rs6141383	G	A	BPIFB1	exonic
rs6141383	G	A	BPIFB1	exonic
rs6141383	G	A	BPIFB1	exonic
rs2232641	T	C	LIG4	exonic
rs2232641	T	C	LIG4	exonic
rs121912664	C	T	TP53	exonic
rs74790047	A	C	CHD4	exonic
rs74790047	A	C	CHD4	exonic
rs74790047	A	C	CHD4	exonic
rs74790047	A	C	CHD4	exonic
rs189506473	G	A	TSHR	exonic
rs200138601	T	C	TSHR	exonic
rs34833812	C	T	TGFBR2	exonic
rs33972313	C	T	SLC23A1	exonic
rs4733	C	T	SHFM1	exonic
rs4733	C	T	SHFM1	exonic
rs4733	C	T	SHFM1	exonic
rs34682185	G	A	RET	exonic
rs4987207	G	T	RAD52	exonic
rs4987207	G	T	RAD52	exonic
rs4987207	G	T	RAD52	exonic
rs80168454	A	G	PTCH2	exonic
rs3219145	T	C	PARP1	exonic
rs3219145	T	C	PARP1	exonic
.	C	T	OGG1	exonic
rs56053615	G	A	OGG1	exonic
rs4866	G	A	NUDT1	exonic
rs200560568	C	T	NKX2-1	exonic
rs200560568	C	T	NKX2-1	exonic
rs267608142	T	TTTGA	MSH6	exonic
rs267608142	T	TTTGA	MSH6	exonic
rs17129219	C	T	MFI2	exonic
rs17129219	C	T	MFI2	exonic
rs33932559	T	C	MC1R	exonic
rs33932559	T	C	MC1R	exonic

rs33932559	T	C	MC1R	exonic
rs33932559	T	C	MC1R	exonic
rs33932559	T	C	MC1R	exonic
rs33932559	T	C	MC1R	exonic
rs33932559	T	C	MC1R	exonic
rs144811392	A	T	KLLN	exonic
rs147932146	T	C	KLLN	exonic
rs201652303	G	C	KLLN	exonic
rs34482255	C	T	ITK	exonic
rs11549467	G	A	HIF1A	exonic
rs145236923	G	A	GALNT12	exonic
.	T	TG	CDK4	exonic
rs28989187	G	A	BUB1B	exonic
rs397507916	C	CT	BRCA2	exonic
rs529779203	A	G	BRCA2	exonic
rs80358862	C	T	BRCA2	exonic
rs142710890	C	T	ARID3C	exonic
rs144756946	G	A	TERT	exonic
rs144756946	G	A	TERT	exonic
rs6141383	G	A	BPIFB1	exonic
rs139196838	C	T	APC	exonic
rs28989187	G	A	BUB1B	exonic
rs33932559	T	C	MC1R	exonic
rs77542170	T	C	MUTYH	splicing
rs149202766	G	A	PMS2	exonic
rs4987207	G	T	RAD52	exonic
rs77998191	T	A	RB1CC1	splicing
.	A	C	SDHC	exonic
.	A	C	SDHC	exonic
rs34833812	C	T	TGFBR2	exonic
rs74790047	A	C	CHD4	exonic
rs4866	G	A	NUDT1	exonic
rs4866	G	A	NUDT1	exonic
rs3219145	T	C	PARP1	exonic
rs3219145	T	C	PARP1	exonic
rs3219145	T	C	PARP1	exonic
rs753393344	A	G	RAD51B	splicing
rs33972313	C	T	SLC23A1	exonic
.	CG	C	KLLN	exonic
rs63750006	C	A	MSH2	exonic
rs267608142	T	TTTGA	MSH6	exonic
rs267608142	T	TTTGA	MSH6	exonic
rs267608142	T	TTTGA	MSH6	exonic
rs4866	G	A	NUDT1	exonic
rs144756946	G	A	TERT	exonic

rs33932559	T	C	MC1R	exonic
rs182893847	T	G	PARK2	exonic
rs9262138	T	C	DHX16	exonic
rs267608142	T	TTTGA	MSH6	exonic
rs3219145	T	C	PARP1	exonic
rs33932559	T	C	MC1R	exonic
rs267608142	T	TTTGA	MSH6	exonic
rs11549467	G	A	HIF1A	exonic
rs33932559	T	C	MC1R	exonic
rs28989187	G	A	BUB1B	exonic
.	T	C	MCC	exonic
rs17129219	C	T	MFI2	exonic
rs267608142	T	TTTGA	MSH6	exonic
rs3218625	C	T	PTGS2	exonic
.	A	C	SDHC	exonic
.	A	C	SDHC	exonic
rs45467993	C	T	TSC2	exonic