

Supplementary Table S1 Summary data for insignificant correlations of some tSNPs under the co-dominant model in unselected cases.

Gene	SNP	Genotype	Case	Control	OR ^a (95%CI)	P-value ^b	Call rate
			n	n			
TP53	rs2287497	GG	335	343	1	0.16	99.43%
		GA	331	274	1.24 (0.99–1.54)		
		AA	61	54	1.16 (0.78–1.72)		
		MAF ^c	0.31	0.28			
		HWE <i>P</i> ^d	0.12	1			
	rs8064946	GG	319	330	1	0.12	99.22%
		GC	340	279	1.26 (1.01–1.57)		
		CC	67	60	1.16 (0.79–1.69)		
		MAF ^c	0.33	0.30			
		HWE <i>P</i> ^d	0.091	0.93			
NBS1	rs13312986	TT	490	461	1	0.85	99.50%
		CT	212	188	1.06 (0.84–1.34)		
		CC	26	22	1.11 (0.62–1.99)		
		MAF	0.18	0.17			
		HWE <i>P</i>	0.62	0.59			
	rs14448	AA	429	414	1	0.58	99.22%
		GA	254	222	1.10 (0.88–1.38)		
		GG	42	34	1.19 (0.74–1.91)		
		MAF	0.23	0.22			
		HWE <i>P</i>	0.6	0.57			
	rs16893166	GG	501	479	1	0.57	99.50%
		GA	205	174	1.13 (0.89–1.43)		
		AA	22	18	1.17 (0.62–2.21)		
		MAF	0.17	0.16			
		HWE <i>P</i>	0.9	0.66			
	rs1805835	AA	663	628	1	0.23	99.43%
		CA	63	42	1.42 (0.95–2.13)		
		CC	1	1	0.95 (0.06–2.13)		
		MAF	0.04	0.03			
		HWE <i>P</i>	1	0.52			
	rs709816	GG	293	277	1	0.78	99.22%
		GA	330	309	1.01 (0.81–1.57)		
		AA	101	85	1.12 (0.81–1.57)		
		MAF	0.37	0.36			
		HWE <i>P</i>	0.63	1			
	rs7830738	CC	488	476	1	0.27	99.29%
		CT	217	175	1.21 (0.96–1.53)		
		TT	22	18	1.19 (0.63–2.25)		

		MAF	0.18	0.16			
		HWE <i>P</i>	0.8	0.66			
PTEN	rs17107001	GG	654	606	1	0.76	99.36%
		GT	69	62	1.03 (0.72–1.48)		
		TT	4	2	1.85 (0.34–10.2)		
		MAF	0.05	0.05			
		HWE <i>P</i>	0.14	0.67			
	rs2299939	CC	472	468	1	0.11	99.50%
		CA	226	184	1.22 (0.96–1.54)		
		AA	30	19	1.57 (0.87–2.82)		
		MAF	0.2	0.17			
		HWE <i>P</i>	0.64	0.89			
	rs2735343	CC	178	179	1	0.096	99.36%
		GC	360	348	1.04 (0.81–1.34)		
		GG	190	142	1.35 (1.00–1.82)		
		MAF	0.51	0.47			
		HWE <i>P</i>	0.77	0.28			
BRIP1	rs11654606	GG	189	170	1	0.94	99.36%
		GA	363	334	0.98 (0.76–1.26)		
		AA	175	166	0.95 (0.70–1.28)		
		MAF	0.49	0.50			
		HWE <i>P</i>	1	0.94			
	rs11871753	GG	521	473	1	0.065	99.29%
		GA	168	177	0.86 (0.67–1.10)		
		AA	37	20	1.68 (0.96–2.93)		
		MAF	0.17	0.16			
		HWE <i>P</i>	<0.0001	0.48			
	rs16945665	GG	467	429	1	0.17	99.29%
		GA	238	211	1.04 (0.83–1.30)		
		AA	20	31	0.59 (0.33–1.06)		
		MAF	0.19	0.20			
		HWE <i>P</i>	0.12	0.47			
	rs16945670	TT	439	407	1	0.24	99.29%
		GT	259	225	1.07 (0.85–1.33)		
		GG	28	38	0.68 (0.41–1.13)		
		MAF	0.22	0.22			
		HWE <i>P</i>	0.19	0.37			
	rs2048718	TT	488	426	1	0.38	99.50%
		CT	215	220	0.85 (0.68–1.07)		
		CC	25	25	0.87 (0.49–1.54)		
		MAF	0.18	0.20			
		HWE <i>P</i>	0.8	0.72			

	rs2191248	CC	557	493	1	0.39	99.43%
		CT	159	162	0.87 (0.68–1.12)		
		TT	12	15	0.71 (0.33–1.53)		
		MAF	0.13	0.14			
		HWE <i>P</i>	0.87	0.64			
	rs7212340	GG	508	475	1	0.71	99.50%
		GC	201	175	1.07 (0.85–1.36)		
		CC	19	21	0.85 (0.45–1.59)		
		MAF	0.16	0.16			
		HWE <i>P</i>	1	0.32			
	rs4986764	GG	378	347	1	0.45	99.43%
		GA	300	267	1.03 (0.83–1.29)		
		AA	49	57	0.79 (0.52–1.19)		
		MAF	0.27	0.28			
		HWE <i>P</i>	0.35	0.57			
	rs4986765	CC	584	525	1	0.37	99.36%
		CT	138	136	0.91 (0.70–1.19)		
		TT	5	9	0.50 (0.17–1.50)		
		MAF	0.10	0.11			
		HWE <i>P</i>	0.42	1			
PALB2	rs16940342	AA	472	430	1	0.33	99.22%
		GA	220	217	0.92 (0.73–1.16)		
		GG	34	22	1.41 (0.81–2.45)		
		MAF	0.2	0.2			
		HWE <i>P</i>	0.2	0.46			
	rs249954	GG	283	256	1	0.23	99.29%
		GA	341	298	1.04 (0.82–1.30)		
		AA	102	116	0.80 (0.58–1.09)		
		MAF	0.38	0.4			
		HWE <i>P</i>	1	0.075			
RAD50	rs11955168	CC	312	286	1	0.72	99.08%
		CT	339	305	1.02 (0.82–1.27)		
		TT	74	77	0.88 (0.62–1.26)		
		MAF	0.34	0.34			
		HWE <i>P</i>	0.21	0.8			
	rs17772583	AA	297	258	1	0.23	99.15%
		GA	331	332	0.87 (0.69–1.09)		
		GG	99	77	1.12 (0.79–1.57)		
		MAF	0.36	0.36			
		HWE <i>P</i>	0.69	0.066			
	rs2040704	AA	480	459	1	0.21	99.00%
		GA	214	194	1.05 (0.84–1.33)		

		GG	29	16	1.73 (0.93–3.23)		
		MAF	0.19	0.17			
		HWE <i>P</i>	0.39	0.49			
CHEK2	rs1884817	GG	270	241	1	0.66	99.29%
		GC	341	311	0.98 (0.78–1.23)		
		CC	115	118	0.87 (0.64–1.19)		
		MAF	0.39	0.41			
		HWE <i>P</i>	0.7	0.34			
	rs2236142	GG	269	252	1	0.91	99.36%
		GC	350	315	1.04 (0.83–1.31)		
		CC	108	103	0.98 (0.71–1.35)		
		MAF	0.39	0.39			
		HWE <i>P</i>	0.76	0.81			
	rs4822983	CC	499	446	1	0.75	99.36%
		CT	211	206	0.92 (0.73–1.15)		
		TT	18	17	0.95 (0.48–1.86)		
		MAF	0.17	0.18			
		HWE <i>P</i>	0.51	0.29			
	rs5762760	AA	380	352	1	0.85	99.22%
		AT	290	262	1.03 (0.82–1.28)		
		TT	55	56	0.91 (0.61–1.36)		
		MAF	0.28	0.28			
		HWE <i>P</i>	1	0.5			
	rs5762763	GG	472	445	1	0.86	99.43%
		GC	229	203	1.06 (0.85–1.34)		
		CC	26	23	1.07 (0.60–1.90)		
		MAF	0.19	0.19			
		HWE <i>P</i>	0.91	1			
	rs5762764	AA	470	442	1	0.88	99.43%
		GA	231	205	1.06 (0.84–1.33)		
		GG	26	24	1.02 (0.58–1.80)		
		MAF	0.19	0.19			
		HWE <i>P</i>	0.81	1			
	rs5762766	TT	208	180	1	0.49	99.79%
		CT	353	322	0.95 (0.74–1.22)		
		CC	164	169	0.84 (0.63–1.13)		
		MAF	0.47	0.49			
		HWE <i>P</i>	0.55	0.32			
	rs9620817	AA	604	561	1	0.64	98.93%
		AT	116	104	1.04 (0.78–1.38)		
		TT	2	4	0.46 (0.08–2.54)		
		MAF	0.08	0.08			
		HWE <i>P</i>	0.22	1			

ATM	rs228592	CC	238	226	1	0.85	98.93%
		CA	354	330	1.02 (0.80–1.29)		
		AA	130	113	1.09 (0.80–1.49)		
		MAF	0.43	0.42			
		HWE <i>P</i>	1	0.75			
	rs228593	GG	341	327	1	0.79	98.93%
		GA	318	282	1.08 (0.87–1.35)		
		AA	64	59	1.04 (0.71–1.53)		
		MAF	0.31	0.30			
		HWE <i>P</i>	0.43	0.93			

Notes: ^aCompared with common homozygote by logistic regression analysis

^bGenotype frequency *P*-value

^cMAF=minor allele frequency

^dHWE= Hardy-Weinberg equilibrium, *P*-value from chi square test with one degree of freedom

Supplementary Table S2 Risk estimates calculated using the dominant and recessive inheritance models of some tSNPs in unselected cases

Gene	SNP	Dominant ^a		Recessive ^b	
		OR (95%CI)	<i>P</i> -value	OR (95%CI)	<i>P</i> -value
TP53	rs2287497	1.22 (0.99–1.51)	0.06	1.05 (0.71–1.53)	0.82
NBS1	rs13312986	1.07 (0.85–1.34)	0.58	1.09 (0.61–1.95)	0.76
	rs14448	1.12 (0.90–1.38)	0.32	1.15 (0.72–1.83)	0.55
	rs16893166	1.13 (0.90–1.42)	0.29	1.13 (0.60–2.13)	0.70
	rs1805835	1.41 (0.94–2.11)	0.091	0.92 (0.06–14.8)	0.95
	rs709816	1.03 (0.84–1.28)	0.76	1.12 (0.82–1.52)	0.48
	rs7830738	1.21 (0.96–1.52)	0.10	1.13 (0.60–2.12)	0.71
RAD50	rs11955168	0.99 (0.80–1.23)	0.93	0.87 (0.62–1.22)	0.43
	rs17772583	0.91 (0.74–1.13)	0.41	1.21 (0.88–1.66)	0.24
	rs2040704	1.11 (0.88–1.39)	0.38	1.71 (0.92–3.17)	0.085
PTEN	rs17107001	1.06 (0.74–1.50)	0.76	1.85 (0.34–10.1)	0.47
	rs2299939	1.25 (1.00–1.56)	0.05	1.47 (0.82–2.65)	0.19
PALB2	rs16940342	0.97 (0.78–1.21)	0.77	1.44 (0.84–2.50)	0.18
	rs249954	0.97 (0.78–1.20)	0.77	0.78 (0.58–1.04)	0.093
CHEK2	rs1884817	0.95 (0.76–1.18)	0.64	0.88 (0.66–1.17)	0.38
	rs2236142	1.03 (0.83–1.28)	0.81	0.96 (0.71–1.29)	0.79
	rs4822983	0.92 (0.73–1.15)	0.45	0.97 (0.50–1.90)	0.93
	rs5762760	1.00 (0.81–1.24)	0.96	0.90 (0.61–1.33)	0.59
	rs5762763	1.06 (0.85–1.33)	0.58	1.04 (0.59–1.85)	0.88
	rs5762764	1.06 (0.85–1.32)	0.63	1.00 (0.57–1.76)	1.00
	rs5762766	0.91 (0.72–1.15)	0.44	0.87 (0.68–1.11)	0.26
	rs9620817	1.01 (0.76–1.35)	0.92	0.46 (0.08–2.53)	0.36

ATM	rs228592	1.04 (0.83–1.30)	0.75	1.08 (0.82–1.43)	0.58
	rs228593	1.07 (0.87–1.33)	0.50	1.00 (0.69–1.45)	0.99
BRIP1	rs11654606	0.97 (0.76–1.23)	0.79	0.96 (0.75–1.23)	0.76
	rs16945665	0.98 (0.79–1.22)	0.85	0.59 (0.33–1.04)	0.064
	rs16945670	1.01 (0.82–1.25)	0.92	0.67 (0.40–1.10)	0.11
	rs2048718	0.86 (0.69–1.07)	0.16	0.92 (0.52–1.62)	0.77
	rs2191248	0.86 (0.67–1.09)	0.21	0.73 (0.34–1.58)	0.42
	rs4986764	0.99 (0.80–1.22)	0.92	0.78 (0.52–1.16)	0.22
	rs4986765	0.89 (0.68–1.15)	0.36	0.51 (0.17–1.52)	0.22
	rs7212340	1.05 (0.83–1.32)	0.68	0.83 (0.44–1.56)	0.56

Notes: A/A as common homozygote

^aDominant model: B/B + A/B vs. A/A

^bRecessive model: B/B vs. A/B + A/A

Supplementary Table S3 Summary data for genotype frequencies and correlation of some tSNPs under the co-dominant model in sporadic and familial and early-onset cases.

Gene	SNP	Genotype	Control	Sporadic cases			Familial and early-onset cases		
			n	n	OR ^a (95%CI)	P-value ^b	n	OR ^a (95%CI)	P-value ^b
TP53	rs2287497	G/G	343	245	1	0.24	90	1	0.31
		G/A	274	240	1.23(0.97-1.56)		91	1.27(0.91-1.76)	
		A/A	54	42	1.09(0.70-1.68)		19	1.34(0.76-2.38)	
	rs8064946	G/G	330	235	1	0.21	84	1	0.21
		G/C	279	246	1.24(0.97-1.57)		94	1.32(0.95-1.85)	
		C/C	60	46	1.08(0.71-1.64)		21	1.38(0.79-2.39)	
NBS1	rs13312986	T/T	461	357	1	0.9	133	1	0.84
		C/T	188	152	1.04(0.81-1.35)		60	1.11(0.78-1.57)	
		C/C	22	19	1.12(0.59-2.09)		7	1.10(0.46-2.64)	
	rs14448	A/A	414	313	1	0.67	116	1	0.68
		G/A	222	182	1.08(0.85-1.39)		72	1.16(0.83-1.62)	
		G/G	34	31	1.21(0.73-2.01)		11	1.15(0.57-2.35)	
	rs16893166	G/G	479	370	1	0.86	131	1	0.28
		G/A	174	142	1.06(0.81-1.37)		63	1.32(0.94-1.87)	
		A/A	18	16	1.15(0.58-2.29)		6	1.22(0.47-3.13)	
	rs1805835	A/A	628	483	1	0.38	180	1	0.24
		C/A	42	44	1.36(0.88-2.11)		19	1.58(0.90-2.78)	
		C/C	1	1	1.30(0.08-20.84)		0	0.00	
	rs709816	G/G	277	204	1	0.44	89	1	0.6
		G/A	309	244	1.07(0.84-1.37)		86	0.87(0.62-1.21)	
		A/A	85	79	1.26(0.88-1.80)		22	0.81(0.48-1.36)	
	rs7830738	C/C	476	357	1	0.45	131	1	0.31
		C/T	175	154	1.17(0.91-1.52)		63	1.31(0.92-1.85)	
		T/T	18	16	1.19(0.60-2.36)		6	1.21(0.47-3.11)	
RAD50	rs11955168	C/C	286	224	1	0.8	88	1	0.73
		C/T	305	248	1.04(0.81-1.32)		91	0.97(0.69-1.35)	

PTEN	rs17772583	T/T	77	55	0.91(0.62-1.34)		19	0.80(0.46-1.40)	
		A/A	258	217	1	0.15	80	1	0.91
		G/A	332	235	0.84(0.66-1.08)		96	0.93(0.66-1.31)	
	rs2040704	G/G	77	75	1.16(0.80-1.67)		24	1.01(0.60-1.69)	
		A/A	459	356	1	0.28	124	1	0.21
		G/A	194	148	0.98(0.76-1.27)		66	1.26(0.89-1.77)	
	rs17107001	G/G	16	21	1.69(0.87-3.29)		8	1.85(0.77-4.42)	
		G/G	606	473	1	0.72	181	1	0.88
		G/T	62	52	1.07(0.73-1.58)		17	0.92(0.52-1.61)	
	rs2299939	T/T	2	3	1.92(0.32-11.55)		1	1.67(0.15-18.6)	
		C/C	468	343	1	0.19	129	1	0.21
		C/A	184	165	1.22(0.95-1.57)		61	1.20(0.85-1.71)	
	rs2735343	A/A	19	20	1.44(0.75-2.73)		10	1.91(0.87-4.21)	
		C/C	179	130	1	0.23	48	1	0.14
		G/C	348	264	1.04(0.79-1.38)		96	1.03(0.70-1.52)	
	rs16940342	G/G	142	134	1.30(0.94-1.80)		56	1.47(0.94-2.29)	
		A/A	430	350	1	0.21	122	1	0.59
		G/A	217	151	0.85(0.67-1.10)		69	1.12(0.80-1.57)	
	rs249954	G/G	22	25	1.40(0.77-2.52)		9	1.44(0.65-3.21)	
		G/G	256	211	1	0.22	72	1	0.54
		G/A	298	244	0.99(0.77-1.27)		97	1.16(0.82-1.64)	
	rs1884817	A/A	116	72	0.75(0.53-1.06)		30	0.92(0.57-1.48)	
		G/G	241	208	1	0.3	62	1	0.45
		G/C	311	241	0.90(0.70-1.15)		100	1.25(0.87-1.79)	
	rs2236142	C/C	118	78	0.77(0.54-1.08)		37	1.22(0.77-1.94)	
		G/G	252	185	1	0.62	84	1	0.53
		G/C	315	262	1.13(0.88-1.46)		88	0.84(0.60-1.18)	
	rs4822983	C/C	103	80	1.06(0.75-1.50)		28	0.82(0.50-1.32)	
		C/C	446	358	1	0.75	141	1	0.27
		C/T	206	154	0.93(0.72-1.20)		57	0.88(0.62-1.24)	
	rs5762760	T/T	17	16	1.17(0.58-2.35)		2	0.37(0.08-1.63)	
		A/A	352	266	1	0.69	114	1	0.52
		A/T	262	218	1.10(0.87-1.40)		72	0.85(0.61-1.19)	
PALB2	rs5762763	T/T	56	41	0.97(0.63-1.49)		14	0.77(0.41-1.44)	
		G/G	445	340	1	0.8	132	1	0.94
		G/C	203	167	1.08(0.84-1.38)		62	1.03(0.73-1.45)	
	rs5762764	C/C	23	20	1.14(0.61-2.11)		6	0.88(0.35-2.21)	
		A/A	442	338	1	0.82	132	1	0.92
		G/A	205	169	1.08(0.84-1.38)		62	1.01(0.72-1.43)	
	rs5762766	G/G	24	20	1.09(0.59-2.01)		6	0.84(0.34-2.09)	
		T/T	180	157	1	0.23	51	1	0.93
		C/T	322	257	0.92(0.70-1.20)		96	1.05(0.72-1.55)	
	rs9620817	C/C	169	112	0.76(0.55-1.05)		52	1.09(0.70-1.69)	
		A/A	561	439	1	0.83	165	1	0.36

ATM	rs228592	A/T	104	85	1.04(0.76-1.43)		31	1.01(0.65-1.57)	
		T/T	4	2	0.64(0.12-3.50)		0	0.00	
		C/C	226	170	1	0.79	68	1	0.15
		C/A	330	270	1.09(0.84-1.40)		84	0.85(0.59-1.21)	
		A/A	113	86	1.01(0.72-1.43)		44	1.29(0.83-2.01)	
BRIP1	rs228593	G/G	327	248	1	0.81	93	1	0.85
		G/A	282	231	1.08(0.85-1.37)		87	1.08(0.78-1.51)	
		A/A	59	45	1.01(0.66-1.53)		19	1.13(0.64-1.99)	
	rs11654606	G/G	170	145	1	0.54	44	0.75(0.48-1.18)	0.46
		G/A	334	264	0.93(0.70-1.22)		99	0.86(0.59-1.26)	
		A/A	166	118	0.83(0.60-1.15)		57	1	
	rs16945665	G/G	429	340	1	0.19	127	1	0.56
		G/A	211	172	1.03(0.80-1.32)		66	1.06(0.75-1.48)	
		A/A	31	14	0.57(0.30-1.09)		6	0.65(0.27-1.60)	
	rs16945670	T/T	407	323	1	0.39	116	1	0.3
		G/T	225	184	1.03(0.81-1.31)		75	1.17(0.84-1.63)	
		G/G	38	21	0.70(0.40-1.21)		7	0.65(0.28-1.49)	
	rs2048718	T/T	426	354	1	0.4	134	1	0.53
		C/T	220	154	0.84(0.66-1.08)		61	0.88(0.63-1.24)	
		C/C	25	20	0.96(0.53-1.76)		5	0.64(0.24-1.69)	
	rs2191248	C/C	493	408	1	0.23	149	1	0.93
		C/T	162	113	0.84(0.64-1.11)		46	0.94(0.65-1.37)	
		T/T	15	7	0.56(0.23-1.40)		5	1.10(0.39-3.08)	
	rs4986764	G/G	347	282	1	0.47	96	1	0.43
		G/A	267	211	0.97(0.77-1.24)		89	1.20(0.87-1.68)	
		A/A	57	35	0.76(0.48-1.18)		14	0.89(0.47-1.66)	
	rs4986765	C/C	525	427	1	0.045	157	1	0.79
		C/T	136	99	0.90(0.67-1.19)		39	0.96(0.64-1.43)	
		T/T	9	1	0.14(0.02-1.08)		4	1.49(0.45-4.89)	
	rs7212340	G/G	475	367	1	0.62	141	1	0.99
		G/C	175	148	1.09(0.85-1.42)		53	1.02(0.71-1.46)	
		C/C	21	13	0.80(0.40-1.62)		6	0.96(0.38-2.43)	

Notes: ^aCompared with common homozygote by logistic regression analysis

^bGenotype frequency *P*-value

Supplementary Table S4 Risk estimates calculated using the dominant and recessive inheritance models of some tSNPs in sporadic cases

Gene	SNP	Dominant ^a		Recessive ^b	
		OR(95%CI)	<i>P</i> -value	OR(95%CI)	<i>P</i> -value
TP53	rs2287497	1.20(0.96-1.51)	0.11	0.99(0.65-1.51)	0.96
NBS1	rs13312986	1.05(0.82-1.34)	0.69	1.10(0.59-2.06)	0.76
	rs14448	1.10(0.87-1.39)	0.42	1.17(0.71-1.93)	0.54
	rs16893166	1.07(0.83-1.37)	0.62	1.13(0.57-2.25)	0.72
	rs1805835	1.36(0.88-2.10)	0.16	1.27(0.08-20.37)	0.87

	rs709816	1.11(0.88-1.41)	0.37	1.22(0.87-1.69)	0.25
	rs7830738	1.17(0.92-1.50)	0.20	1.13(0.57-2.24)	0.72
RAD50	rs11955168	1.01(0.80-1.28)	0.91	0.89(0.62-1.29)	0.55
	rs17772583	0.90(0.71-1.14)	0.38	1.27(0.90-1.79)	0.17
	rs2040704	1.04(0.81-1.33)	0.77	1.70(0.88-3.29)	0.11
PTEN	rs17107001	1.10(0.75-1.61)	0.62	1.91(0.32-11.46)	0.47
	rs2299939	1.24(0.98-1.59)	0.079	1.35(0.71-2.56)	0.36
PALB2	rs16940342	0.90(0.71-1.15)	0.41	1.47(0.82-2.63)	0.20
	rs249954	0.93(0.73-1.17)	0.52	0.76(0.55-1.04)	0.083
CHEK2	rs1884817	0.86(0.68-1.09)	0.21	0.81(0.59-1.11)	0.19
	rs2236142	1.11(0.88-1.41)	0.37	0.99(0.72-1.35)	0.93
	rs4822983	0.95(0.74-1.21)	0.68	1.20(0.60-2.40)	0.61
	rs5762760	1.08(0.86-1.35)	0.52	0.93(0.61-1.41)	0.73
	rs5762763	1.08(0.85-1.38)	0.51	1.11(0.60-2.05)	0.73
	rs5762764	1.08(0.85-1.37)	0.53	1.06(0.58-1.95)	0.84
	rs5762766	0.86(0.67-1.11)	0.25	0.80(0.61-1.05)	0.11
	rs9620817	1.03(0.76-1.40)	0.85	0.63(0.12-3.48)	0.59
ATM	rs228592	1.07(0.84-1.36)	0.59	0.96(0.71-1.31)	0.8
	rs228593	1.07(0.85-1.34)	0.58	0.97(0.65-1.46)	0.88
BRIP1	rs11654606	0.90(0.69-1.16)	0.4	0.88(0.67-1.15)	0.33
	rs16945665	0.97(0.76-1.23)	0.8	0.56(0.30-1.07)	0.072
	rs16945628	0.83(0.66-1.05)	0.12	1.06(0.76-1.49)	0.73
	rs16945670	0.98(0.78-1.24)	0.88	0.69(0.40-1.19)	0.17
	rs2048718	0.85(0.67-1.09)	0.2	1.02(0.56-1.85)	0.96
	rs2191248	0.82(0.63-1.07)	0.14	0.59(0.24-1.45)	0.24
	rs4986764	0.93(0.74-1.17)	0.56	0.76(0.49-1.18)	0.23
	rs4986765	0.85(0.64-1.13)	0.26	0.14(0.02-1.11)	0.018
	rs7212340	1.06(0.83-1.36)	0.63	0.78(0.39-1.58)	0.49

Notes:A/A as common homozygote

^aDominant model :B/B + A/B vs A/A

^bRecessive model :B/B vs A/B +A/A

Supplementary Table S5 Risk estimates calculated using the dominant and recessive inheritance models of some tSNPs in familial and early-onset cases

Gene	SNP	Dominant ^a		Recessive ^b	
		OR(95%CI)	P-value	OR(95%CI)	P-value
TP53	rs2287497	1.28(0.93-1.75)	0.13	1.20(0.69-2.08)	0.52
NBS1	rs13312986	1.11(0.79-1.55)	0.56	1.07(0.45-2.54)	0.88
	rs14448	1.16(0.84-1.60)	0.38	1.09(0.54-2.20)	0.8
	rs16893166	1.31(0.94-1.84)	0.11	1.12(0.44-2.87)	0.81
	rs1805835	1.54(0.88-2.71)	0.14	0.00	0.47
	rs709816	0.85(0.62-1.17)	0.33	0.87(0.53-1.43)	0.57
	rs7830738	1.30(0.93-1.82)	0.13	1.12(0.44-2.86)	0.82
RAD50	rs11955168	0.94(0.68-1.29)	0.68	0.81(0.48-1.38)	0.44

	rs17772583	0.95(0.69-1.31)	0.74	1.04(0.64-1.70)	0.86
	rs2040704	1.30(0.94-1.82)	0.12	1.72(0.72-4.08)	0.23
PTEN	rs17107001	0.94(0.54-1.63)	0.83	1.69(0.15-18.70)	0.68
	rs2299939	1.27(0.91-1.77)	0.16	1.81(0.83-3.95)	0.15
PALB2	rs16940342	1.15(0.83-1.59)	0.4	1.39(0.63-3.06)	0.43
	rs249954	1.09(0.79-1.51)	0.6	0.85(0.55-1.31)	0.45
CHEK2	rs1884817	1.24(0.88-1.74)	0.21	1.07(0.71-1.61)	0.75
	rs2236142	0.83(0.60-1.15)	0.26	0.90(0.57-1.41)	0.63
	rs4822983	0.84(0.59-1.18)	0.31	0.39(0.09-1.69)	0.16
	rs5762760	0.84(0.61-1.15)	0.27	0.83(0.45-1.52)	0.53
	rs5762763	1.01(0.73-1.42)	0.93	0.87(0.35-2.17)	0.76
	rs5762764	0.99(0.71-1.39)	0.97	0.83(0.34-2.07)	0.69
	rs5762766	1.06(0.74-1.53)	0.74	1.05(0.73-1.51)	0.79
	rs9620817	0.98(0.63-1.51)	0.91	0.00	0.15
ATM	rs228592	0.96(0.69-1.34)	0.81	1.42(0.96—2.11)	0.082
	rs228593	1.09(0.80-1.50)	0.58	1.09(0.63-1.88)	0.76
BRIP1	rs11654606	0.83(0.58-1.18)	0.29	0.83(0.57-1.21)	0.33
	rs16945665	1.01(0.72-1.40)	0.98	0.64(0.26-1.56)	0.31
	rs16945670	1.09(0.79-1.51)	0.59	0.61(0.27-1.39)	0.21
	rs2048718	0.86(0.61-1.20)	0.36	0.66(0.25-1.75)	0.39
	rs2191248	0.95(0.66-1.37)	0.8	1.12(0.4-3.12)	0.83
	rs4986764	1.15(0.84-1.58)	0.39	0.82(0.44-1.50)	0.5
	rs4986765	0.99(0.68-1.46)	0.97	1.50(0.46-4.92)	0.52
	rs7212340	1.01(0.72-1.43)	0.94	0.96(0.38-2.41)	0.93

Notes: A/A as common homozygote

^aDominant model :B/B + A/B vs A/A

^bRecessive model :B/B vs A/B +A/A