

**Supplementary Table 1.** The association between each of the 221 nucleotide excision repair single nucleotide polymorphisms (SNPs) studied and the risk of non-melanoma skin cancer.

SNP	P-value	Odds Ratio	95% Confidence Interval
rs2228527	0.001041688	1.57	(1.20-2.05)
rs2228529	0.001119038	1.57	(1.20-2.05)
rs17495770	0.002194386	1.68	(1.20-2.34)
rs4647709	0.00720726	0.59	(0.40-0.87)
rs4134822	0.025607628	2.69	(1.13-6.40)
rs4150530	0.031310164	0.67	(0.47-0.97)
rs4838518	0.031750663	1.26	(1.02-1.57)
rs876430	0.032735996	1.31	(1.02-1.67)
rs1264302	0.034996917	1.27	(1.02-1.59)
rs4253200	0.056640879	1.66	(0.99-2.80)
rs17494629	0.058445961	1.30	(0.99-1.71)
rs1951543	0.068341657	1.33	(0.98-1.81)
rs158572	0.069955511	0.82	(0.66-1.02)
rs3793552	0.070836611	1.48	(0.97-2.28)
rs999484	0.075074362	0.78	(0.60-1.03)
rs3093816	0.080013718	0.83	(0.67-1.02)
rs916920	0.088865537	0.79	(0.60-1.04)
rs4150351	0.096073464	1.26	(0.96-1.66)
rs274883	0.117031734	0.80	(0.60-1.06)
rs3730886	0.120219494	0.51	(0.21-1.19)
rs17256107	0.123984479	0.85	(0.69-1.05)
rs1805335	0.125978952	1.19	(0.95-1.48)
rs7103375	0.149351161	1.23	(0.93-1.63)
rs17497014	0.154495813	1.17	(0.94-1.45)
rs3136166	0.16747197	1.17	(0.94-1.47)
rs254942	0.168242073	0.58	(0.26-1.26)
rs11078676	0.18192073	1.16	(0.93-1.44)
rs976631	0.182937442	1.15	(0.93-1.42)
rs12888332	0.183826032	0.70	(0.41-1.19)
rs1799800	0.188065817	1.17	(0.93-1.48)
rs2894054	0.188242836	0.76	(0.51-1.14)
rs1038144	0.192040118	0.78	(0.54-1.13)
rs1685404	0.194295878	1.16	(0.93-1.46)
rs1803541	0.194585231	1.43	(0.83-2.43)
rs12551155	0.195913288	0.86	(0.68-1.08)
rs3731087	0.196928555	1.62	(0.78-3.36)
rs3136203	0.211565073	0.63	(0.30-1.30)

rs4151223	0.214314481	1.15	(0.92-1.44)
rs1952404	0.214353526	0.52	(0.19-1.46)
rs4151150	0.214815993	0.52	(0.19-1.46)
rs1800975	0.232773279	1.15	(0.92-1.44)
rs4151330	0.234439567	0.87	(0.69-1.09)
rs4134815	0.236440795	0.84	(0.62-1.13)
rs744154	0.236720258	1.15	(0.91-1.45)
rs4790830	0.241088299	1.14	(0.92-1.42)
rs4151289	0.249828701	0.84	(0.62-1.13)
rs12894381	0.261383371	0.84	(0.63-1.13)
rs2271026	0.272657179	0.76	(0.47-1.24)
rs2502604	0.278354129	0.89	(0.73-1.10)
rs4150484	0.27977079	1.53	(0.71-3.33)
rs11612479	0.280197465	1.13	(0.91-1.41)
rs2972381	0.282741322	1.13	(0.90-1.42)
rs34584424	0.28848334	1.44	(0.73-2.85)
rs17655	0.289730318	1.15	(0.88-1.51)
rs9901624	0.291700908	1.19	(0.86-1.63)
rs17563175	0.299336285	1.15	(0.88-1.49)
rs3810366	0.300651178	1.13	(0.90-1.41)
rs1047768	0.305125802	0.89	(0.70-1.12)
rs4838524	0.30695902	0.84	(0.60-1.17)
rs4151225	0.309293515	0.79	(0.49-1.25)
rs7726671	0.316104962	0.88	(0.69-1.13)
rs3136122	0.316563815	1.27	(0.79-2.04)
rs12525665	0.324507622	0.88	(0.68-1.13)
rs11971467	0.331571122	0.89	(0.71-1.12)
rs10819689	0.340828454	0.88	(0.68-1.14)
rs11247752	0.3462352	0.89	(0.71-1.13)
rs2275586	0.348084704	1.54	(0.63-3.77)
rs12702675	0.353456897	0.90	(0.71-1.13)
rs3731151	0.358517778	1.12	(0.88-1.42)
rs4150403	0.361671204	0.76	(0.42-1.37)
rs3731078	0.368576506	1.30	(0.73-2.31)
rs754948	0.369400474	0.77	(0.43-1.36)
rs2266690	0.382888862	0.89	(0.69-1.15)
rs4150437	0.387211731	0.81	(0.51-1.30)
rs4150339	0.388340019	0.78	(0.44-1.37)
rs6673627	0.397421948	0.88	(0.64-1.19)
rs13181	0.39746728	1.10	(0.88-1.37)
rs2160138	0.407668051	0.91	(0.74-1.13)
rs2013867	0.40801206	1.10	(0.87-1.39)

rs3731068	0.412855153	1.12	(0.85-1.48)
rs20579	0.416242627	0.87	(0.63-1.21)
rs12889598	0.418819664	0.89	(0.68-1.18)
rs1805330	0.420546717	1.17	(0.80-1.73)
rs6463746	0.421578813	0.91	(0.73-1.14)
rs4150386	0.425700248	0.88	(0.65-1.20)
rs6974910	0.427041897	0.90	(0.69-1.17)
rs3731081	0.433053	1.10	(0.87-1.40)
rs2351273	0.435022318	0.82	(0.49-1.36)
rs17562267	0.460585287	1.11	(0.84-1.47)
rs3793556	0.461801373	0.92	(0.74-1.14)
rs732052	0.461833224	0.90	(0.69-1.18)
rs3136141	0.472715356	1.42	(0.54-3.71)
rs17332991	0.474721085	0.88	(0.62-1.25)
rs4567413	0.487904659	0.92	(0.74-1.16)
rs893919	0.488068903	0.89	(0.63-1.25)
rs1350344	0.489478546	1.08	(0.87-1.33)
rs8065937	0.491041388	1.10	(0.84-1.45)
rs4917772	0.497467357	0.92	(0.73-1.17)
rs10952075	0.505160557	0.93	(0.75-1.15)
rs2291120	0.522172113	1.11	(0.81-1.52)
rs10979808	0.525506686	0.89	(0.63-1.27)
rs3093821	0.527775452	1.30	(0.57-2.96)
rs3731015	0.528958846	1.34	(0.54-3.32)
rs3793786	0.529964315	0.93	(0.74-1.17)
rs5030755	0.531924347	0.90	(0.64-1.26)
rs4534184	0.533831609	0.90	(0.63-1.27)
rs4150563	0.534117952	0.92	(0.71-1.19)
rs11558955	0.542470165	0.84	(0.47-1.49)
rs12727	0.54617057	0.92	(0.70-1.20)
rs13436	0.54619982	0.94	(0.76-1.16)
rs10255802	0.546631804	0.93	(0.74-1.18)
rs4151154	0.549435021	0.81	(0.40-1.62)
rs2228528	0.553499914	0.92	(0.70-1.21)
rs13241138	0.557840879	1.07	(0.86-1.32)
rs3740526	0.558237233	0.94	(0.76-1.16)
rs4150416	0.566925614	1.12	(0.77-1.63)
rs11974817	0.579005683	1.06	(0.86-1.31)
rs2336219	0.585922317	1.09	(0.80-1.48)
rs4151276	0.58706293	0.78	(0.32-1.91)
rs758994	0.592437356	1.06	(0.85-1.33)
rs11656253	0.596241109	0.94	(0.76-1.17)

rs3729512	0.602439942	0.92	(0.66-1.27)
rs3212948	0.604177846	1.06	(0.85-1.33)
rs2957873	0.608847385	1.08	(0.81-1.43)
rs13340445	0.615404121	1.07	(0.83-1.37)
rs1799787	0.618381998	1.06	(0.84-1.33)
rs6463745	0.622119186	1.06	(0.85-1.32)
rs4151342	0.624649152	0.90	(0.60-1.36)
rs12360068	0.626854205	0.89	(0.55-1.43)
rs2972357	0.627543365	0.94	(0.75-1.19)
rs4150261	0.631244902	0.80	(0.32-2.00)
rs2974755	0.632984141	1.05	(0.85-1.31)
rs156641	0.637947399	1.05	(0.85-1.31)
rs3810945	0.6413214	0.91	(0.60-1.37)
rs4150336	0.646143688	1.11	(0.70-1.76)
rs6947203	0.650886747	0.95	(0.75-1.20)
rs1558476	0.661226277	0.95	(0.75-1.20)
rs7915501	0.67709851	0.94	(0.72-1.24)
rs3786136	0.682010684	1.06	(0.82-1.37)
rs4150342	0.698435492	1.16	(0.55-2.43)
rs9653966	0.700151718	1.08	(0.73-1.60)
rs3212955	0.708436485	1.05	(0.82-1.34)
rs3744768	0.711581685	1.05	(0.80-1.38)
rs6416887	0.711807667	1.07	(0.73-1.57)
rs4134813	0.716675878	0.96	(0.77-1.20)
rs3212986	0.722177059	1.05	(0.82-1.34)
rs4150581	0.722840927	0.96	(0.78-1.18)
rs6956254	0.723056804	0.96	(0.77-1.20)
rs3786133	0.724831742	0.96	(0.78-1.19)
rs750723	0.725428155	0.94	(0.65-1.35)
rs2230356	0.730903432	1.06	(0.76-1.49)
rs3136036	0.732888796	0.90	(0.50-1.63)
rs2268414	0.746324064	1.08	(0.67-1.74)
rs3731095	0.748758024	0.90	(0.47-1.73)
rs3916855	0.753684325	0.94	(0.62-1.41)
rs17139209	0.755415965	0.93	(0.59-1.47)
rs1800067	0.761559406	1.06	(0.72-1.56)
rs4725048	0.768939518	0.96	(0.75-1.23)
rs238404	0.783482076	0.97	(0.78-1.21)
rs6598919	0.786667869	0.97	(0.79-1.19)
rs1800124	0.790389941	1.10	(0.55-2.21)
rs4150650	0.793791232	1.03	(0.82-1.29)
rs2348769	0.795562344	0.97	(0.76-1.23)

rs4270868	0.797619285	0.97	(0.77-1.22)
rs12702665	0.799337913	0.97	(0.74-1.27)
rs238415	0.801434985	0.97	(0.78-1.21)
rs50872	0.804181419	0.97	(0.76-1.24)
rs10816790	0.804924158	1.03	(0.81-1.32)
rs6678050	0.807213718	1.03	(0.83-1.28)
rs4150474	0.808829949	0.96	(0.67-1.37)
rs4150454	0.816963459	1.03	(0.80-1.32)
rs4150479	0.817125992	1.07	(0.60-1.93)
rs1264308	0.819836131	1.04	(0.74-1.46)
rs7893335	0.820998515	0.97	(0.73-1.29)
rs4140805	0.825272907	1.02	(0.82-1.28)
rs4253211	0.82935322	0.96	(0.68-1.36)
rs4640	0.830062211	1.07	(0.59-1.94)
rs50871	0.831974657	1.02	(0.83-1.25)
rs4978787	0.837113353	0.98	(0.79-1.21)
rs3731143	0.850413751	0.96	(0.61-1.51)
rs3136171	0.856900701	0.94	(0.45-1.93)
rs10244745	0.858928073	1.03	(0.77-1.38)
rs12656449	0.859168516	0.97	(0.67-1.39)
rs536132	0.859393349	0.98	(0.79-1.21)
rs556596	0.864813982	0.98	(0.78-1.23)
rs17549396	0.867465904	1.04	(0.62-1.75)
rs4150400	0.869224892	1.10	(0.34-3.63)
rs4790838	0.873604649	1.02	(0.81-1.29)
rs4151361	0.876007039	1.06	(0.51-2.20)
rs274869	0.878204002	0.98	(0.79-1.22)
rs12197370	0.880491032	0.98	(0.79-1.22)
rs7778555	0.881483256	0.98	(0.79-1.23)
rs1047769	0.883082096	0.96	(0.59-1.57)
rs7812102	0.883468016	0.97	(0.68-1.39)
rs746418	0.888953186	1.02	(0.82-1.25)
rs2018836	0.893572973	0.98	(0.78-1.24)
rs4150383	0.894871063	0.98	(0.73-1.32)
rs156640	0.903063075	0.99	(0.80-1.22)
rs3919526	0.903307299	1.02	(0.78-1.32)
rs3212965	0.905079089	0.96	(0.47-1.94)
rs4987068	0.909062506	1.04	(0.49-2.22)
rs11763763	0.915143931	0.98	(0.70-1.37)
rs3731062	0.918263616	1.03	(0.56-1.91)
rs2229090	0.921494643	0.99	(0.76-1.28)
rs3093792	0.921857871	1.03	(0.54-1.96)

rs1805334	0.92290334	0.99	(0.77-1.27)
rs20580	0.924768684	0.99	(0.80-1.23)
rs3130780	0.927413942	0.99	(0.77-1.27)
rs13099160	0.93437195	0.98	(0.64-1.52)
rs794084	0.936380959	1.01	(0.81-1.26)
rs7780564	0.946382114	1.01	(0.81-1.25)
rs3793561	0.946848547	0.99	(0.79-1.24)
rs1805329	0.953342087	1.01	(0.77-1.32)
rs2227869	0.953682824	1.02	(0.60-1.71)
rs732855	0.967717355	1.00	(0.81-1.25)
rs9651726	0.978377698	1.00	(0.72-1.40)
rs3730878	0.980447679	0.99	(0.44-2.23)
rs2159832	0.981919025	1.01	(0.64-1.59)
rs3738948	0.985233573	1.00	(0.76-1.32)
rs3731099	0.986034563	1.01	(0.51-1.99)
rs3136066	0.986173067	1.00	(0.58-1.75)

Results are based on a conditional logistic regression using the additive model and adjusting for the first three principle components, and baseline age, education, body mass index, and smoking