

Supplemental Table 5. A list of variants that are present in group 2 and absent from group 1

Gene	Location	Type	Substitution	dbSNP	III-1	III-6
<Non-synonymous variants>						
IL17RC	3p25.3	nonsynonymous SNV	NM_001203265:c.G947A:p.R316Q	rs12054059	Hetero	Hetero
C3orf20	3p25.1	nonsynonymous SNV	NM_032137:c.G125A:p.G42D	rs17040154	Hetero	Hetero
DCLK3	3p22.2	nonsynonymous SNV	NM_033403:c.G1048A:p.A350T		Hetero	Hetero
VILL	3p22.2	nonsynonymous SNV	NM_015873:c.G2315A:p.R772Q		Hetero	Hetero
ANO10	3p22.1	nonsynonymous SNV	NM_001204833:c.C1226T:p.A409V	rs150026260	Hetero	Hetero
ZNF501	3p21.31	nonsynonymous SNV	NM_145044:c.A190G:p.N64D		Hetero	Hetero
EXOSC7	3p21.31	nonsynonymous SNV	NM_015004:c.A694G:p.S232G		Hetero	Hetero
CCRL2	3p21.31	nonsynonymous SNV	NM_001130910:c.T536A:p.F179Y	rs3204849	Hetero	Hetero
RNF123	3p21.31	nonsynonymous SNV	NM_022064:c.G1445A:p.R482Q		Hetero	Hetero
TKT	3p21.1	nonsynonymous SNV	NM_001064:c.A1306G:p.M436V	rs141784567	Hetero	Hetero
CCDC66	3p14.3	nonsynonymous SNV	NM_001012506:c.A2402T:p.E801V	rs61747991	Hetero	Hetero
CCDC66	3p14.3	nonsynonymous SNV	NM_001012506:c.T2405C:p.L802S	rs61747994	Hetero	Hetero
ATXN7	3p14.1	nonsynonymous SNV	NM_001128149:c.G2149A:p.V717M	rs3774729	Hetero	Hetero
LRIG1	3p14.1	nonsynonymous SNV	NM_015541:c.C169A:p.R57S		Hetero	Hetero
SUCLG2	3p14.1	nonsynonymous SNV	NM_001177599:c.G1273A:p.V425I	rs902320	Hetero	Hetero
SUCLG2	3p14.1	nonsynonymous SNV	NM_001177599:c.T1210C:p.Y404H	rs902321	Hetero	Hetero
ZNF717	3p12.3	nonsynonymous SNV	NM_001128223:c.G2021A:p.R674H	rs3009020	Homo	Homo
ZNF717	3p12.3	nonsynonymous SNV	NM_001128223:c.G1942A:p.V648I	rs11122676	Homo	Homo
NFKBIZ	3q12.3	nonsynonymous SNV	NM_031419:c.C920G:p.T307S	rs3821727	Hetero	Hetero
C3orf17	3q13.2	nonsynonymous SNV	NM_015412:c.A1426G:p.T476A	rs3732813	Hetero	Hetero
C3orf17	3q13.2	nonsynonymous SNV	NM_015412:c.C1054T:p.P352S	rs2306858	Hetero	Hetero
WDR52	3q13.2	nonsynonymous SNV	NM_001164496:c.T5163A:p.N1721K	rs148547745	Hetero	Hetero
KIAA1407	3q13.31	nonsynonymous SNV	NM_020817:c.A2088T:p.E696D	rs6784095	Hetero	Hetero
HTR3D	3q27.1	nonsynonymous SNV	NM_182537:c.C589G:p.L197V	rs75040538	Hetero	Hetero
VPS8	3q27.2	nonsynonymous SNV	NM_001009921:c.T4091C:p.I1364T	rs3821750	Hetero	Hetero
C3orf70	3q27.2	nonsynonymous SNV	NM_001025266:c.C454T:p.P152S	rs61740263	Hetero	Hetero
HRG	3q27.3	nonsynonymous SNV	NM_000412:c.T539C:p.I180T	rs10770	Hetero	Hetero
HRG	3q27.3	nonsynonymous SNV	NM_000412:c.C1342T:p.R448C	rs1042445	Hetero	Hetero
ADAMTS2	5q35.3	nonframeshift insertion	NM_014244:c.71_72insTGC:p.P24delinsLP		Hetero	Hetero
MGAT4B	5q35.3	nonsynonymous SNV	NM_054013:c.A221G:p.K74R	rs78450232	Hetero	Hetero
RP1L1	8p23.1	nonsynonymous SNV	NM_178857:c.A5666T:p.D1889V	rs28446662	Hetero	Hetero
RP1L1	8p23.1	nonsynonymous SNV	NM_178857:c.C4484G:p.P1495R	rs4841399	Hetero	Hetero
RP1L1	8p23.1	nonsynonymous SNV	NM_178857:c.A4046T:p.Q1349L	rs13253053	Hetero	Hetero
DLC1	8p22	nonsynonymous SNV	NM_001164271:c.G838A:p.V280M	rs532841	Hetero	Hetero
PDGFRL	8p22	nonsynonymous SNV	NM_006207:c.G381T:p.Q127H		Hetero	Hetero
PCMI	8p22	nonsynonymous SNV	NM_006197:c.G2071T:p.A691S	rs17635381	Hetero	Hetero
ASAHI	8p22	nonsynonymous SNV	NM_004315:c.A325G:p.I109V	rs1049874	Hetero	Hetero
ASAHI	8p22	nonsynonymous SNV	NM_004315:c.G262A:p.V88M	rs1071645	Hetero	Hetero
ASAHI	8p22	nonsynonymous SNV	NM_001127505:c.G187A:p.V63I	rs3753115	Hetero	Hetero
PSD3	8p22	nonsynonymous SNV	NM_015310:c.C878T:p.P293L	rs13263453	Hetero	Hetero
GFRA2	8p21.3	nonsynonymous SNV	NM_001165039:c.T986A:p.L329Q	rs1128397	Hetero	Hetero
PDLIM2	8p21.3	nonsynonymous SNV	NM_021630:c.C389T:p.P130L	rs11545016	Hetero	Hetero
PDLIM2	8p21.3	nonsynonymous SNV	NM_021630:c.C1805T:p.A602V	rs145349678	Hetero	Hetero
KIAA1967	8p21.3	nonsynonymous SNV	NM_021174:c.G1809C:p.Q603H	rs59511580	Hetero	Hetero
DOCK5	8p21.2	nonsynonymous SNV	NM_024940:c.A3068G:p.Q1023R	rs2271111	Hetero	Hetero
RAB11FIP1	8p11.23	nonsynonymous SNV	NM_001002814:c.T1727C:p.V576A	rs75705762	Hetero	Hetero
KAT6A	8p11.21	nonsynonymous SNV	NM_006766:c.T401C:p.L134S	rs3824276	Hetero	Hetero
NPBWR1	8q11.23	nonsynonymous SNV	NM_005285:c.A404T:p.Y135F	rs33977775	Hetero	Hetero
CPA6	8q13.2	nonsynonymous SNV	NM_020361:c.C518G:p.S173C	rs17853192	Hetero	Hetero
ZBTB10	8q21.13	nonframeshift deletion	NM_001105539:c.3_5del:p.L_2del	rs144692080	Hetero	Hetero
CDH17	8q22.1	nonsynonymous SNV	NM_001144663:c.A2216C:p.E739A	rs1051624	Hetero	Hetero
C8orf38	8q22.1	nonsynonymous SNV	NM_152416:c.C805G:p.H269D		Hetero	Hetero
NIPAL2	8q22.2	nonsynonymous SNV	NM_024759:c.A493C:p.T165P	rs77774174	Hetero	Hetero
COL14A1	8q24.12	nonsynonymous SNV	NM_021110:c.G4024C:p.V1342L	rs17833992	Hetero	Hetero
SNTB1	8q24.12	nonsynonymous SNV	NM_021021:c.G56A:p.R19Q		Hetero	Hetero
TG	8q24.22	nonsynonymous SNV	NM_003235:c.C4859T:p.T1620M	rs115902639	Hetero	Hetero
TG	8q24.22	nonsynonymous SNV	NM_003235:c.C5995T:p.R1999W	rs2076740	Hetero	Hetero
ZFAT	8q24.22	nonsynonymous SNV	NM_001167583:c.C268T:p.P90S	rs12541381	Hetero	Hetero
TUSC1	9p21.2	nonsynonymous SNV	NM_001004125:c.T622G:p.S208A	rs72631815	Hetero	Hetero
UBAP2	9p13.3	nonsynonymous SNV	NM_018449:c.A1817G:p.N606S	rs307658	Hetero	Hetero
KIF24	9p13.3	nonsynonymous SNV	NM_194313:c.C2510T:p.S837F	rs41274041	Hetero	Hetero
KIF24	9p13.3	nonsynonymous SNV	NM_194313:c.A325G:p.R109G	rs41274845	Hetero	Hetero
FAM205A	9p13.3	nonsynonymous SNV	NM_001141917:c.T1055C:p.F352S	rs521630	Homo	Hetero
FAM205A	9p13.3	nonsynonymous SNV	NM_001141917:c.C713T:p.T238M	rs1810820	Hetero	Hetero
FAM205A	9p13.3	nonsynonymous SNV	NM_001141917:c.T416G:p.L139R	rs117956208	Hetero	Hetero
C9orf131	9p13.3	nonsynonymous SNV	NM_001040410:c.G560T:p.W187L	rs615474	Hetero	Hetero
C9orf131	9p13.3	nonsynonymous SNV	NM_001040410:c.T1762A:p.S588T	rs2298312	Hetero	Hetero
SMC5	9q21.12	nonsynonymous SNV	NM_015110:c.T922C:p.C308R	rs1180117	Hetero	Hetero

TRPM3	9q21.12	nonsynonymous SNV	NM_206944:c.A4631C:p.N1544T	rs17535963	Hetero	Hetero
TRPM3	9q21.12	nonsynonymous SNV	NM_206944:c.G4586A:p.R1529K	rs41287373	Hetero	Hetero
TMEM2	9q21.13	nonsynonymous SNV	NM_001135820:c.G3572A:p.S1191N	rs2297089	Hetero	Hetero
C9orf47	9q22.1	nonsynonymous SNV	NM_001001938:c.G497A:p.G166D		Hetero	Hetero
C9orf86	9q34.3	nonsynonymous SNV	NM_001173988:c.C1592T:p.P531L	rs143011384	Hetero	Hetero
MAMDC4	9q34.3	nonsynonymous SNV	NM_206920:c.G2005A:p.E669K	rs76796290	Hetero	Hetero
NDOR1	9q34.3	nonsynonymous SNV	NM_001144027:c.C740T:p.P247L	rs117332028	Hetero	Hetero
SLC34A3	9q34.3	nonsynonymous SNV	NM_001177316:c.G1009A:p.G337S	rs35699762	Hetero	Hetero
EXD3	9q34.3	nonsynonymous SNV	NM_017820:c.G2429A:p.R810Q	rs28685844	Hetero	Hetero
NOXA1	9q34.3	nonsynonymous SNV	NM_001256067:c.C409A:p.L137I	rs77546115	Hetero	Hetero
ANKRD16	10p15.1	nonsynonymous SNV	NM_001009941:c.C383G:p.A128G	rs2296136	Hetero	Hetero
ANKRD16	10p15.1	nonsynonymous SNV	NM_001009941:c.G88A:p.G30R	rs3750659	Hetero	Hetero
PFKFB3	10p15.1	nonsynonymous SNV	NM_001145443:c.G151A:p.V51I	rs181651478	Hetero	Hetero
OR4C46	11p11.12	nonsynonymous SNV	NM_001004703:c.C719T:p.S240F	rs11246607	Homo	Hetero
MMP17	12q24.33	nonsynonymous SNV	NM_016155:c.C386G:p.A129G	rs4964883	Hetero	Hetero
MMP17	12q24.33	nonsynonymous SNV	NM_016155:c.G836A:p.R279H	rs35466884	Hetero	Hetero
ANKLE2	12q24.33	nonsynonymous SNV	NM_015114:c.G2159A:p.R720H	rs10781634	Hetero	Hetero
ANKLE2	12q24.33	nonsynonymous SNV	NM_015114:c.C364T:p.H122Y	rs1132375	Hetero	Hetero
TUBA3C	13q12.11	nonsynonymous SNV	NM_006001:c.G1318A:p.V440M	rs1803092	Hetero	Hetero
LATS2	13q12.11	nonsynonymous SNV	NM_014572:c.C971T:p.A324V	rs558614	Hetero	Hetero
ERN2	16p12.2	nonsynonymous SNV	NM_033266:c.G1604C:p.S535T	rs26764	Hetero	Hetero
ZKSCAN2	16p12.1	nonsynonymous SNV	NM_001012981:c.C757T:p.L253F	rs2112811	Hetero	Hetero
IL21R	16p12.1	nonsynonymous SNV	NM_021798:c.T734C:p.V245A	rs138134818	Hetero	Hetero
GTF3C1	16p12.1	nonsynonymous SNV	NM_001520:c.C3761T:p.A1254V		Hetero	Hetero
TBC1D10B	16p11.2	nonsynonymous SNV	NM_015527:c.G202C:p.E68Q	rs12930787	Hetero	Hetero
BCL7C	16p11.2	nonsynonymous SNV	NM_004765:c.G368A:p.R123H		Hetero	Hetero
PYDC1	16p11.2	frameshift deletion	NM_152901:c.115_134del:p.39_45del		Hetero	Hetero
ARMC5	16p11.2	nonsynonymous SNV	NM_001105247:c.C1039T:p.P347S	rs79238971	Hetero	Hetero
CHD9	16q12.2	nonsynonymous SNV	NM_025134:c.G6232A:p.V2078I	rs145249816	Hetero	Hetero
CHD9	16q12.2	nonsynonymous SNV	NM_025134:c.A8278G:p.T2760A	rs3743771	Hetero	Hetero
CES5A	16q12.2	nonsynonymous SNV	NM_145024:c.T1461G:p.D487E	rs11860456	Hetero	Hetero
NLRC5	16q13	nonsynonymous SNV	NM_032206:c.C572T:p.P191L	rs74439742	Hetero	Hetero
GPR56	16q21	nonsynonymous SNV	NM_001145773:c.G82A:p.A28T		Hetero	Hetero
CNGB1	16q21	nonsynonymous SNV	NM_001297:c.C1435A:p.L479I	rs2303783	Hetero	Hetero
ENTD6	16q21	nonsynonymous SNV	NM_001160305:c.C599G:p.P200R		Hetero	Hetero
CMTM2	16q21	nonsynonymous SNV	NM_144673:c.T365C:p.I122T	rs2290182	Hetero	Hetero
CDH16	16q22.1	nonsynonymous SNV	NM_001204746:c.C478T:p.H160Y	rs2271023	Hetero	Hetero
ZDHHC1	16q22.1	nonsynonymous SNV	NM_013304:c.G374A:p.S125N		Hetero	Hetero
NOB1	16q22.1	nonsynonymous SNV	NM_014062:c.G692A:p.R231Q	rs3811348	Hetero	Hetero
IL34	16q22.1	stopgain SNV	NM_001172771:c.C636A:p.Y212X	rs4985556	Hetero	Hetero
DHODH	16q22.2	nonsynonymous SNV	NM_001361:c.C1022T:p.A341V	rs61733129	Hetero	Hetero
HPR	16q22.2	nonsynonymous SNV	NM_020995:c.G608A:p.R203K	rs2021171	Hetero	Hetero
HPR	16q22.2	nonsynonymous SNV	NM_020995:c.T848C:p.V283A	rs1065360	Hetero	Hetero
LDHD	16q23.1	nonsynonymous SNV	NM_153486:c.G1345A:p.E449K	rs78008482	Hetero	Hetero
ADAMTS18	16q23.1	nonsynonymous SNV	NM_199355:c.T571C:p.Y191H	rs11643211	Hetero	Hetero
CLEC3A	16q23.1	nonsynonymous SNV	NM_001244755:c.C433A:p.Q145K	rs2072663	Hetero	Hetero
HIC1	17p13.3	nonsynonymous SNV	NM_001098202:c.C1108G:p.P370A	rs182733310	Hetero	Hetero
SMG6	17p13.3	nonsynonymous SNV	NM_001170957:c.A929C:p.N310T	rs1885987	Hetero	Hetero
TSR1	17p13.3	nonsynonymous SNV	NM_018128:c.A595G:p.K199E	rs79597880	Hetero	Hetero
KIAA0664	17p13.3	nonsynonymous SNV	NM_015229:c.G3643A:p.G1215S		Hetero	Hetero
SPATA22	17p13.2	nonsynonymous SNV	NM_001170696:c.G206C:p.R69T	rs2291604	Hetero	Hetero
TRPV3	17p13.2	nonsynonymous SNV	NM_145068:c.G1882A:p.A628T	rs75319568	Hetero	Hetero
SHPK	17p13.2	nonsynonymous SNV	NM_013276:c.G694A:p.E232K	rs180851246	Hetero	Hetero
ZZEF1	17p13.2	nonsynonymous SNV	NM_015113:c.A6040G:p.I2014V	rs781831	Hetero	Hetero
ZZEF1	17p13.2	nonsynonymous SNV	NM_015113:c.T4309G:p.S1437A	rs4790555	Hetero	Hetero
FBXO39	17p13.1	nonsynonymous SNV	NM_153230:c.C28T:p.P10S	rs4796555	Hetero	Hetero
TEKT1	17p13.1	nonsynonymous SNV	NM_053285:c.G933T:p.K311N	rs77092590	Hetero	Hetero
TEKT1	17p13.1	nonsynonymous SNV	NM_053285:c.C760T:p.R254C	rs3744395	Hetero	Hetero
CTDNEP1	17p13.1	nonsynonymous SNV	NM_001143775:c.A34G:p.T12A	rs3744399	Hetero	Hetero
SPEM1	17p13.1	nonsynonymous SNV	NM_199339:c.G794A:p.R265Q	rs33989543	Hetero	Hetero
CHRN1	17p13.1	nonsynonymous SNV	NM_000747:c.G725A:p.R242H	rs79220301	Hetero	Hetero
DNAH2	17p13.1	nonsynonymous SNV	NM_020877:c.C10799T:p.T3600I	rs7213894	Hetero	Hetero
DNAH2	17p13.1	nonsynonymous SNV	NM_020877:c.T13070A:p.V4357D	rs78354379	Hetero	Hetero
KDM6B	17p13.1	nonsynonymous SNV	NM_001080424:c.C1532A:p.P511H	rs61031471	Hetero	Hetero
TMEM88	17p13.1	nonsynonymous SNV	NM_203411:c.C130T:p.L44F	rs2270518	Hetero	Hetero
MYH13	17p13.1	nonsynonymous SNV	NM_003802:c.G3881A:p.R1294Q	rs17690195	Hetero	Hetero
MYH3	17p13.1	nonsynonymous SNV	NM_002470:c.G3574A:p.A1192T	rs2285477	Hetero	Hetero
DNAH9	17p12	nonsynonymous SNV	NM_001372:c.G6485A:p.R2162K	rs61743635	Hetero	Hetero
ELAC2	17p12	nonsynonymous SNV	NM_018127:c.C650T:p.S217L	rs4792311	Hetero	Hetero
COX10	17p12	nonsynonymous SNV	NM_001303:c.G476A:p.R159Q	rs8077302	Hetero	Hetero
TEKT3	17p12	nonsynonymous SNV	NM_031898:c.G8A:p.R3H	rs7226363	Hetero	Hetero

CDRT1	17p12	nonsynonymous SNV	NM_006382:c.T1927C:p.F643L	rs8078150	Hetero	Hetero
TRIM16	17p12	nonsynonymous SNV	NM_006470:c.G363T:p.E121D	rs2074890	Hetero	Hetero
ATPAF2	17p11.2	stoploss SNV	NM_145691:c.T868C:p.X290R		Hetero	Hetero
KIAA0100	17q11.2	nonsynonymous SNV	NM_014680:c.T4547G:p.V1516G	rs12602520	Hetero	Hetero
ATAD5	17q11.2	nonsynonymous SNV	NM_024857:c.A103T:p.T35S	rs9910051	Hetero	Hetero
ATAD5	17q11.2	nonsynonymous SNV	NM_024857:c.C259T:p.P87S	rs3816780	Hetero	Hetero
ATAD5	17q11.2	nonsynonymous SNV	NM_024857:c.G746A:p.R249K	rs17826219	Hetero	Hetero
ATAD5	17q11.2	nonframeshift deletion	NM_024857:c.857_862del:p.286_288del	rs72427574	Hetero	Hetero
ATAD5	17q11.2	nonsynonymous SNV	NM_024857:c.A2095C:p.N699H	rs3764421	Hetero	Hetero
ATAD5	17q11.2	nonsynonymous SNV	NM_024857:c.T4255C:p.Y1419H	rs11657270	Hetero	Hetero
TEFM	17q11.2	nonsynonymous SNV	NM_024683:c.A1042G:p.I348V	rs2433	Hetero	Hetero
UNC45B	17q12	nonsynonymous SNV	NM_001033576:c.G2398C:p.G800R	rs142387062	Hetero	Hetero
SLFN12L	17q12	nonsynonymous SNV	NM_001195790:c.A1553C:p.Y518S	rs3744372	Hetero	Hetero
SLFN12L	17q12	nonsynonymous SNV	NM_001195790:c.C1118G:p.A373G	rs2304967	Hetero	Hetero
SLFN12L	17q12	frameshift deletion	NM_001195790:c.387delC:p.S129fs	rs143471015	Hetero	Hetero
PLXDC1	17q12	nonsynonymous SNV	NM_020405:c.G1385A:p.R462H	rs75117355	Hetero	Hetero
CACNB1	17q12	nonsynonymous SNV	NM_000723:c.C665G:p.P222R		Hetero	Hetero
KRT25	17q21.2	nonsynonymous SNV	NM_181534:c.G197C:p.G66A	rs35076248	Hetero	Hetero
KRT26	17q21.2	nonsynonymous SNV	NM_181539:c.T352C:p.W118R	rs9898164	Hetero	Hetero
KRT27	17q21.2	nonsynonymous SNV	NM_181537:c.G430A:p.E144K	rs12453124	Hetero	Hetero
KRTAP9-3	17q21.2	nonsynonymous SNV	NM_031962:c.C58A:p.Q20K	rs112082369	Hetero	Hetero
KRTAP16-1	17q21.2	nonsynonymous SNV	NM_001146182:c.C1460G:p.A487G	rs2074286	Hetero	Hetero
KRTAP16-1	17q21.2	nonsynonymous SNV	NM_001146182:c.C1019G:p.P340R	rs2074285	Hetero	Hetero
KRTAP16-1	17q21.2	nonsynonymous SNV	NM_001146182:c.G770C:p.S257T	rs2074284	Hetero	Hetero
KRTAP16-1	17q21.2	nonsynonymous SNV	NM_001146182:c.G412A:p.V138I	rs12453338	Hetero	Hetero
KRTAP17-1	17q21.2	nonframeshift deletion	NM_031964:c.I36_150del:p.46_50del	rs146763178	Hetero	Hetero
KRTAP17-1	17q21.2	nonsynonymous SNV	NM_031964:c.G125A:p.G42D	rs78413710	Hetero	Hetero
KRT33A	17q21.2	nonsynonymous SNV	NM_004138:c.C809T:p.A270V	rs12937519	Hetero	Hetero
KRT37	17q21.2	nonsynonymous SNV	NM_003770:c.C917A:p.A306D	rs2071607	Hetero	Hetero
KRT37	17q21.2	stopgain SNV	NM_003770:c.C703T:p.Q235X	rs78158550	Hetero	Hetero
KRT37	17q21.2	nonsynonymous SNV	NM_003770:c.C650T:p.A217V	rs16966811	Hetero	Hetero
KRT37	17q21.2	nonsynonymous SNV	NM_003770:c.A217T:p.S73C	rs9916475	Hetero	Hetero
KRT37	17q21.2	nonsynonymous SNV	NM_003770:c.A214G:p.T72A	rs9916484	Hetero	Hetero
KRT37	17q21.2	nonsynonymous SNV	NM_003770:c.A116G:p.N39S	rs9916724	Hetero	Hetero
DHX58	17q21.2	nonsynonymous SNV	NM_024119:c.G1568A:p.R523Q	rs2074160	Hetero	Hetero
DHX58	17q21.2	nonsynonymous SNV	NM_024119:c.A1274G:p.Q425R	rs2074158	Hetero	Hetero
DHX58	17q21.2	nonsynonymous SNV	NM_024119:c.T1211C:p.I404T		Hetero	Hetero
HSPB9	17q21.2	nonsynonymous SNV	NM_033194:c.A5C:p.Q2P	rs1122326	Hetero	Hetero
BRCA1	17q21.31	nonsynonymous SNV	NM_007297:c.A4696G:p.S1566G	rs1799966	Hetero	Hetero
BRCA1	17q21.31	nonsynonymous SNV	NM_007297:c.A3407G:p.K1136R	rs16942	Hetero	Hetero
BRCA1	17q21.31	nonsynonymous SNV	NM_007297:c.A2972G:p.E991G	rs16941	Hetero	Hetero
BRCA1	17q21.31	nonsynonymous SNV	NM_007297:c.C2471T:p.P824L	rs799917	Hetero	Hetero
NBR1	17q21.31	nonsynonymous SNV	NM_005899:c.A2768G:p.H923R	rs8482	Hetero	Hetero
FAM171A2	17q21.31	nonsynonymous SNV	NM_198475:c.C386T:p.P129L	rs71371993	Hetero	Hetero
OR4D2	17q22	nonsynonymous SNV	NM_001004707:c.C61T:p.R21W	rs116853619	Hetero	Hetero
OR4D2	17q22	nonsynonymous SNV	NM_001004707:c.C85A:p.L29I	rs60994383	Hetero	Hetero
ACE	17q23.3	nonsynonymous SNV	NM_000789:c.A928G:p.S310G	rs144137849	Hetero	Hetero
KCNH6	17q23.3	nonsynonymous SNV	NM_030779:c.C2774T:p.T925M	rs35819807	Hetero	Hetero
FTSJ3	17q23.3	nonsynonymous SNV	NM_017647:c.A1270T:p.S424C	rs2727288	Hetero	Hetero
FTSJ3	17q23.3	nonsynonymous SNV	NM_017647:c.C271G:p.Q91E	rs2584625	Hetero	Hetero
KPNA2	17q24.2	nonsynonymous SNV	NM_002266:c.G1567A:p.A523T	rs141790032	Hetero	Hetero
SLC39A11	17q24.3	nonsynonymous SNV	NM_001159770:c.C860T:p.A287V	rs61736066	Hetero	Hetero
LILRA1	19q13.42	nonsynonymous SNV	NM_006863:c.A34G:p.R12G	rs1974982	Hetero	Hetero
SIRPB1	20p13	nonsynonymous SNV	NM_001083910:c.A67G:p.R23G	rs1535882	Hetero	Hetero
TGM6	20p13	nonsynonymous SNV	NM_001254734:c.G1103A:p.R368Q	rs75122556	Hetero	Hetero
TMC2	20p13	nonframeshift deletion	NM_080751:c.2545_2547del:p.849_849del	rs142900000	Hetero	Hetero
NOP56	20p13	nonsynonymous SNV	NM_006392:c.A361G:p.I121V	rs2273137	Hetero	Hetero
NOP56	20p13	nonsynonymous SNV	NM_006392:c.T1727C:p.V576A	rs5856	Hetero	Hetero
TAF4	20q13.33	nonframeshift deletion	NM_003185:c.556_561del:p.186_187del		Homo	Homo
ZNF70	22q11.23	nonsynonymous SNV	NM_021916:c.A143G:p.Y48C	rs145952310	Hetero	Hetero
SLC2A11	22q11.23	nonsynonymous SNV	NM_001024938:c.G695A:p.R232Q	rs9608213	Hetero	Hetero
CABIN1	22q11.23	nonsynonymous SNV	NM_001201429:c.C5837T:p.P1946L	rs146769197	Hetero	Hetero
ADORA2A	22q11.23	nonsynonymous SNV	NM_000675:c.G823A:p.V275I	rs141942830	Hetero	Hetero
KREMEN1	22q12.1	nonsynonymous SNV	NM_001039570:c.G471T:p.R157S	rs61751700	Hetero	Hetero
GATSL3	22q12.2	nonsynonymous SNV	NM_001037666:c.C964T:p.R322W		Hetero	Hetero
SFII	22q12.2	nonsynonymous SNV	NM_014775:c.T1349C:p.F450S		Hetero	Hetero
PRR14L	22q12.2	nonsynonymous SNV	NM_173566:c.C3662T:p.S1221L	rs140078	Hetero	Hetero
PRR14L	22q12.2	nonsynonymous SNV	NM_173566:c.A1364G:p.N455S	rs140081	Hetero	Hetero
TMPRSS6	22q12.3	nonsynonymous SNV	NM_153609:c.T2207C:p.V736A	rs855791	Hetero	Hetero
CARD10	22q13.1	nonframeshift deletion	NM_014550:c.814_819del:p.272_273del	rs113275238	Hetero	Hetero
APOBEC3B	22q13.1	nonsynonymous SNV	NM_004900:c.A184G:p.K62E	rs2076109	Hetero	Hetero

TAB1	22q13.1	nonsynonymous SNV	NM_006116:c.T455C:p.L152P	rs35469986	Hetero	Hetero
TCF20	22q13.2	nonsynonymous SNV	NM_005650:c.A2164G:p.S722G	rs5758651	Hetero	Hetero
PNPLA5	22q13.31	nonsynonymous SNV	NM_138814:c.C418T:p.L140F	rs2071883	Hetero	Hetero
PRR5	22q13.31	nonsynonymous SNV	NM_001017529:c.G442A:p.V148M	rs36082900	Hetero	Hetero
ARSD	Xp22.33	nonsynonymous SNV	NM_001669:c.C671G:p.S224C	rs211653	Hetero	Hetero
HDHD1	Xp22.31	nonsynonymous SNV	NM_001178135:c.C493G:p.P165A	rs3747386	Hetero	Hetero
KAL1	Xp22.31	nonsynonymous SNV	NM_000216:c.G1600A:p.V534I	rs808119	Hetero	Hetero
SHROOM2	Xp22.2	nonsynonymous SNV	NM_001649:c.A4423G:p.I1475V	rs12012202	Hetero	Hetero
TCEANC	Xp22.2	nonsynonymous SNV	NM_152634:c.C578T:p.S193L	rs2361159	Hetero	Hetero
TCEANC	Xp22.2	nonsynonymous SNV	NM_152634:c.G1142T:p.W381L	rs5935650	Hetero	Hetero
NHS	Xp22.13	nonsynonymous SNV	NM_198270:c.T3955C:p.F1319L	rs3747295	Hetero	Hetero
CXorf36	Xp11.3	nonsynonymous SNV	NM_024689:c.G383A:p.R128K	rs1132201	Hetero	Hetero
LOC100509575	Xp11.2	nonsynonymous SNV	NM_001205103:c.A329C:p.K110T		Hetero	Hetero
NHSL2	Xq13.1	nonsynonymous SNV	NM_001013627:c.G586A:p.E196K	rs72630038	Hetero	Hetero
ATRX	Xq21.1	nonsynonymous SNV	NM_138270:c.C2671G:p.Q891E	rs3088074	Hetero	Hetero
ATP7A	Xq21.1	nonsynonymous SNV	NM_000052:c.G2299C:p.V767L	rs2227291	Hetero	Hetero
RPS6KA6	Xq21.1	nonsynonymous SNV	NM_014496:c.G2074A:p.D692N	rs6616890	Hetero	Hetero
TAF7L	Xq22.1	nonsynonymous SNV	NM_001168474:c.A664G:p.S222G	rs35899692	Hetero	Hetero
ZCCHC18	Xq22.2	nonsynonymous SNV	NM_001143978:c.A1160T:p.E387V	rs144116434	Hetero	Hetero
ESX1	Xq22.2	nonsynonymous SNV	NM_153448:c.G874A:p.A292T		Hetero	Hetero
KCNE1L	Xq23	nonsynonymous SNV	NM_012282:c.G87T:p.L29F		Hetero	Hetero
ZCCHC16	Xq23	nonsynonymous SNV	NM_001004308:c.T80C:p.L27P	rs6568050	Hetero	Hetero
CXorf64	Xq25	nonsynonymous SNV	NM_001122716:c.T578C:p.M193T	rs4289953	Hetero	Hetero
FRMD7	Xq26.2	nonsynonymous SNV	NM_194277:c.A1481G:p.Q494R		Hetero	Hetero
GPR112	Xq26.3	nonsynonymous SNV	NM_153834:c.A828G:p.I276M	rs4829829	Hetero	Hetero
GPR112	Xq26.3	nonsynonymous SNV	NM_153834:c.C1103A:p.P368H	rs5930931	Hetero	Hetero
GPR112	Xq26.3	nonsynonymous SNV	NM_153834:c.T5371C:p.F1791L	rs5930932	Hetero	Hetero
F9	Xq27.1	nonsynonymous SNV	NM_000133:c.G769A:p.V257I		Hetero	Hetero
CXorf66	Xq27.1	nonsynonymous SNV	NM_001013403:c.C698T:p.P233L	rs5955139	Hetero	Hetero
MAGEC1	Xq27.2	nonsynonymous SNV	NM_005462:c.A1090G:p.T364A	rs4824884	Hetero	Hetero
IDS	Xq28	nonsynonymous SNV	NM_000202:c.A97T:p.T33S		Hetero	Hetero
GABRQ	Xq28	nonsynonymous SNV	NM_018558:c.T1432A:p.F478I	rs3810651	Hetero	Hetero
IRAK1	Xq28	nonsynonymous SNV	NM_001025243:c.C1358T:p.S453L	rs1059703	Hetero	Hetero
IRAK1	Xq28	nonsynonymous SNV	NM_001025242:c.T587C:p.F196S	rs1059702	Hetero	Hetero
CTAG2	Xq28	nonsynonymous SNV	NM_020994:c.C265G:p.Q89E	rs17328091	Hetero	Hetero
F8	Xq28	nonsynonymous SNV	NM_000132:c.C3780G:p.D1260E	rs1800291	Hetero	Hetero

<Synonymous variants>

BATF3	1q32.3	synonymous SNV	NM_018664:c.A9G:p.Q3Q	rs2202682	Hetero	Homo
GRM7	3p26.1	synonymous SNV	NM_000844:c.T2196C:p.Y732Y	rs1485175	Hetero	Hetero
SLC6A11	3p25.3	synonymous SNV	NM_014229:c.A1737G:p.T579T	rs2245532	Hetero	Hetero
BTD	3p25.1	synonymous SNV	NM_000060:c.C1101T:p.G367G	rs142421934	Hetero	Hetero
ANKRD28	3p25.1	synonymous SNV	NM_001195099:c.C1059T:p.N353N	rs2470548	Hetero	Hetero
ANKRD28	3p25.1	synonymous SNV	NM_001195099:c.A1050G:p.Q350Q	rs2470549	Hetero	Hetero
PLCL2	3p24.3	synonymous SNV	NM_015184:c.C234A:p.R78R	rs28932173	Hetero	Hetero
RBMS3	3p24.1	synonymous SNV	NM_001003792:c.C339T:p.A113A	rs3773104	Hetero	Hetero
OSBPL10	3p23	synonymous SNV	NM_001174060:c.G1980A:p.L660L	rs2305610	Hetero	Hetero
CRTP	3p22.3	synonymous SNV	NM_006371:c.G213A:p.L71L	rs11558338	Hetero	Hetero
CRL2	3p21.31	synonymous SNV	NM_001130910:c.A444C:p.G148G	rs11266744	Hetero	Hetero
WDR6	3p21.31	synonymous SNV	NM_018031:c.T924C:p.C308C	rs149007635	Hetero	Hetero
ALAS1	3p21.2	synonymous SNV	NM_199166:c.C519T:p.I173I	rs352168	Hetero	Hetero
TLR9	3p21.2	synonymous SNV	NM_017442:c.G1635A:p.P545P	rs352140	Hetero	Hetero
DNAH1	3p21.1	synonymous SNV	NM_015512:c.G6819A:p.L2273L	rs79760452	Hetero	Hetero
DNAH1	3p21.1	synonymous SNV	NM_015512:c.C6957T:p.H2319H	rs1546737	Hetero	Hetero
CHDH	3p21.1	synonymous SNV	NM_018397:c.G720A:p.A240A	rs2241808	Hetero	Hetero
IL17RB	3p21.1	synonymous SNV	NM_018725:c.C126G:p.P42P	rs1025689	Hetero	Hetero
CACNA2D3	3p14.3	synonymous SNV	NM_018398:c.G1260A:p.Q420Q	rs3732748	Hetero	Hetero
ATXN7	3p14.1	synonymous SNV	NM_001128149:c.C1702T:p.L568L	rs3733125	Hetero	Hetero
ALCAM	3q13.11	synonymous SNV	NM_001243280:c.T1281C:p.S427S	rs16851279	Hetero	Hetero
SLC9A10	3q13.2	synonymous SNV	NM_183061:c.T2910C:p.T970T	rs74367861	Hetero	Hetero
HPS3	3q24	synonymous SNV	NM_032383:c.C2526T:p.H842H	rs3732557	Hetero	Homo
TTC14	3q26.33	synonymous SNV	NM_133462:c.A2094G:p.R698R		Hetero	Hetero
HTR3D	3q27.1	synonymous SNV	NM_001145143:c.C417T:p.T139T	rs56365132	Hetero	Hetero
HTR3D	3q27.1	synonymous SNV	NM_182537:c.C714T:p.A238A	rs56203055	Hetero	Hetero
UGT2B28	4q13.2	synonymous SNV	NM_053039:c.A1173G:p.V391V	rs10013145	Hetero	Hetero
DSPP	4q22.1	synonymous SNV	NM_014208:c.C3300T:p.S1100S		Hetero	Hetero
SQSTM1	5q35.3	synonymous SNV	NM_003900:c.G150C:p.R50R		Hetero	Hetero
FLT4	5q35.3	synonymous SNV	NM_002020:c.G2196A:p.K732K	rs147242761	Hetero	Hetero
SGK223	8p23.1	synonymous SNV	NM_001080826:c.G3498C:p.P1166P		Hetero	Hetero
TNKS	8p23.1	synonymous SNV	NM_003747:c.G1434A:p.P478P	rs33944167	Hetero	Hetero
TNKS	8p23.1	synonymous SNV	NM_003747:c.C1719A:p.V573V	rs35052906	Hetero	Hetero
RPIL1	8p23.1	synonymous SNV	NM_178857:c.A4044G:p.G1348G	rs13253055	Hetero	Hetero

MSR1	8p22	synonymous SNV	NM_138715:c.A1038G:p.P346P	rs34175190	Hetero	Hetero
MTUS1	8p22	synonymous SNV	NM_020749:c.A714G:p.E238E		Hetero	Hetero
PCM1	8p22	synonymous SNV	NM_006197:c.A2568T:p.L856L	rs6991775	Hetero	Hetero
PSD3	8p22	synonymous SNV	NM_206909:c.G42A:p.G14G	rs35222739	Hetero	Hetero
PSD3	8p22	synonymous SNV	NM_015310:c.A915G:p.E305E	rs13273954	Hetero	Hetero
SLC18A1	8p21.3	synonymous SNV	NM_001142324:c.C969T:p.L323L	rs2270648	Hetero	Hetero
GFRA2	8p21.3	synonymous SNV	NM_001165039:c.G390C:p.L130L	rs80120686	Hetero	Hetero
DOK2	8p21.3	synonymous SNV	NM_003974:c.C1161T:p.A387A	rs17853066	Hetero	Hetero
XPO7	8p21.3	synonymous SNV	NM_015024:c.C696T:p.I232I	rs2306641	Hetero	Hetero
SLC39A14	8p21.3	synonymous SNV	NM_001128431:c.C156T:p.G52G	rs33999442	Hetero	Hetero
SLC39A14	8p21.3	synonymous SNV	NM_001128431:c.T1041C:p.H347H	rs6558052	Hetero	Hetero
PDLIM2	8p21.3	synonymous SNV	NM_176871:c.A447G:p.A149A	rs2294047	Hetero	Hetero
C8orf58	8p21.3	synonymous SNV	NM_001013842:c.C526T:p.L176L	rs57261277	Hetero	Hetero
ENTPD4	8p21.3	synonymous SNV	NM_001128930:c.C1756A:p.R586R		Hetero	Hetero
DOCK5	8p21.2	synonymous SNV	NM_024940:c.C3618T:p.D1206D	rs2271108	Hetero	Hetero
ADAM32	8p11.22	synonymous SNV	NM_145004:c.T1743C:p.T581T	rs4515515	Hetero	Hetero
KAT6A	8p11.21	synonymous SNV	NM_006766:c.C4455T:p.S1485S	rs3739365	Hetero	Hetero
KAT6A	8p11.21	synonymous SNV	NM_006766:c.G2982A:p.P994P	rs3824275	Hetero	Hetero
DKK4	8p11.21	synonymous SNV	NM_014420:c.C507T:p.V169V	rs2073664	Hetero	Hetero
OPRK1	8q11.23	synonymous SNV	NM_000912:c.G36T:p.P12P	rs1051660	Hetero	Hetero
UBXN2B	8q12.1	synonymous SNV	NM_001077619:c.A144G:p.R48R	rs138120094	Hetero	Hetero
NKAIN3	8q12.3	synonymous SNV	NM_173688:c.G393A:p.T131T	rs1319275	Hetero	Hetero
C8orf46	8q13.1	synonymous SNV	NM_152765:c.C531T:p.C177C	rs16932952	Hetero	Hetero
PREX2	8q13.2	synonymous SNV	NM_024870:c.A4797G:p.P1599P	rs2280637	Hetero	Hetero
XKR9	8q13.3	synonymous SNV	NM_001011720:c.G132A:p.A44A	rs6991329	Hetero	Hetero
ZFHX4	8q21.11	synonymous SNV	NM_024721:c.C9036T:p.C3012C	rs139869161	Hetero	Hetero
RBM12B	8q22.1	synonymous SNV	NM_203390:c.C1941A:p.P647P	rs3133974	Hetero	Hetero
TMEM67	8q22.1	synonymous SNV	NM_153704:c.A2892C:p.T964T	rs16916221	Hetero	Hetero
CDH17	8q22.1	synonymous SNV	NM_001144663:c.G1941A:p.L647L	rs1131830	Hetero	Hetero
ESRP1	8q22.1	synonymous SNV	NM_001034915:c.C984T:p.V328V	rs1549466	Hetero	Hetero
ESRP1	8q22.1	synonymous SNV	NM_001034915:c.T1788C:p.N596N	rs12677519	Hetero	Hetero
VPS13B	8q22.2	synonymous SNV	NM_017890:c.T9567C:p.S3189S	rs36074608	Hetero	Hetero
FBXO32	8q24.13	synonymous SNV	NM_148177:c.G171A:p.T57T	rs3739287	Hetero	Hetero
FER1L6	8q24.13	synonymous SNV	NM_001039112:c.T615C:p.S205S	rs7465584	Hetero	Hetero
HHLA1	8q24.22	synonymous SNV	NM_001145095:c.G1170A:p.L390L		Hetero	Hetero
TUSC1	9p21.2	synonymous SNV	NM_001004125:c.A387G:p.A129A	rs35110225	Hetero	Hetero
LOC100506422	9p21.2	synonymous SNV	NM_001004352:c.G333A:p.R111R	rs12376729	Hetero	Hetero
TEK	9p21.2	synonymous SNV	NM_000459:c.C3151T:p.L1051L	rs2273718	Hetero	Hetero
B4GALT1	9p21.1	synonymous SNV	NM_001497:c.C597T:p.H199H	rs1065765	Hetero	Hetero
FAM205A	9p13.3	synonymous SNV	NM_001141917:c.A819G:p.P273P	rs2937382	Hetero	Hetero
FAM214B	9p13.3	synonymous SNV	NM_025182:c.C1578T:p.T526T	rs7030595	Hetero	Hetero
TESK1	9p13.3	synonymous SNV	NM_006285:c.G441A:p.L147L	rs2275422	Hetero	Hetero
PIP5K1B	9q21.11	synonymous SNV	NM_003558:c.G1320A:p.L440L	rs117957752	Hetero	Hetero
CEP78	9q21.2	synonymous SNV	NM_001098802:c.G84C:p.S28S	rs10867166	Hetero	Hetero
PSAT1	9q21.2	synonymous SNV	NM_021154:c.T297G:p.A99A	rs3739474	Hetero	Hetero
OR13C9	9q31.1	synonymous SNV	NM_001001956:c.A90C:p.L30L	rs36091517	Homo	Hetero
LHX3	9q34.3	synonymous SNV	NM_014564:c.G81A:p.A27A	rs2274116	Hetero	Hetero
QSOX2	9q34.3	synonymous SNV	NM_181701:c.A1866G:p.P622P	rs9696116	Hetero	Hetero
QSOX2	9q34.3	synonymous SNV	NM_181701:c.G957A:p.K319K	rs12684650	Hetero	Hetero
DPP7	9q34.3	synonymous SNV	NM_013379:c.T162C:p.P54P	rs11145999	Hetero	Hetero
RNF224	9q34.3	synonymous SNV	NM_001190228:c.C468G:p.V156V	rs80009402	Hetero	Hetero
SLC34A3	9q34.3	synonymous SNV	NM_001177316:c.G942C:p.A314A	rs34664302	Hetero	Hetero
FAM166A	9q34.3	synonymous SNV	NM_001001710:c.T657C:p.Y219Y	rs4073074	Hetero	Hetero
ANKRD16	10p15.1	synonymous SNV	NM_001009941:c.A585G:p.Q195Q	rs3750656	Hetero	Hetero
FBXO18	10p15.1	synonymous SNV	NM_178150:c.G2853A:p.L951L	rs117214741	Hetero	Hetero
FBXO18	10p15.1	synonymous SNV	NM_178150:c.T3006C:p.C1002C	rs2274033	Hetero	Hetero
GLB1L2	11q25	synonymous SNV	NM_138342:c.C1680G:p.T560T	rs3741097	Hetero	Hetero
NOC4L	12q24.33	synonymous SNV	NM_024078:c.C957T:p.H319H	rs77081180	Hetero	Hetero
PXMP2	12q24.33	synonymous SNV	NM_018663:c.C76T:p.L26L	rs11538534	Hetero	Hetero
TUBA3C	13q12.11	synonymous SNV	NM_006001:c.A894G:p.P298P	rs36216108	Hetero	Hetero
TUBA3C	13q12.11	synonymous SNV	NM_006001:c.C466A:p.R156R	rs9507566	Hetero	Hetero
AHNAK2	14q32.33	synonymous SNV	NM_138420:c.C6930T:p.D2310D		Hetero	Hetero
TUBGCP5	15q11.2	synonymous SNV	NM_001102610:c.G345T:p.L115L	rs61744212	Hetero	Hetero
DCTN5	16p12.2	synonymous SNV	NM_001199743:c.A408G:p.P136P	rs35586	Hetero	Hetero
RBBP6	16p12.1	synonymous SNV	NM_018703:c.A4917G:p.A1639A	rs7593	Hetero	Hetero
ZKSCAN2	16p12.1	synonymous SNV	NM_001012981:c.G1581A:p.K527K	rs11642611	Hetero	Hetero
ZKSCAN2	16p12.1	synonymous SNV	NM_001012981:c.T1482C:p.N494N	rs11649280	Hetero	Hetero
SH2B1	16p11.2	synonymous SNV	NM_001145795:c.C2238G:p.P746P	rs148378470	Hetero	Hetero
TBC1D10B	16p11.2	synonymous SNV	NM_015527:c.A1104G:p.K368K	rs8049108	Hetero	Hetero
ZNF768	16p11.2	synonymous SNV	NM_024671:c.T789C:p.C263C	rs3751847	Hetero	Hetero
SHCBP1	16q11.2	synonymous SNV	NM_024745:c.C612T:p.N204N	rs34559393	Hetero	Hetero

ABCC11	16q12.1	synonymous SNV	NM_033151:c.G3531A:p.T1177T	rs74869498	Hetero	Hetero
CHD9	16q12.2	synonymous SNV	NM_025134:c.G3849A:p.Q1283Q	rs8052283	Hetero	Hetero
CHD9	16q12.2	synonymous SNV	NM_025134:c.G5406A:p.Q1802Q	rs2287078	Hetero	Hetero
CES5A	16q12.2	synonymous SNV	NM_145024:c.C1407G:p.L469L	rs11860488	Hetero	Hetero
CMTM1	16q21	synonymous SNV	NM_052999:c.G63A:p.P21P	rs7193473	Hetero	Hetero
CMTM3	16q21	synonymous SNV	NM_181553:c.G96A:p.P32P	rs3743718	Hetero	Hetero
CES3	16q22.1	synonymous SNV	NM_001185176:c.G519A:p.R173R	rs3848289	Hetero	Hetero
CDH1	16q22.1	synonymous SNV	NM_004360:c.C2253T:p.N751N	rs33964119	Hetero	Hetero
VPS4A	16q22.1	synonymous SNV	NM_013245:c.G606A:p.L202L		Hetero	Hetero
DHX38	16q22.2	synonymous SNV	NM_014003:c.T69C:p.G23G	rs11554764	Hetero	Hetero
SPATA22	17p13.2	synonymous SNV	NM_001170696:c.G870A:p.P290P	rs9901726	Hetero	Hetero
TRPV1	17p13.2	synonymous SNV	NM_080706:c.G2157A:p.K719K	rs877610	Hetero	Hetero
TRPV1	17p13.2	synonymous SNV	NM_080706:c.C2040T:p.I680I	rs17706245	Hetero	Hetero
TRPV1	17p13.2	synonymous SNV	NM_080706:c.T1695C:p.Y565Y	rs34378673	Hetero	Hetero
ATP2A3	17p13.2	synonymous SNV	NM_174955:c.A3102G:p.R1034R	rs887387	Hetero	Hetero
ANKFY1	17p13.2	synonymous SNV	NM_016376:c.G2184A:p.T728T	rs117382496	Hetero	Hetero
SPNS3	17p13.2	synonymous SNV	NM_182538:c.C150G:p.V50V	rs3809853	Hetero	Hetero
GGT6	17p13.2	synonymous SNV	NM_001122890:c.C21T:p.P7P	rs7216474	Hetero	Hetero
TM4SF5	17p13.2	synonymous SNV	NM_003963:c.G189A:p.P63P	rs17765153	Hetero	Hetero
GP1BA	17p13.2	synonymous SNV	NM_000173:c.A1311G:p.P437P	rs2586529	Hetero	Hetero
GP1BA	17p13.2	synonymous SNV	NM_000173:c.C1344T:p.T448T	rs41466145	Hetero	Hetero
FBXO39	17p13.1	synonymous SNV	NM_153230:c.C1086T:p.I362I	rs17853331	Hetero	Hetero
ASGR1	17p13.1	synonymous SNV	NM_001197216:c.G150A:p.K50K	rs55714927	Hetero	Hetero
SPEM1	17p13.1	synonymous SNV	NM_199339:c.C858G:p.P286P	rs34333422	Hetero	Hetero
KDM6B	17p13.1	synonymous SNV	NM_001080424:c.C3795A:p.I1265I	rs3736306	Hetero	Hetero
CHD3	17p13.1	synonymous SNV	NM_001005271:c.T3639C:p.F1213F	rs74903197	Hetero	Hetero
MYH3	17p13.1	synonymous SNV	NM_002470:c.C4731T:p.I1577I	rs2285479	Hetero	Hetero
MYH3	17p13.1	synonymous SNV	NM_002470:c.A3138C:p.R1046R	rs2285475	Hetero	Hetero
MYH3	17p13.1	synonymous SNV	NM_002470:c.T2952C:p.S984S	rs2285474	Hetero	Hetero
MYH3	17p13.1	synonymous SNV	NM_002470:c.A2916G:p.T972T	rs2285472	Hetero	Hetero
MYH3	17p13.1	synonymous SNV	NM_002470:c.A2532G:p.A844A	rs2285469	Hetero	Hetero
MYH3	17p13.1	synonymous SNV	NM_002470:c.C2151A:p.G717G	rs876657	Hetero	Hetero
DNAH9	17p12	synonymous SNV	NM_001372:c.C9744G:p.P3248P	rs12449553	Hetero	Hetero
DNAH9	17p12	synonymous SNV	NM_001372:c.C10320T:p.N3440N	rs61743933	Hetero	Hetero
ELAC2	17p12	synonymous SNV	NM_001165962:c.A1440G:p.T480T	rs11545302	Hetero	Hetero
USP22	17p11.2	synonymous SNV	NM_015276:c.C1209A:p.I403I	rs11541311	Hetero	Hetero
USP22	17p11.2	synonymous SNV	NM_015276:c.C321T:p.Y107Y	rs2291037	Hetero	Hetero
KIAA0100	17q11.2	synonymous SNV	NM_014680:c.A5196G:p.E1732E	rs141127714	Hetero	Hetero
SUPT6H	17q11.2	synonymous SNV	NM_003170:c.C2913T:p.V971V	rs28753762	Hetero	Hetero
SUPT6H	17q11.2	synonymous SNV	NM_003170:c.C3000A:p.L1000L	rs28588628	Hetero	Hetero
TLCD1	17q11.2	synonymous SNV	NM_001160407:c.G183A:p.T61T	rs2288595	Hetero	Hetero
NEK8	17q11.2	synonymous SNV	NM_178170:c.T1170C:p.G390G	rs3809797	Hetero	Hetero
TRAF4	17q11.2	synonymous SNV	NM_004295:c.C606T:p.F202F	rs2070265	Hetero	Hetero
C17orf63	17q11.2	synonymous SNV	NM_001077498:c.T1413C:p.L471L	rs2043031	Hetero	Hetero
CRLF3	17q11.2	synonymous SNV	NM_015986:c.T993C:p.D331D	rs34756112	Hetero	Hetero
ATAD5	17q11.2	synonymous SNV	NM_024857:c.G39C:p.P13P	rs999796	Hetero	Hetero
ATAD5	17q11.2	synonymous SNV	NM_024857:c.T1074C:p.P358P	rs11655623	Hetero	Hetero
ATAD5	17q11.2	synonymous SNV	NM_024857:c.A3003G:p.V1001V	rs9896095	Hetero	Hetero
NF1	17q11.2	synonymous SNV	NM_000267:c.C369G:p.T123T	rs146691765	Hetero	Hetero
RHOT1	17q11.2	synonymous SNV	NM_001033566:c.A1458G:p.E486E	rs16967164	Hetero	Hetero
TMEM132E	17q12	synonymous SNV	NM_207313:c.G180A:p.E60E	rs4795954	Hetero	Hetero
RAD51D	17q12	synonymous SNV	NM_002878:c.C234T:p.S78S	rs9901455	Hetero	Hetero
LYZL6	17q12	synonymous SNV	NM_020426:c.A198G:p.A66A	rs1052266	Hetero	Hetero
LHX1	17q12	synonymous SNV	NM_005568:c.C816A:p.P272P		Hetero	Hetero
ARHGAP23	17q12	synonymous SNV	NM_001199417:c.C2481T:p.N827N	rs7405920	Homo	Hetero
ARHGAP23	17q12	synonymous SNV	NM_001199417:c.C4290T:p.P1430P	rs15537	Hetero	Hetero
SRCIN1	17q12	synonymous SNV	NM_025248:c.G3312A:p.P1104P	rs35262222	Hetero	Hetero
LASP1	17q12	synonymous SNV	NM_006148:c.C687T:p.I229I	rs3744075	Hetero	Hetero
IKZF3	17q12	synonymous SNV	NM_183231:c.C1029T:p.S343S	rs907092	Hetero	Hetero
ZBP2	17q12	synonymous SNV	NM_199321:c.C90T:p.G30G	rs75027016	Hetero	Hetero
KRTAP16-1	17q21.2	synonymous SNV	NM_001146182:c.A117T:p.T39T	rs12451604	Hetero	Hetero
RAB5C	17q21.2	synonymous SNV	NM_004583:c.C429T:p.A143A	rs2230326	Hetero	Hetero
GHDC	17q21.2	synonymous SNV	NM_001142622:c.G576A:p.A192A	rs72820887	Hetero	Hetero
VAT1	17q21.31	synonymous SNV	NM_006373:c.T315G:p.P105P	rs2070835	Hetero	Hetero
BRCA1	17q21.31	synonymous SNV	NM_007297:c.T4167C:p.S1389S	rs1060915	Hetero	Hetero
BRCA1	17q21.31	synonymous SNV	NM_007297:c.T2170C:p.L724L	rs16940	Hetero	Hetero
BRCA1	17q21.31	synonymous SNV	NM_007297:c.C1941T:p.S647S	rs1799949	Hetero	Hetero
HDAC5	17q21.31	synonymous SNV	NM_001015053:c.T3106C:p.L1036L		Hetero	Hetero
ABI3	17q21.32	synonymous SNV	NM_001135186:c.C633A:p.A211A	rs76617033	Hetero	Hetero
CA10	17q21.33	synonymous SNV	NM_020178:c.C705T:p.Y235Y	rs11870209	Hetero	Hetero
LOC100506650	17q22	synonymous SNV	NM_001243552:c.A30G:p.V10V	rs12450084	Hetero	Hetero

TBX4	17q23.2	synonymous SNV	NM_018488:c.C1446T;p.V482V	rs2270150	Hetero	Hetero
KCNH6	17q23.3	synonymous SNV	NM_030779:c.T852C;p.D284D	rs7225568	Hetero	Hetero
PSMC5	17q23.3	synonymous SNV	NM_001199163:c.C631T;p.L211L	rs41414452	Hetero	Hetero
PSMC5	17q23.3	synonymous SNV	NM_001199163:c.C816T;p.L272L	rs13030	Hetero	Hetero
C17orf72	17q23.3	synonymous SNV	NM_001191029:c.A710G;p.X237X	rs11079520	Hetero	Hetero
ERN1	17q23.3	synonymous SNV	NM_001433:c.A2802G;p.T934T	rs196912	Hetero	Hetero
AXIN2	17q24.1	synonymous SNV	NM_004655:c.C2062T;p.L688L	rs35415678	Hetero	Hetero
SDK2	17q25.1	synonymous SNV	NM_001144952:c.G4353A;p.S1451S	rs2270723	Hetero	Hetero
ZNF676	19p12	synonymous SNV	NM_001001411:c.T723C;p.T241T	rs142355819	Hetero	Hetero
TMC2	20p13	synonymous SNV	NM_080751:c.T1767C;p.S589S	rs6515646	Hetero	Hetero
SLC2A11	22q11.23	synonymous SNV	NM_001024938:c.C699A;p.L233L	rs9612499	Hetero	Hetero
PLA2G3	22q12.2	synonymous SNV	NM_015715:c.C795T;p.Y265Y	rs2074739	Hetero	Hetero
TOM1	22q12.3	synonymous SNV	NM_001135730:c.T1152G;p.G384G	rs743810	Hetero	Hetero
TOM1	22q12.3	synonymous SNV	NM_001135730:c.G1266C;p.G422G	rs2071745	Hetero	Hetero
APOL3	22q12.3	synonymous SNV	NM_145640:c.T957A;p.G319G	rs132618	Hetero	Hetero
TMPRSS6	22q12.3	synonymous SNV	NM_153609:c.C2217T;p.Y739Y	rs2235321	Hetero	Hetero
TMPRSS6	22q12.3	synonymous SNV	NM_153609:c.C1563T;p.D521D	rs4820268	Hetero	Hetero
CARD10	22q13.1	synonymous SNV	NM_014550:c.T1551C;p.N517N	rs3817803	Hetero	Hetero
CARD10	22q13.1	synonymous SNV	NM_014550:c.C1398T;p.S466S	rs3817805	Hetero	Hetero
EIF3L	22q13.1	synonymous SNV	NM_001242923:c.C351G;p.A117A	rs11551384	Hetero	Hetero
RPL3	22q13.1	synonymous SNV	NM_000967:c.C21T;p.S7S	rs61737929	Hetero	Hetero
EP300	22q13.2	synonymous SNV	NM_001429:c.G3348A;p.Q1116Q	rs20554	Hetero	Hetero
TTLL1	22q13.2	synonymous SNV	NM_012263:c.C711T;p.F237F	rs2272869	Hetero	Hetero
TTLL12	22q13.2	synonymous SNV	NM_015140:c.C390T;p.H130H	rs2071723	Hetero	Hetero
MPPED1	22q13.2	synonymous SNV	NM_001044370:c.C267T;p.Y89Y	rs2413761	Hetero	Hetero
MPPED1	22q13.2	synonymous SNV	NM_001044370:c.C327T;p.Y109Y	rs4331615	Hetero	Hetero
CERK	22q13.31	synonymous SNV	NM_022766:c.C1506T;p.D502D	rs35318967	Hetero	Hetero
SHROOM2	Xp22.2	synonymous SNV	NM_001649:c.A3756G;p.T1252T	rs2073945	Hetero	Hetero
TLR8	Xp22.2	synonymous SNV	NM_138636:c.C354T;p.D118D	rs2159377	Hetero	Hetero
TCEANC	Xp22.2	synonymous SNV	NM_152634:c.C1101T;p.N367N	rs5935649	Hetero	Hetero
ASB11	Xp22.2	synonymous SNV	NM_001012428:c.T51C;p.R17R	rs5935944	Hetero	Hetero
MBTPS2	Xp22.12	synonymous SNV	NM_015884:c.A222G;p.Q74Q	rs3213451	Hetero	Hetero
DDX53	Xp22.11	synonymous SNV	NM_182699:c.T1245C;p.R415R	rs78316756	Hetero	Hetero
DYNLT3	Xp11.4	synonymous SNV	NM_006520:c.C183T;p.A61A	rs11771	Hetero	Hetero
MAOA	Xp11.3	synonymous SNV	NM_000240:c.G891T;p.R297R	rs6323	Hetero	Hetero
MAOA	Xp11.3	synonymous SNV	NM_000240:c.T1410C;p.D470D	rs1137070	Hetero	Hetero
KDM6A	Xp11.3	synonymous SNV	NM_021140:c.G3111A;p.Q1037Q	rs20539	Hetero	Hetero
ZNF673	Xp11.3	synonymous SNV	NM_001129898:c.A370C;p.R124R	rs144294150	Hetero	Hetero
SLC9A7	Xp11.23	synonymous SNV	NM_032591:c.C1824T;p.Y608Y	rs3208940	Hetero	Hetero
USP11	Xp11.23	synonymous SNV	NM_004651:c.G1515A;p.P505P	rs138367954	Hetero	Hetero
GPR173	Xp11.22	synonymous SNV	NM_018969:c.C1062T;p.H354H	rs11091720	Hetero	Hetero
HUWE1	Xp11.22	synonymous SNV	NM_031407:c.A9360G;p.A3120A	rs2281481	Hetero	Hetero
MAGED2	Xp11.21	synonymous SNV	NM_014599:c.A252G;p.S84S	rs1043031	Hetero	Hetero
MAGED2	Xp11.21	synonymous SNV	NM_014599:c.A396G;p.T132T	rs1043034	Hetero	Hetero
MAGED2	Xp11.21	synonymous SNV	NM_014599:c.C624T;p.A208A	rs1043044	Hetero	Hetero
MAGED2	Xp11.21	synonymous SNV	NM_014599:c.C981T;p.S327S	rs2071932	Hetero	Hetero
ARMCX5	Xq22.1	synonymous SNV	NM_001168482:c.A1401G;p.R467R	rs148274740	Hetero	Hetero
ZCCHC16	Xq23	synonymous SNV	NM_001004308:c.T657C;p.H219H	rs7053563	Hetero	Hetero
LONRF3	Xq24	synonymous SNV	NM_024778:c.G1176T;p.G392G	rs142579791	Hetero	Hetero
LONRF3	Xq24	synonymous SNV	NM_024778:c.T1902C;p.Y634Y	rs188327106	Hetero	Hetero
CXorf64	Xq25	synonymous SNV	NM_001122716:c.C279T;p.Y93Y	rs41309536	Hetero	Hetero
OR13H1	Xq26.2	synonymous SNV	NM_001004486:c.C549G;p.L183L	rs17316625	Hetero	Hetero
ZNF449	Xq26.3	synonymous SNV	NM_152695:c.C471T;p.A157A	rs2286479	Hetero	Hetero
DDX26B	Xq26.3	synonymous SNV	NM_182540:c.C2157T;p.D719D	rs2298302	Hetero	Hetero
GPR112	Xq26.3	synonymous SNV	NM_153834:c.C5493T;p.P1831P	rs5930933	Hetero	Hetero
HTATSF1	Xq26.3	synonymous SNV	NM_014500:c.G1263A;p.A421A	rs1058376	Hetero	Hetero
SLITRK2	Xq27.3	synonymous SNV	NM_001144009:c.G309A;p.T103T	rs3810704	Hetero	Hetero
MAGEA12	Xq28	synonymous SNV	NM_005367:c.A174C;p.S58S	rs1894358	Hetero	Hetero
MAGEA1	Xq28	synonymous SNV	NM_004988:c.C813T;p.L271L	rs2233045	Hetero	Hetero
ZNF275	Xq28	synonymous SNV	NM_001080485:c.T39C;p.P13P	rs3213466	Hetero	Hetero
BGN;BGN	Xq28	synonymous SNV	NM_001711:c.C564T;p.L188I	rs2070933	Hetero	Hetero
ATP2B3	Xq28	synonymous SNV	NM_001001344:c.G2592C;p.V864V	rs2269415	Hetero	Hetero
PLXNB3	Xq28	synonymous SNV	NM_005393:c.G4911A;p.R1637R	rs34966902	Hetero	Hetero
IRAK1	Xq28	synonymous SNV	NM_001025242:c.C483T;p.V161V	rs1059701	Hetero	Hetero
FLNA	Xq28	synonymous SNV	NM_001456:c.T5826C;p.A1942A	rs2070825	Hetero	Hetero
CTAG2	Xq28	synonymous SNV	NM_020994:c.T345G;p.P115P	rs4326559	Hetero	Hetero