

Supplementary Table 3. Description of the loss-of-function variants identified in the study along with patients' age at diagnosis, personal and family history.

Patient ID	Gene	DNA variation	Predicted Protein consequence	Brca 1 dx	BrCa 2 dx	Other Ca dx	FH	TNBC
F2352	ATM	c.1215delT	p.Asn405fs	37			yes	no
F2572	ATM	c.1215delT	p.Asn405fs	37			yes	no
F2892	ATM	c.1215delT	p.Asn405fs	33			no	no
F622	ATM	c.1215delT	p.Asn405fs	35	35		no	no
F979	ATM	c.2250G>A	p.Glu709_Lys750del	43	43		yes	no
F965	ATM	c.2921+1G>A	p.Ser974_Trp1026del	47	54		yes	no
F2237	ATM	c.3576G>A	p.Ser1135_Lys1192del	35			no	no
F735	ATM	c.4683_4689delTTTAGAT	p.Asp1563fs	38			yes	no
F805	ATM	c.5644C>T	p.Arg1882Ter	34			yes	no
F1353	ATM	c.5932G>T	p.Gly1978Ter	47			yes	no
F985	ATM	c.7307delG	p.Arg2436fs	36	36		yes	no
F2759	ATM	c.757G>T	p.Glu253Ter	46			yes	no
F2360	ATM	c.8218C>T	p.Gln2740Ter	57		EndCa 57	yes	yes
F2570	ATM	c.8395_8404delTTTCAGTGCC	p.Phe2799fs	39			yes	no
F2771	ATM	c.8766dupT	p.Val2923fs	55	55		yes	no
F1624	ATM	c.8925_8928dupAGAT	p.Glu2977fs	59			yes	no
F2769	BLM	c.1642C>T	p.Gln548Ter	43			yes	no
F2394	BRCA1	c.(?-4600)_(249+1_250-1)del	p.?	23			yes	yes
F2762	BRCA1	c.68_69delAG	p.Glu23fs	47	55		yes	yes
F1126	BRCA1	c.181T>G	p.Cys61Gly	37			yes	yes
F1164	BRCA1	c.181T>G	p.Cys61Gly	46	52		yes	yes
F1249	BRCA1	c.181T>G	p.Cys61Gly	38	39		yes	yes
F1257	BRCA1	c.181T>G	p.Cys61Gly	41			yes	yes
F2235	BRCA1	c.181T>G	p.Cys61Gly	33			yes	yes
F2327	BRCA1	c.181T>G	p.Cys61Gly	32		OvCa 49	yes	yes
F2357	BRCA1	c.181T>G	p.Cys61Gly	57		OvCa 60	yes	no
F2400	BRCA1	c.181T>G	p.Cys61Gly	33			yes	yes
F2501	BRCA1	c.181T>G	p.Cys61Gly	58		OvCa 40	yes	yes
F2672	BRCA1	c.181T>G	p.Cys61Gly	34			yes	no
F324	BRCA1	c.181T>G	p.Cys61Gly	37	42		yes	N/A
F849	BRCA1	c.181T>G	p.Cys61Gly	43	54		yes	yes
F1472	BRCA1	c.302-2A>G	p.?	25			yes	yes
F1085	BRCA1	c.331delG	p.Glu111fs	55			yes	yes

F2486	BRCA1	c.331delG	p.Glu111fs	36	49	OvCa 42	yes	no
F1238	BRCA1	c.1058G>A	p.Trp353Ter	30			yes	yes
F1936	BRCA1	c.1058G>A	p.Trp353Ter	33			N/A	yes
F1181	BRCA1	c.1210_1211insCT	p.Glu404fs	39		OvCa 50	yes	yes
F315	BRCA1	c.1504_1508delTTAAA	p.Leu502fs	25			yes	N/A
F932	BRCA1	c.1504_1508delTTAAA	p.Leu502fs	47			yes	yes
F1708	BRCA1	c.2504dupA	p.His835fs	66			yes	yes
F2346	BRCA1	c.2504dupA	p.His835fs	36		OvCa 56	yes	yes
F796	BRCA1	c.2963C>A	p.Ser988Ter	29			no	yes
F145	BRCA1	c.3158_3159insG	p.Val1054fs	62		OvCa 71	yes	N/A
F1016	BRCA1	c.3178G>T	p.Glu1060Ter	34			yes	no
F1144	BRCA1	c.3375_3376delTC	p.Pro1126fs	20	48		no	yes
F2014	BRCA1	c.3375_3376delTC	p.Pro1126Ilefs	43		OvCa 47	yes	yes
F483	BRCA1	c.3375_3376delTC	p.Pro1126fs	30			yes	yes
F1004	BRCA1	c.3607C>T	p.Arg1203Ter	57			yes	yes
F1025	BRCA1	c.3607C>T	p.Arg1203Ter	32			yes	yes
F1117	BRCA1	c.3607C>T	p.Arg1203Ter	40			yes	yes
F230	BRCA1	c.3607C>T	p.Arg1203Ter	26	40	OvCa 46	yes	yes
F430	BRCA1	c.3607C>T	p.Arg1203Ter	40			yes	yes
F1604	BRCA1	c.3607C>T	p.Arg1203Ter	43		OvCa 48	yes	no
F1719	BRCA1	c.3607C>T	p.Arg1203Ter	40			yes	yes
F1789	BRCA1	c.3607C>T	p.Arg1203Ter	27			N/A	N/A
F425	BRCA1	c.3624delA	p.Lys1208fs	50			yes	yes
F64	BRCA1	c.3624delA	p.Lys1208fs	31	33		yes	yes
F820	BRCA1	c.3624delA	p.Lys1208fs	29			yes	yes
F2618	BRCA1	c.3700_3704delGTAAA	p.Val1234fs	53			yes	no
F393	BRCA1	c.3700_3704delGTAAA	p.Val1234fs	42			yes	N/A
F699	BRCA1	c.3700_3704delGTAAA	p.Val1234fs	42	43	OvCa 45	yes	no
F749	BRCA1	c.3700_3704delGTAAA	p.Val1234fs	33			yes	yes
F1008	BRCA1	c.3755_3758delTGTC	p.Ser1253fs	38			yes	yes
F2523	BRCA1	c.3755_3758delTGTC	p.Ser1253fs	45			yes	no
F914	BRCA1	c.3756_3759delGTCT	p.Ser1253fs	50			yes	no
F1507	BRCA1	c.4065_4068delTCAA	p.Asn1355fs	31			yes	yes
F824	BRCA1	c.4168_4169delTG	p.Ser1389fs	33			yes	yes
F1393	BRCA1	c.4205delA	p.His1402fs	41	41	OvCa 50	yes	no

F1675	BRCA1	c.4327C>T	p.Arg1443Ter	29	36		yes	yes
F2099	BRCA1	c.4327C>T	p.Arg1443Ter	29	56		yes	yes
F2196	BRCA1	c.4327C>T	p.Arg1443Ter	42			yes	no
F518	BRCA1	c.4391_4393delCTAinsTT	p.Pro1464fs	39			yes	yes
F1127	BRCA1	c.4391_4393delCTAinsTT	p.Pro1464fs	36		OvCa 41	yes	yes
F678	BRCA1	c.4576G>T	p.Glu1526Ter	30			yes	yes
F1861	BRCA1	c.4964_4982del19	p.Ser1655fs	59		OvCa 57	yes	yes
F1660	BRCA1	c.5030_5033delCTAA	p.Thr1677fs	53			yes	yes
F2404	BRCA1	c.5075-1G>A	p.Asp1692_Trp1718delinsGly	47	52		yes	yes
F1045	BRCA1	c.5212G>A	p.Gly1738Arg	33			no	yes
F1150	BRCA1	c.5212G>A	p.Gly1738Arg	35			no	yes
F125	BRCA1	c.5212G>A	p.Gly1738Arg	42			yes	yes
F1443	BRCA1	c.5212G>A	p.Gly1738Arg	38	40		yes	yes
F1526	BRCA1	c.5212G>A	p.Gly1738Arg	41			yes	yes
F1539	BRCA1	c.5212G>A	p.Gly1738Arg	28			no	yes
F1652	BRCA1	c.5212G>A	p.Gly1738Arg	26			yes	no
F1753	BRCA1	c.5212G>A	p.Gly1738Arg	41			yes	no
F1785	BRCA1	c.5212G>A	p.Gly1738Arg	36	48		yes	yes
F193	BRCA1	c.5212G>A	p.Gly1738Arg	62			yes	N/A
F1949	BRCA1	c.5212G>A	p.Gly1738Arg	35			yes	no
F2104	BRCA1	c.5212G>A	p.Gly1738Arg	49	59	OvCa 53	yes	yes
F2202	BRCA1	c.5212G>A	p.Gly1738Arg	51	59		yes	yes
F2434	BRCA1	c.5212G>A	p.Gly1738Arg	43	57		yes	yes
F2537	BRCA1	c.5212G>A	p.Gly1738Arg	39			yes	yes
F276	BRCA1	c.5212G>A	p.Gly1738Arg	27			yes	N/A
F285	BRCA1	c.5212G>A	p.Gly1738Arg	46			yes	yes
F287	BRCA1	c.5212G>A	p.Gly1738Arg	52			yes	N/A
F373	BRCA1	c.5212G>A	p.Gly1738Arg	39	47		yes	no
F419	BRCA1	c.5212G>A	p.Gly1738Arg	29			yes	N/A
F634	BRCA1	c.5212G>A	p.Gly1738Arg	43			yes	yes
F688	BRCA1	c.5212G>A	p.Gly1738Arg	39			yes	yes
F707	BRCA1	c.5212G>A	p.Gly1738Arg	26	31,33,41		yes	N/A
F710	BRCA1	c.5212G>A	p.Gly1738Arg	35	42		yes	yes
F739	BRCA1	c.5212G>A	p.Gly1738Arg	24			yes	yes
F750	BRCA1	c.5212G>A	p.Gly1738Arg	34			yes	yes

F85	BRCA1	c.5212G>A	p.Gly1738Arg	36	45	PanCa 54	yes	no
F909	BRCA1	c.5212G>A	p.Gly1738Arg	39		CRC 40	yes	no
F1420	BRCA1	c.5246C>G	p.Pro1749Arg	27			yes	yes
F1142	BRCA1	c.5251C>T	p.Arg1751Ter	42			yes	yes
F1198	BRCA1	c.5251C>T	p.Arg1751Ter	30			yes	yes
F1463	BRCA1	c.5251C>T	p.Arg1751Ter	46			yes	yes
F1687	BRCA1	c.5251C>T	p.Arg1751Ter	25			yes	yes
F189	BRCA1	c.5251C>T	p.Arg1751Ter	41		OvCa 42	yes	yes
F2229	BRCA1	c.5251C>T	p.Arg1751Ter	32			yes	yes
F2754	BRCA1	c.5251C>T	p.Arg1751Ter	30			yes	yes
F2816	BRCA1	c.5251C>T	p.Arg1751Ter	41			yes	yes
F298	BRCA1	c.5251C>T	p.Arg1751Ter	30		OvCa 40	yes	yes
F601	BRCA1	c.5251C>T	p.Arg1751Ter	47			yes	N/A
F737	BRCA1	c.5251C>T	p.Arg1751Ter	45			yes	yes
F1024	BRCA1	c.5256_5278-2757del	p.Arg1753fs	46		OvCa 48	yes	yes
F1042	BRCA1	c.5256_5278-2757del	p.Arg1753fs	33	41, 49		yes	yes
F1160	BRCA1	c.5256_5278-2757del	p.Arg1753fs	33			yes	yes
F1270	BRCA1	c.5256_5278-2757del	p.Arg1753fs	48		OvCa 43	yes	yes
F1486	BRCA1	c.5256_5278-2757del	p.Arg1753fs	44	59		yes	yes
F2057	BRCA1	c.5256_5278-2757del	p.Arg1753fs	40		OvCa 59	yes	no
F2091	BRCA1	c.5256_5278-2757del	p.Arg1753fs	47		OvCa 62	yes	yes
F2798	BRCA1	c.5256_5278-2757del	p.Arg1753fs	43			yes	yes
F428	BRCA1	c.5256_5278-2757del	p.Arg1753fs	57		OvCa 55	yes	N/A
F582	BRCA1	c.5256_5278-2757del	p.Arg1753fs	29			yes	no
F698	BRCA1	c.5256_5278-2757del	p.Arg1753fs	38	42	OvCa 48	yes	N/A
F725	BRCA1	c.5256_5278-2757del	p.Arg1753fs	40		OvCa 52	yes	yes
F817	BRCA1	c.5256_5278-2757del	p.Arg1753fs	34			yes	no
F937	BRCA1	c.5256_5278-2757del	p.Arg1753fs	38			yes	yes
F113	BRCA1	c.5266dupC	p.Gln1756fs	39			yes	yes
F1147	BRCA1	c.5266dupC	p.Gln1756fs	59		OvCa 61	yes	yes
F1159	BRCA1	c.5266dupC	p.Gln1756fs	35			yes	no
F1228	BRCA1	c.5266dupC	p.Gln1756fs	34			yes	N/A
F1236	BRCA1	c.5266dupC	p.Gln1756fs	36	46		yes	yes
F125	BRCA1	c.5266dupC	p.Gln1756fs	42	49		yes	yes
F1466	BRCA1	c.5266dupC	p.Gln1756fs	44			yes	no

F1480	BRCA1	c.5266dupC	p.Gln1756fs	39		yes	yes
F1581	BRCA1	c.5266dupC	p.Gln1756fs	59	68	yes	yes
F1627	BRCA1	c.5266dupC	p.Gln1756fs	35	56	yes	yes
F1648	BRCA1	c.5266dupC	p.Gln1756fs	32		yes	yes
F172	BRCA1	c.5266dupC	p.Gln1756fs	59		yes	no
F177	BRCA1	c.5266dupC	p.Gln1756fs	41		yes	yes
F1776	BRCA1	c.5266dupC	p.Gln1756fs	42		OvCa 49	yes
F1792	BRCA1	c.5266dupC	p.Gln1756fs	30		N/A	yes
F180	BRCA1	c.5266dupC	p.Gln1756fs	47		yes	yes
F1848	BRCA1	c.5266dupC	p.Gln1756fs	40		yes	yes
F1862	BRCA1	c.5266dupC	p.Gln1756fs	28		yes	no
F1883	BRCA1	c.5266dupC	p.Gln1756fs	31		yes	no
F1947	BRCA1	c.5266dupC	p.Gln1756fs	43		yes	yes
F198	BRCA1	c.5266dupC	p.Gln1756fs	35		yes	no
F2024	BRCA1	c.5266dupC	p.Gln1756fs	62		OvCa 50	yes
F2082	BRCA1	c.5266dupC	p.Gln1756fs	34		yes	yes
F2292	BRCA1	c.5266dupC	p.Gln1756fs	48		yes	yes
F2323	BRCA1	c.5266dupC	p.Gln1756fs	35		yes	no
F2415	BRCA1	c.5266dupC	p.Gln1756fs	42	61	yes	yes
F2590	BRCA1	c.5266dupC	p.Gln1756fs	30		N/A	yes
F2714	BRCA1	c.5266dupC	p.Gln1756fs	30		yes	yes
F2765	BRCA1	c.5266dupC	p.Gln1756fs	49		yes	yes
F2960	BRCA1	c.5266dupC	p.Gln1756fs	31	34	yes	yes
F363	BRCA1	c.5266dupC	p.Gln1756fs	34		yes	no
F364	BRCA1	c.5266dupC	p.Gln1756fs	33		yes	no
F365	BRCA1	c.5266dupC	p.Gln1756fs	33		yes	yes
F366	BRCA1	c.5266dupC	p.Gln1756fs	35		yes	yes
F369	BRCA1	c.5266dupC	p.Gln1756fs	36	36	yes	yes
F370	BRCA1	c.5266dupC	p.Gln1756fs	58		yes	yes
F371	BRCA1	c.5266dupC	p.Gln1756fs	31		yes	no
F387	BRCA1	c.5266dupC	p.Gln1756fs	37		yes	no
F454	BRCA1	c.5266dupC	p.Gln1756fs	40		yes	no
F572	BRCA1	c.5266dupC	p.Gln1756fs	33		yes	no
F578	BRCA1	c.5266dupC	p.Gln1756fs	35		yes	yes
F579	BRCA1	c.5266dupC	p.Gln1756fs	31	45	yes	yes

F655	BRCA1	c.5266dupC	p.Gln1756fs	30			yes	yes
F777	BRCA1	c.5266dupC	p.Gln1756fs	28			no	no
F847	BRCA1	c.5266dupC	p.Gln1756fs	41	46	OvCa 44	yes	no
F887	BRCA1	c.5266dupC	p.Gln1756fs	33			yes	no
F890	BRCA1	c.5266dupC	p.Gln1756fs	45			yes	no
F933	BRCA1	c.5266dupC	p.Gln1756fs	29			yes	yes
F963	BRCA1	c.5266dupC	p.Gln1756fs	40			yes	no
F97	BRCA1	c.5266dupC	p.Gln1756fs	35			yes	no
F1343	BRCA1	c.5278-1G>T	p.Phe1761fs	30			yes	no
F553	BRCA1	c.5328delC	p.Thr1777fs	32			yes	yes
F968	BRCA1	c.5406+5G>T	p.Asp1778fs	31			N/A	yes
F1036	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	51	56	OvCa 51	yes	yes
F1073	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	45	48		yes	yes
F1103	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	36			yes	yes
F1514	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	33	40		yes	yes
F1576	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	43	43	OvCa 49 & PhaCa 57	yes	no
F1713	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	48			yes	N/A
F1796	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	37			yes	yes
F1890	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	56	60	OvCa 46	yes	no
F1991	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	44	50	OvCa 54	yes	yes
F2000	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	47		OvCa 67	yes	no
F2432	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	31			yes	no
F2639	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	33			yes	yes
F2722	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	34			yes	yes
F2740	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	26			no	no
F2773	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	35		OvCa 45	yes	yes
F2789	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	48			yes	yes
F2887	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	30	34		yes	yes
F2911	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	30	31		no	yes
F2945	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	36			yes	yes
F400	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	37			yes	yes
F416	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	27	37	OvCa 39	yes	yes
F422	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	33			yes	N/A
F607	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	35			no	N/A
F62	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	29	40,45		yes	no

F661	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	47	60	OvCa 67	yes	N/A
F686	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	28			yes	yes
F795	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	33			yes	yes
F851	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	26			yes	no
F891	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	46			yes	no
F902	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	33			yes	no
F930	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	56			yes	yes
F942	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	50	50		yes	yes
F976	BRCA1	c.5406+664_*8273del	p.Gly1803_Tyr1863del	29			yes	yes
F1413	BRCA1	c.5425G>T	p.Val1809Phe	65		EndCa 70	yes	yes
F500	BRCA1	c.5431C>T	p.Gln1811Ter	29			yes	yes
F757	BRCA1	c.5431C>T	p.Gln1811Ter	30	30		yes	yes
F2751	BRCA1	c.5431C>T	p.Gln1811Ter	32	40		yes	yes
F2002	BRCA1	c.5434C>G	p.Gly1803_Ala1813del	38		OvCa 42	yes	no
F155	BRCA1	c.5467G>A	p.Gly1803_Ala1813del	40		OvCa 53	yes	no
F178	BRCA1	c.5467G>A	p.Gly1803_Ala1813del	27	43		yes	yes
F1829	BRCA1	c.5467G>A	p.Gly1803_Ala1813del	36			yes	N/A
F2060	BRCA1	c.5467G>A	p.Gly1803_Ala1813del	46		OvCa 46	yes	no
F2422	BRCA1	c.5467G>A	p.Gly1803_Ala1813del	33			yes	yes
F2497	BRCA1	c.5467G>A	p.Gly1803_Ala1813del	39	52		yes	yes
F388	BRCA1	c.5467G>A	p.Gly1803_Ala1813del	34			yes	yes
F576	BRCA1	c.5467G>A	p.Gly1803_Ala1813del	43	45,51		yes	yes
F628	BRCA1	c.5467G>A	p.Gly1803_Ala1813del	55		CRC 55	yes	yes
F1059	BRCA1	c.5468-285_*4019delinsCACAG	p.0	29	35		yes	yes
F1131	BRCA1	c.5468-285_*4019delinsCACAG	p.0	37	40		yes	yes
F1174	BRCA1	c.5468-285_*4019delinsCACAG	p.0	61		OvCa 53	yes	N/A
F1278	BRCA1	c.5468-285_*4019delinsCACAG	p.0	50		OvCa 50	yes	yes
F1293	BRCA1	c.5468-285_*4019delinsCACAG	p.0	33			yes	yes
F1523	BRCA1	c.5468-285_*4019delinsCACAG	p.0	37			yes	yes
F1563	BRCA1	c.5468-285_*4019delinsCACAG	p.0	43			yes	no
F1889	BRCA1	c.5468-285_*4019delinsCACAG	p.0	38	40	OvCa 44	yes	yes
F196	BRCA1	c.5468-285_*4019delinsCACAG	p.0	37			yes	yes
F2068	BRCA1	c.5468-285_*4019delinsCACAG	p.0	34			yes	yes
F2125	BRCA1	c.5468-285_*4019delinsCACAG	p.0	49			yes	yes
F2405	BRCA1	c.5468-285_*4019delinsCACAG	p.0	33			yes	yes

F2587	BRCA1	c.5468-285_*4019delinsCACAG	p.0	39			yes	yes
F284	BRCA1	c.5468-285_*4019delinsCACAG	p.0	53		OvCa 52	yes	N/A
F332	BRCA1	c.5468-285_*4019delinsCACAG	p.0	28	43	OvCa 33 & EndCa 38	yes	yes
F382	BRCA1	c.5468-285_*4019delinsCACAG	p.0	29			yes	yes
F442	BRCA1	c.5468-285_*4019delinsCACAG	p.0	38			yes	yes
F514	BRCA1	c.5468-285_*4019delinsCACAG	p.0	33			yes	yes
F567	BRCA1	c.5468-285_*4019delinsCACAG	p.0	29	29		yes	yes
F736	BRCA1	c.5468-285_*4019delinsCACAG	p.0	28			yes	yes
F764	BRCA1	c.5468-285_*4019delinsCACAG	p.0	33	44		yes	yes
F2054	BRCA1	c.5492delC	p.Pro1831fs	41			yes	no
F2430	BRCA1	c.5492delC	p.Pro1831fs	52		VaCa 76	yes	no
F2803	BRCA1	c.5492delC	p.Pro1831fs	50	62		yes	no
F2825	BRCA1	c.5492delC	p.Pro1831fs	42			yes	no
F782	BRCA1	c.5492delC	p.Pro1831fs	29			yes	no
F1294	BRCA1	c.5497G>A	p.Val1833Met	33			yes	yes
F1434	BRCA1	c.5497G>A	p.Val1833Met	45		OvCa 74	yes	no
F1439	BRCA1	c.5497G>A	p.Val1833Met	43			yes	no
F1460	BRCA1	c.5497G>A	p.Val1833Met	27			yes	yes
F1967	BRCA1	c.5497G>A	p.Val1833Met	49			yes	yes
F2107	BRCA1	c.5497G>A	p.Val1833Met	52		OvCa 59	yes	yes
F2164	BRCA1	c.5497G>A	p.Val1833Met	38			yes	yes
F2233	BRCA1	c.5497G>A	p.Val1833Met	33			yes	no
F2596	BRCA1	c.5497G>A	p.Val1833Met	38			yes	yes
F636	BRCA1	c.5497G>A	p.Val1833Met	66			yes	yes
F649	BRCA1	c.5497G>A	p.Val1833Met	51			yes	no
F1761	BRCA1	c.5503C>T	p.Arg1835Ter	39	54		yes	yes
F2566	BRCA1	c.5533dupT	p.Tyr1845fs	33			no	yes
F681	BRCA1	c.5556_5560delCTACC	p.Tyr1853fs	37			yes	no
F897	BRCA2	c.-806G>A	p.?	41			yes	no
F335	BRCA2	c.10G>T	p.Gly4Ter	56			yes	N/A
F1516	BRCA2	c.537dupT	p.Ile180fs	41			yes	no
F1596	BRCA2	c.537dupT	p.Ile180fs	42			yes	no
F1111	BRCA2	c.658_659delGT	p.Val220fs	38			yes	no
F549	BRCA2	c.658_659delGT	p.Val220fs	48		CRC 48, OvCa 50	yes	N/A
F2669	BRCA2	c.682-1G>T	p.?	44	82		yes	no

F1481	BRCA2	c.1405_1406delGA	p.Asp469Terfs	40			yes	no
F2215	BRCA2	c.1405_1406delGA	p.Asp469Terfs	34			no	yes
F753	BRCA2	c.1405_1406delGA	p.Asp469Terfs	43			yes	no
F2799	BRCA2	c.1117C>T	p.Gln373Ter	71		CRC 57	yes	no
F2809	BRCA2	c.1532C>A	p.Ser511Ter	45	47		yes	no
F1292	BRCA2	c.1813dupA	p.Ile605fs	33			yes	no
F1597	BRCA2	c.2339C>G	p.Ser780Ter	31	36		yes	no
F1817	BRCA2	c.2339C>G	p.Ser780Ter	52			yes	no
F801	BRCA2	c.2339C>G	p.Ser780Ter	33			yes	yes
F2117	BRCA2	c.2490_2491insT	p.Val831fs	45			yes	yes
F1546	BRCA2	c.2808_2811delACAA	p.Ala938fs	34	55		yes	no
F2477	BRCA2	c.2808_2811delACAA	p.Ala938fs	62			yes	no
F2599	BRCA2	c.2808_2811delACAA	p.Ala938fs	37			yes	yes
F2908	BRCA2	c.2808_2811delACAA	p.Ala938fs	40			yes	no
F1688	BRCA2	c.3554_3563delCAGTTGAAAT	p.Thr1185fs	43			yes	no
F349	BRCA2	c.3554_3563delCAGTTGAAAT	p.Thr1185fs	33			N/A	no
F1743	BRCA2	c.3865_3868delAAAT	p.Lys1289fs	42			yes	no
F135	BRCA2	c.4409_4410delTA	p.Ile1470fs	28			no	no
F1850	BRCA2	c.4415_4418delAGAA	p.Lys1472fs	32			yes	no
F1204	BRCA2	c.4415_4418delAGAA	p.Lys1472fs	42			yes	no
F2582	BRCA2	c.4415_4418delAGAA	p.Lys1472fs	45			yes	yes
F967	BRCA2	c.4415_4418delAGAA	p.Lys1472fs	30	42		yes	yes
F934	BRCA2	c.4515_4525delCTTCCAGGGAC	p.Phe1506fs	54		OvCa 53	yes	no
F2458	BRCA2	c.4530delC	p.Glu1511fs	32	32		yes	no
F591	BRCA2	c.4530delC	p.Glu1511fs	46	60		yes	no
F2716	BRCA2	c.4530delC	p.Glu1511fs	39			yes	no
F1802	BRCA2	c.4654_4657delGGTA	p.Glu1552fs	38			yes	yes
F427	BRCA2	c.4769delA	p.Lys1590fs	38	42		yes	no
F435	BRCA2	c.4769delA	p.Lys1590fs	43			yes	no
F478	BRCA2	c.4769delA	p.Lys1590fs	32			N/A	no
F2548	BRCA2	c.5110_5113delAGAA	p.Arg1704Terfs	35			yes	no
F642	BRCA2	c.5349_5351delAAA	p.Lys1783del	25	48		yes	no
F2046	BRCA2	c.5645C>A	p.Ser1882Ter	53		OvCa 63	yes	yes
F2264	BRCA2	c.5645C>A	p.Ser1882Ter	28			yes	no
F653	BRCA2	c.5722_5723delCT	p.Leu1908fs	49			yes	no

F1525	BRCA2	c.5791C>T	p.Gln1931Ter	49			yes	no
F2535	BRCA2	c.6037A>T	p.Lys2013Ter	58	63		yes	no
F969	BRCA2	c.6490C>T	p.Gln2164Ter	42			yes	no
F1002	BRCA2	c.6600_6601delTT	p.Ser2201Terfs	41			yes	no
F2890	BRCA2	c.6771delC	p.Glu2258fs	37	45		yes	no
F1572	BRCA2	c.6842_7007del6421	p.Gly2281fs	49	57		yes	no
F903	BRCA2	c.6842_7007del6421	p.Gly2281fs	25			yes	no
F943	BRCA2	c.6842_7007del6421	p.Gly2281fs	47		OvCa 56	yes	no
F980	BRCA2	c.6842_7007del6421	p.Gly2281fs	36	36		yes	no
F1972	BRCA2	c.6941delC	p.Thr2314fs	62		OvCa 54	yes	no
F2199	BRCA2	c.6941delC	p.Thr2314fs	38		OvCa 37	yes	no
F852	BRCA2	c.6941delC	p.Thr2314fs	27			yes	no
F2763	BRCA2	c.7007G>A	p.Gly2313fs	44	44		yes	no
F1251	BRCA2	c.7363delC	p.His2455fs	35			yes	no
F1284	BRCA2	c.7806-2A>T	p.Ala2603_Arg2659del	38	41		yes	no
F2483	BRCA2	c.7806-2A>T	p.Ala2603_Arg2659del	37			yes	no
F2558	BRCA2	c.7806-2A>T	p.Ala2603_Arg2659del	58			yes	no
F560	BRCA2	c.7806-2A>T	p.Ala2603_Arg2659del	31			yes	no
F1098	BRCA2	c.7879A>T	p.Ile2627Phe	41			yes	no
F720	BRCA2	c.7879A>T	p.Ile2627Phe	45			yes	no
F1217	BRCA2	c.7913_7917delTTCCT	p.Phe2638Terfs	38			yes	yes
F1210	BRCA2	c.7976G>A	p.Ala2603_Arg2659del	45			yes	no
F1301	BRCA2	c.7976G>A	p.Ala2603_Arg2659del	35	35		yes	no
F1316	BRCA2	c.7976G>A	p.Ala2603_Arg2659del	56			yes	no
F1124	BRCA2	c.8364G>A	p.Trp2788Ter	43			yes	no
F2468	BRCA2	c.8364G>A	p.Trp2788Ter	53		OvCa 56	yes	no
F1763	BRCA2	c.8546delA	p.Lys2849fs	37			yes	no
F1698	BRCA2	c.8592delC	p.Leu2865fs	47			yes	no
F2715	BRCA2	c.8754+1G>A	p.Glu2918fs	44			yes	no
F537	BRCA2	c.8800delC	p.Gln2934fs	39	55		yes	no
F1069	BRCA2	c.8930delA	p.Tyr2977fs	41	41		yes	no
F465	BRCA2	c.8993_9024del32	p.Ser2998fs	28			N/A	N/A
F2354	BRCA2	c.9016_9017delTA	p.Tyr3006fs	41			yes	no
F989	BRCA2	c.9097dupA	p.Thr3033fs	33			yes	no
F2420	BRCA2	c.9246_9247insA	p.Thr3085fs	29	44		yes	no

F666	<i>BRCA2</i>	c.9376C>T	p.Gln3126Ter	47			yes	no
F160	<i>BRCA2</i>	c.9382C>T	p.Arg3128Ter	29			yes	N/A
F1433	<i>BRCA2</i>	c.9501+1 G>A	p.Gly3086_Gly3167del	36			yes	no
F1981	<i>BRCA2</i>	c.9501+1 G>A	p.Gly3086_Gly3167del	39			yes	no
F2028	<i>BRCA2</i>	c.9501+1 G>A	p.Gly3086_Gly3167del	32			yes	no
F1741	<i>BRIP1</i>	c.2786_2789delTATC	p.Leu929fs	40			yes	no
F1473	<i>BRIP1</i>	c.2947delA	p.Ile983fs	29			yes	no
F2189	<i>CDKN2A</i>	c.71G>C	p.Arg24Pro	36			yes	yes
F876	<i>CHEK2</i>	c.(?-1900)(?-1-1)del	p.?	47	56		yes	N/A
F993	<i>CHEK2</i>	c.100C>T	p.Glu34Ter	47			yes	no
F1081	<i>CHEK2</i>	c.320_592del6160	p.Glu107_Lys197del	36			no	no
F124	<i>CHEK2</i>	c.475T>C	p.Tyr159His	30			no	no
F259	<i>CHEK2</i>	c.475T>C	p.Tyr159His	57			yes	N/A
F508	<i>CHEK2</i>	c.480_481insAAA	p.Glu161fs	39	58		yes	yes
F2050	<i>CHEK2</i>	c.499G>A	p.Gly167Arg	46			yes	no
F2469	<i>CHEK2</i>	c.499G>A	p.Gly167Arg	35			yes	no
F667	<i>CHEK2</i>	c.499G>A	p.Gly167Arg	34			yes	no
F2305	<i>CHEK2</i>	c.507delT	p.Phe169fs	41			yes	no
F322	<i>CHEK2</i>	c.507delT	p.Phe169fs	51	67		yes	N/A
F509	<i>CHEK2</i>	c.548T>C	p.Leu183Ser	48			yes	N/A
F1018	<i>CHEK2</i>	c.549G>C	p.Leu183Phe	36			yes	no
F1327	<i>CHEK2</i>	c.549G>C	p.Leu183Phe	31			yes	no
F1484	<i>CHEK2</i>	c.549G>C	p.Leu183Phe	29			yes	no
F459	<i>CHEK2</i>	c.549G>C	p.Leu183Phe	46			yes	N/A
F1313	<i>CHEK2</i>	c.592+3A>T	p.Glu149fs	50	52	CRC 53	yes	no
F2482	<i>CHEK2</i>	c.592+3A>T	p.Glu149fs	33			yes	no
F1136	<i>CHEK2</i>	c.793_846del7566	p.Asp265_His282del	50			yes	N/A
F1556	<i>CHEK2</i>	c.1100delC	p.Thr367fs	41	42		yes	no
F2839	<i>CHEK2</i>	c.1188delT	p.Val397fs	30			N/A	no
F802	<i>CHEK2</i>	c.1368dupA	p.Glu457fs	48			yes	no
F2464	<i>DICER1</i>	c.5563C>T	p.Arg1855Ter	66			yes	no
F1922	<i>ERCC3</i>	c.325C>T	p.Arg109Ter	32			no	yes
F2734	<i>FANCD2</i>	c.2917_2918delTTC	p.Ser973fs	53		OvCa 56	yes	no
F2495	<i>FANCI</i>	c.1597C>T	p.Arg533Ter	36			yes	yes
F2484	<i>FANCL</i>	c.2T>C	p.Met1?	30			no	no

F2795	<i>FANCL</i>	c.2T>C	p.Met1?	40			yes	yes
F2717	<i>FANCM</i>	c.4843A>T	p.Lys1615Ter	29			yes	no
F2529	<i>FANCM</i>	c.5314_5315delTG	p.Cys1772Ter	47			yes	no
F1178	<i>MLH1</i>	c.1036C>T	p.Gln346Ter	32	34	CRC 50	yes	no
F1272	<i>MSH6</i>	c.3169_3170delTT	p.Leu1057fs	50	50		yes	no
F643	<i>MSH6</i>	c.3953_3956delGAAA	p.Arg1318fs	31			no	no
F714	<i>MSH6</i>	c.4005_4008delAGTT	p.Glu1335fs	31			N/A	N/A
F258	<i>NBN</i>	c.657_661delACAAA	p.Lys219fs	37			yes	N/A
F1673	<i>NBN</i>	c.896+2C>T	p.?	33			yes	no
F1487	<i>NBN</i>	c.2140C>T	p.Arg714Ter	30			yes	no
F2560	<i>NF1</i>	c.3525_3526delAA	p.Arg1176fs	31			yes	no
F1769	<i>PALB2</i>	c.1140_1143delTCTT	p.Ser380fs	34	41		yes	no
F924	<i>PALB2</i>	c.1591_1600delTTGCCAACTT	p.Leu531fs	30			yes	yes
F1309	<i>PALB2</i>	c.2257C>T	p.Arg753Ter	58			yes	no
F1586	<i>PALB2</i>	c.2257C>T	p.Arg753Ter	34			yes	no
F945	<i>PALB2</i>	c.2257C>T	p.Arg753Ter	34			yes	no
F2736	<i>PALB2</i>	c.2747_2748+4delAGGTAA	p.Glu916fs	37	37		yes	no
F2010	<i>PALB2</i>	c.3255dupG	p.Arg1086fs	38			yes	yes
F2514	<i>PMS2</i>	c.1261C>T	p.Arg421Ter	59			yes	no
F1511	<i>PMS2</i>	c.1414A>T	p.Lys472Ter	52			yes	no
F975	<i>PTEN</i>	c.424delC	p.Arg142fs	30			yes	no
F775	<i>PTEN</i>	c.697C>T	p.Arg233Ter	35			N/A	no
F1173	<i>RAD51C</i>	c.706-2A>C	p.Val236_Ala279del	40			yes	yes
F2216	<i>RAD51C</i>	c.706-2A>C	p.Val236_Ala279del	50	50	OvCa 54	yes	no
F2322	<i>RAD51C</i>	c.706-2A>C	p.Val236_Ala279del	56			yes	no
F879	<i>RAD51C</i>	c.706-2A>C	p.Val236_Ala279del	37			yes	yes
F2907	<i>RAD51C</i>	c.709C>T	p.Arg237Ter	33			yes	no
F1394	<i>RAD51C</i>	c.904+5G>T	p.Val280_Gly302del	44	44		yes	yes
F1758	<i>RAD51C</i>	c.904+5G>T	p.Val280_Gly302del	47	58		yes	no
F752	<i>RAD51D</i>	c.451C>T	p.Gln151Ter	55			yes	no
F2247	<i>RAD51D</i>	c.556C>T	p.Arg186Ter	43			yes	yes
F1695	<i>RAD51D</i>	c.709C>T	p.Arg237Ter	39			yes	no
F487	<i>RAD51D</i>	c.898C>T	p.Arg300Ter	33			yes	no
F774	<i>SDHB</i>	c.445C>T	p.Gln149Ter	28			no	no
F1746	<i>SLX4</i>	c.4089_4090delAG	p.Asp1365fs	45			yes	no

F1686	TP53	c.(?-17900)(?-1-1)del	p.?	29			no	no
F920	TP53	c.324_327dupTTTC	p.Arg110fs	20			yes	yes
F329	TP53	c.375G>A	p.Ser33_Thr125del	24	36	OvCa 33	yes	no
F1995	TP53	c.559+2T>C	p.?	30			yes	no
F1966	TP53	c.578A>T	p.His193Leu	24	30		yes	yes
F1359	TP53	c.847C>T	p.Arg283Cys	31			yes	no
F1963	TP53	c.847C>T	p.Arg283Cys	36			yes	no
F812	TP53	c.1021T>G	p.Phe341Val	35	40		yes	no
F543	BRCA1 & BRCA2	c.5406+664_*8273del c.9748dupT	p.Gly1803_Tyr1863del p.Ser3250fs	31	49		yes	yes
F330	BRCA1 & PALB2	c.5497G>A c.2257C>T	p.Val1833Met p.Arg753Ter	44			yes	N/A
F1281	BRCA2 & SDHC	c.7879A>T c.397C>T	p.Ile2627Phe p.Arg133Ter	31	31		no	no
F2070	BRCA2 & RECQL4	c.1813dupA c.1879-1G>A	p.Ile605fs p.?	46		OvCa 63	yes	no
F2540	BRCA2 & RAD51C	c.2490_2491insT c.904+5G>T	p.Val831fs p.Val280_Gly302del	46	56		yes	no
F882	BRCA2 & ATM	c.(80+1_81-1)_(593+1_594-1)del c.3576G>A	p.? p.Ser1135_Lys1192del	40			yes	no
F2516	ERCC3 & FANCC	c.576_583delCGTGATCC c.346-1G>A	p.Pro192fs p.?	34			no	yes
F2364	PALB2 & SLX4	c.2747_2748+4delAGGTAA c.4089_4090delAG	p.Glu916fs p.Asp1365fs	44		OvCa 48	yes	no
F776	PALB2 & ATM	c.2257C>T c.1562_1563delAG	p.Arg753Ter p.Glu522fs	33			yes	no
F1097	PTEN & PALB2	c.697C>T c.3426dupA	p.Arg233Ter p.Leu1143fs	36			yes	no

Variant nomenclature was based on the following reference sequences: *ATM* NM_000051.3; *BLM* NM_000057.3; *BRCA1* NM_007294.3; *BRCA2* NM_000059.3; *BRIP1* NM_032043.2; *CDKN2A* NM_000077.4; *CHEK2* NM_007194.3; *DICER1* NM_030621.4; *ERCC3* NM_000122.1; *FANCC* NM_000136.2; *FANCD2* NM_001018115.1; *FANCI* NM_001113378.1; *FANCL* NM_018062.3; *FANCM* NM_020937.2; *MLH1* NM_000249.3; *MSH6* NM_000179.2; *NBN* NM_002485.4; *NF1*

NM_001042492.2; PALB2 NM_024675.3; PTEN NM_000314.6; PMS2 NM_000535.6; RAD51C NM_058216.2; RAD51D NM_002878.3; RECQL4 NM_004260.3; SDHB NM_003000.2; SDHC NM_003001.3; SLX4 NM_032444.2 and TP53 NM_000546.5.

Abbreviations used: dx, diagnosis; TNBC, triple-negative breast cancer; FH, family history; Ca, cancer; Br, breast; Ov, ovarian; Pr, prostate; Pha, pharyngeal; End, endometrial; CRC, colorectal cancer; Pan, pancreatic; Va, ampulla of Vater; y, years and N/A, Not Available;

Blue color highlights individuals carrying two LoF alleles. Family history yes: at least two family relatives, irrespectively of degree and age at diagnosis, with BrCa and/or OvCa and/or PanCa.