

Supplement to:

Landscape of homologous recombination deficiencies in solid tumours: analyses of two independent genomic datasets

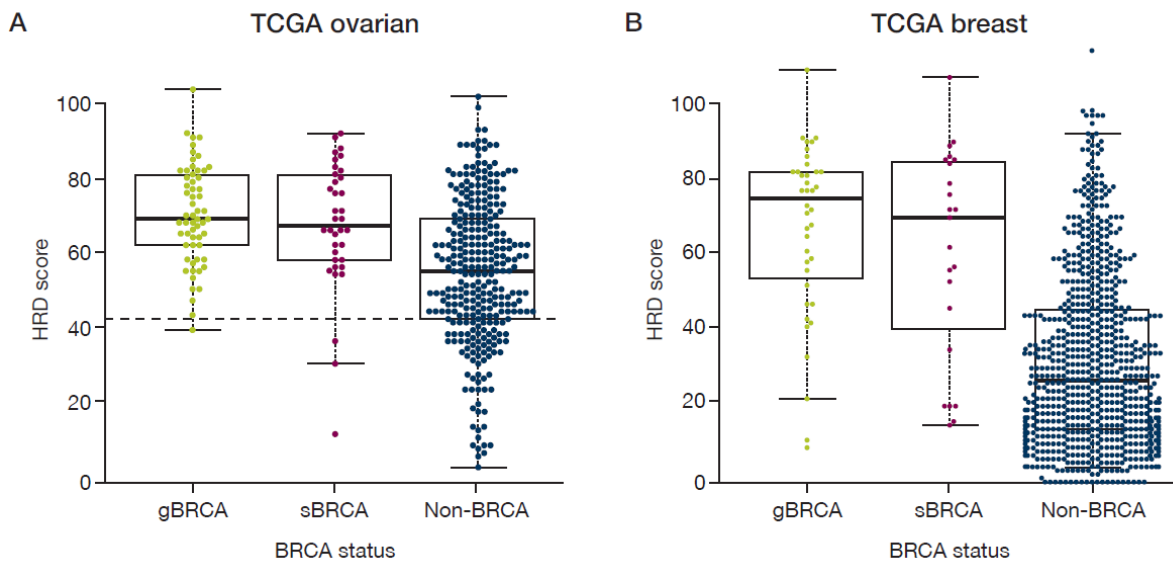
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Supplementary Figure 1

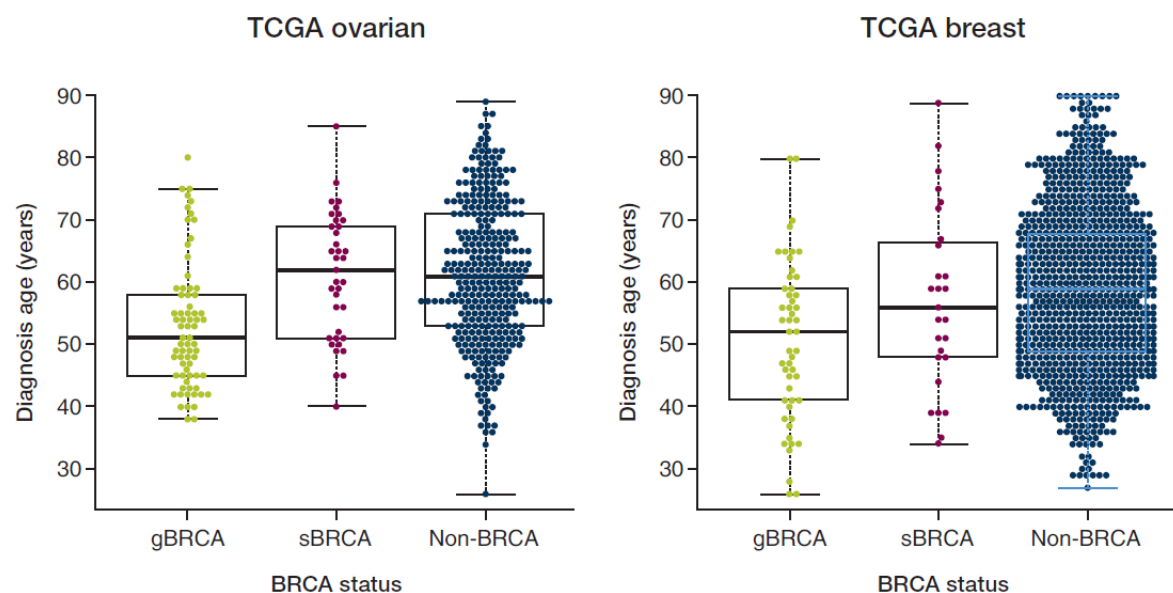
HRD scores by BRCA status in TCGA ovarian and breast cancer cohorts.



HRD, homologous recombination deficiency; TCGA, The Cancer Genome Atlas.

Supplementary Figure 2

Age of diagnosis by BRCA status in TCGA ovarian and breast cancer cohorts.



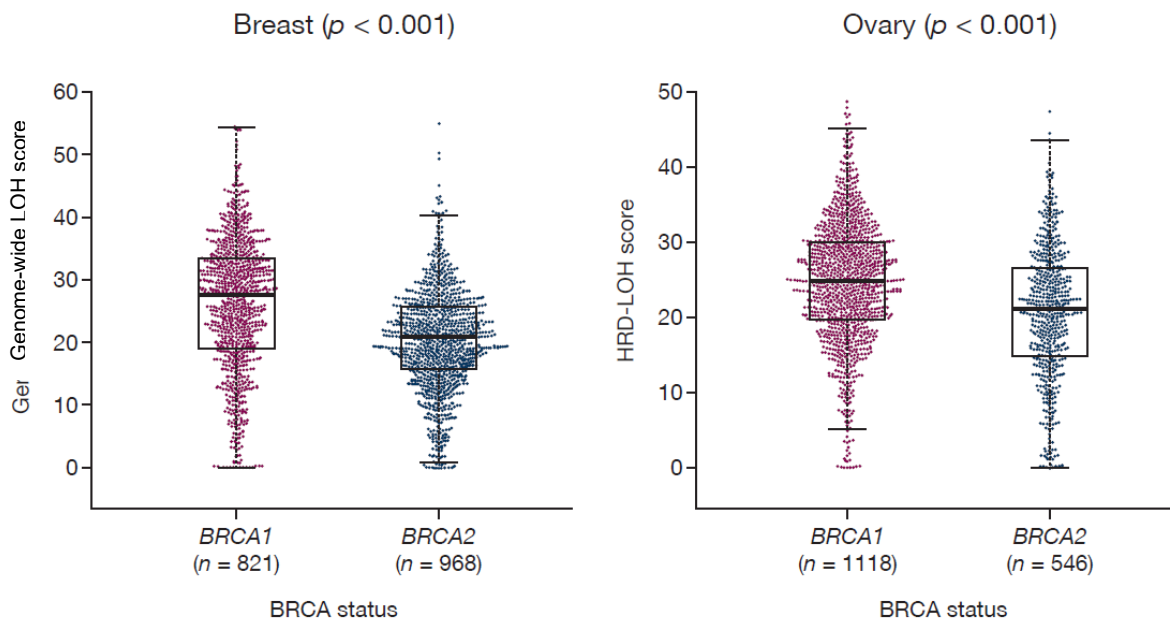
TCGA, The Cancer Genome Atlas.

Patients with germline BRCA mutations, who were born with the mutation, would develop tumours at younger ages than those with somatic BRCA mutations, which have to be acquired later in life. Indeed, we found patients with germline BRCA mutations were diagnosed at a younger age than patients with somatic BRCA mutations in both the ovarian cancer cohort (median 52 and 63, respectively, and Mann-Whitney U test P value of 0.003) and the breast cancer cohort (median 52 and 56 years, respectively, and Mann-Whitney U test P value of 0.078). The reason for this observation is suggested to be due to patients carrying a gBRCA mutation having a defect in DNA repair in every cell when

they were born, and thus are more likely to acquire secondary cancer-causing mutations at early stage of their lives. Patients with somatic BRCA mutations had similar diagnostic age as those without a BRCAm (61 and 59, respectively), with t-test P values of 0.98 and 0.50 for ovarian and breast cancers, respectively.

Supplementary Figure 3

Genome wide-LOH scores by *BRCA1* and *BRCA2* status in Foundation Medicine ovarian and breast cancer mutation cohorts.

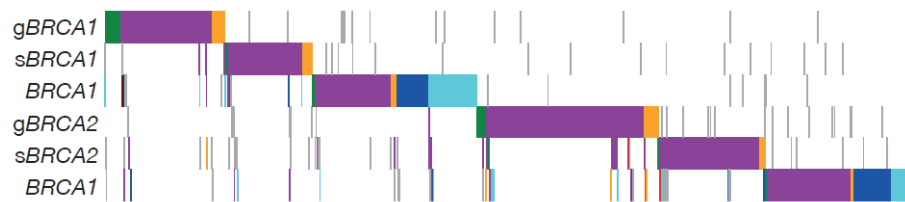


LOH, loss of heterozygosity.

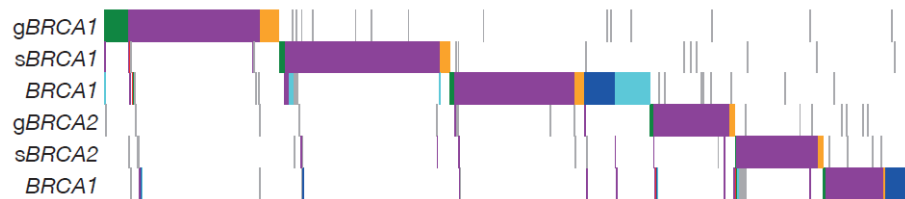
Supplementary Figure 4

Oncoprint analysis of Foundation Medicine ovarian and breast cancer cohorts.

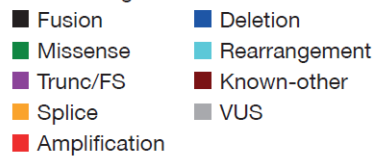
Breast ($n = 1789$)



Ovarian ($n = 1664$)



Mutation legends:

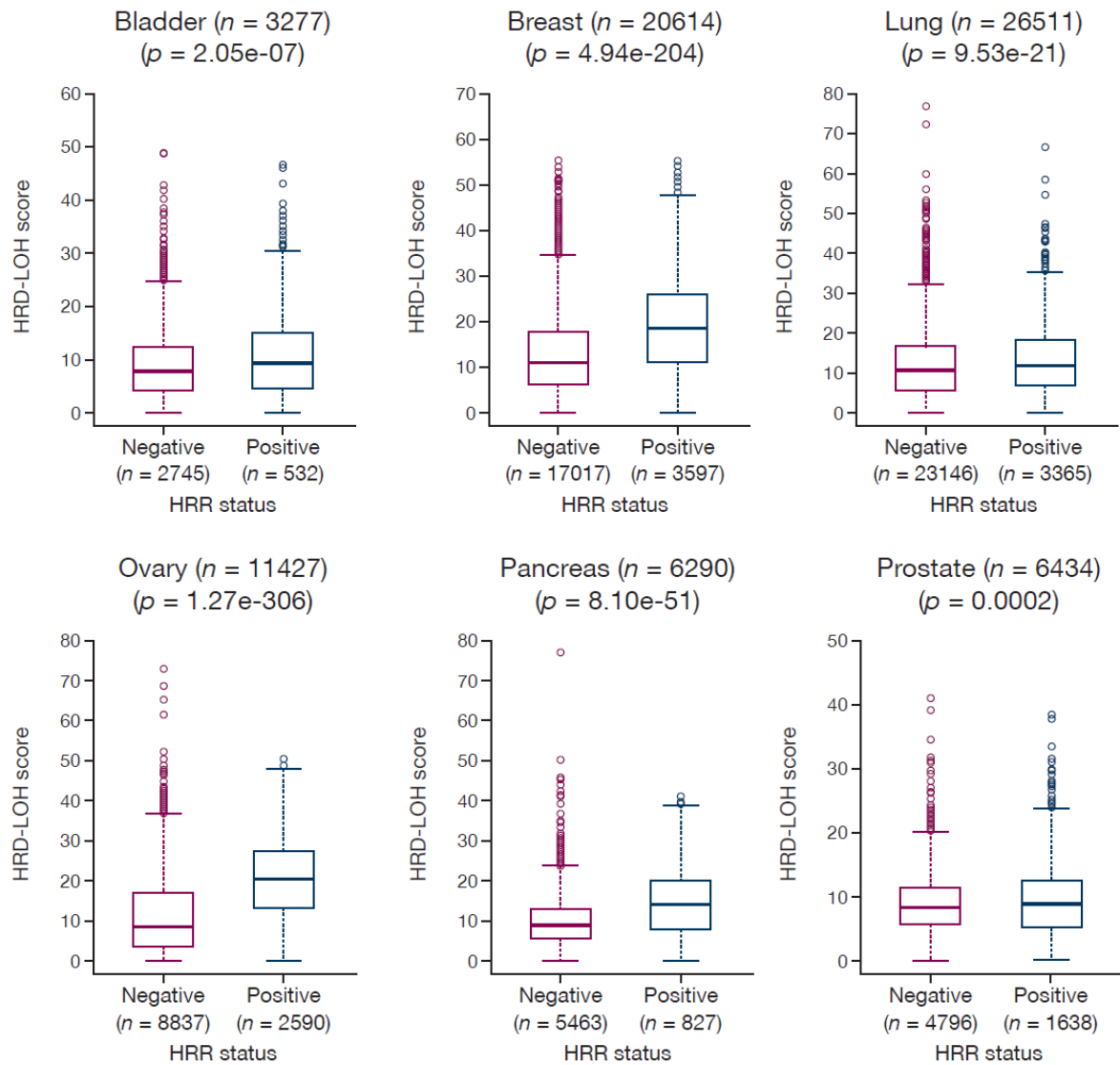


gBRCA1, *gBRCA2*: samples with germline *BRCA1* or *BRCA2* mutations; *sBRCA1*, *sBRCA2*: samples with somatic *BRCA1* or *BRCA2* mutations; *BRCA1*, *BRCA2*: samples whose mutation origin cannot be determined by SGZ algorithm, including all deletions and rearrangements. VUS, variant of unknown significance.

The figure shows that the vast majority of *BRCA1* and *BRCA2* mutations are truncating mutations, and that not only are *BRCA1* and *BRCA2* mutations mutually exclusive, but germline and somatic mutations are also mutually exclusive to either other.

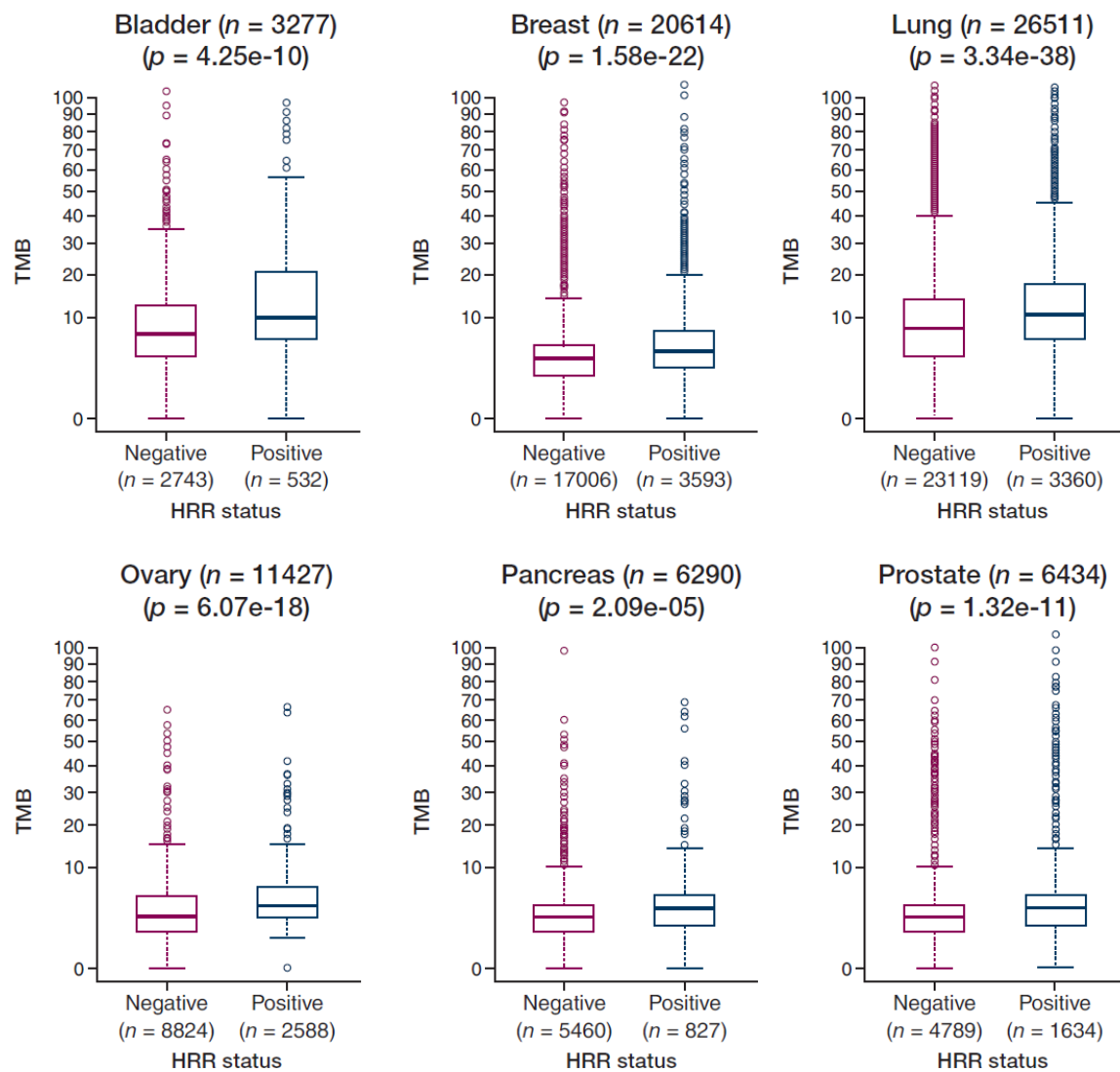
Supplementary Figure 5

HRD-LOH scores in patients with and without HRR gene mutations, including BRCA, in the Foundation Medicine dataset.



Supplementary Figure 6

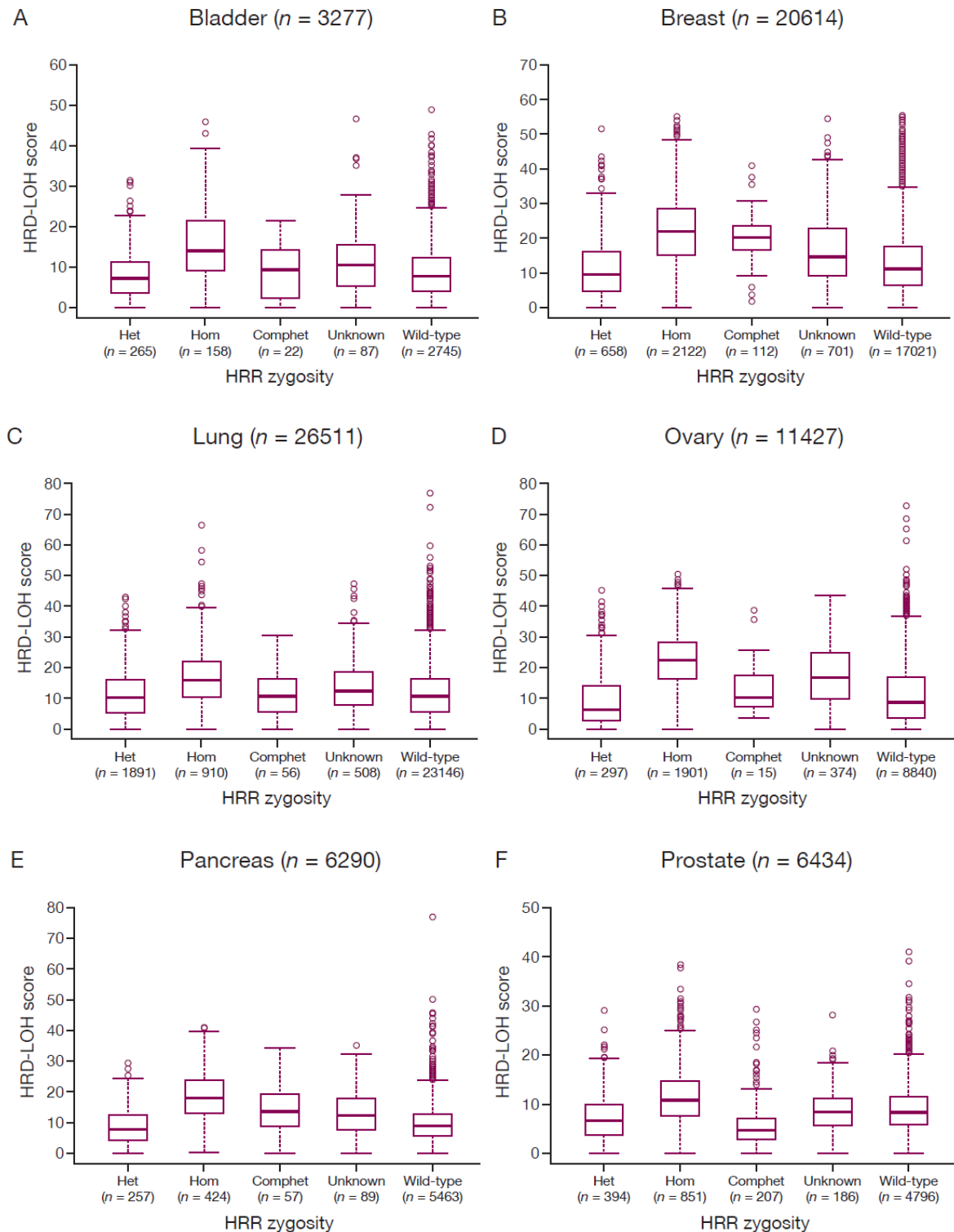
TMB in patients with and without HRR gene mutations in the Foundation Medicine dataset.



HRR, homologous recombination repair; TMB, tumour mutation burden.

Supplementary Figure 7

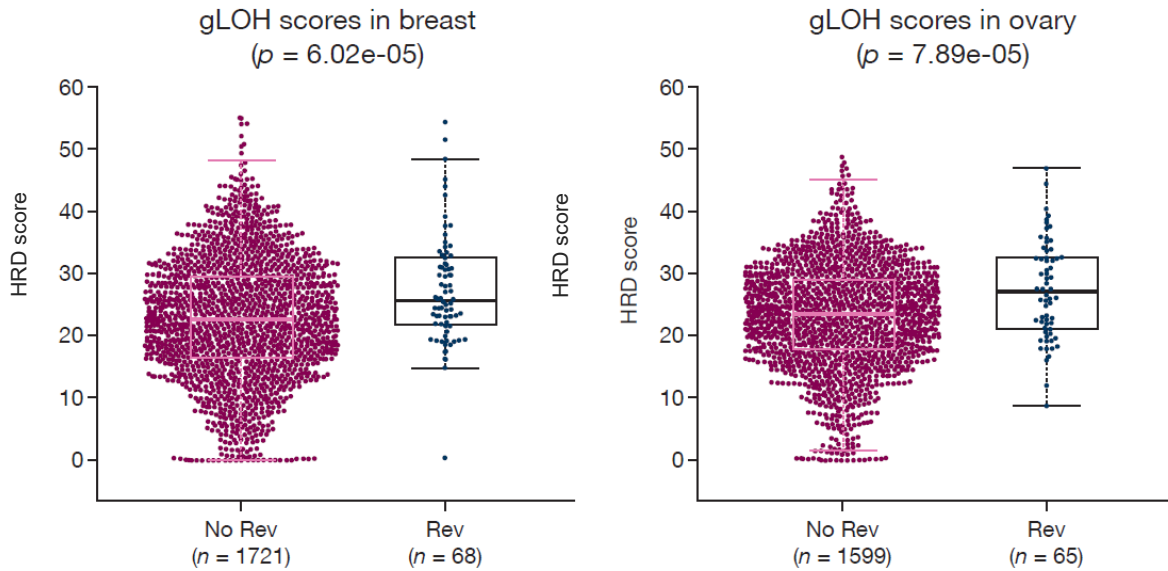
HRD-LOH scores by HRR gene mutation – heterozygous (mono-allelic loss without LOH) versus homozygous (bi-allelic loss of function with LOH) versus compound heterozygous (bi-allelic loss of function without LOH) versus unknown versus wild-type – in Foundation Medicine dataset (a) bladder, (b) breast, (c) lung, (d) ovarian, (e) pancreas and (f) prostate tumour samples.



HRD, homologous recombination deficiency; HRR, homologous recombination repair; LOH, loss of heterozygosity.

Supplementary Figure 8

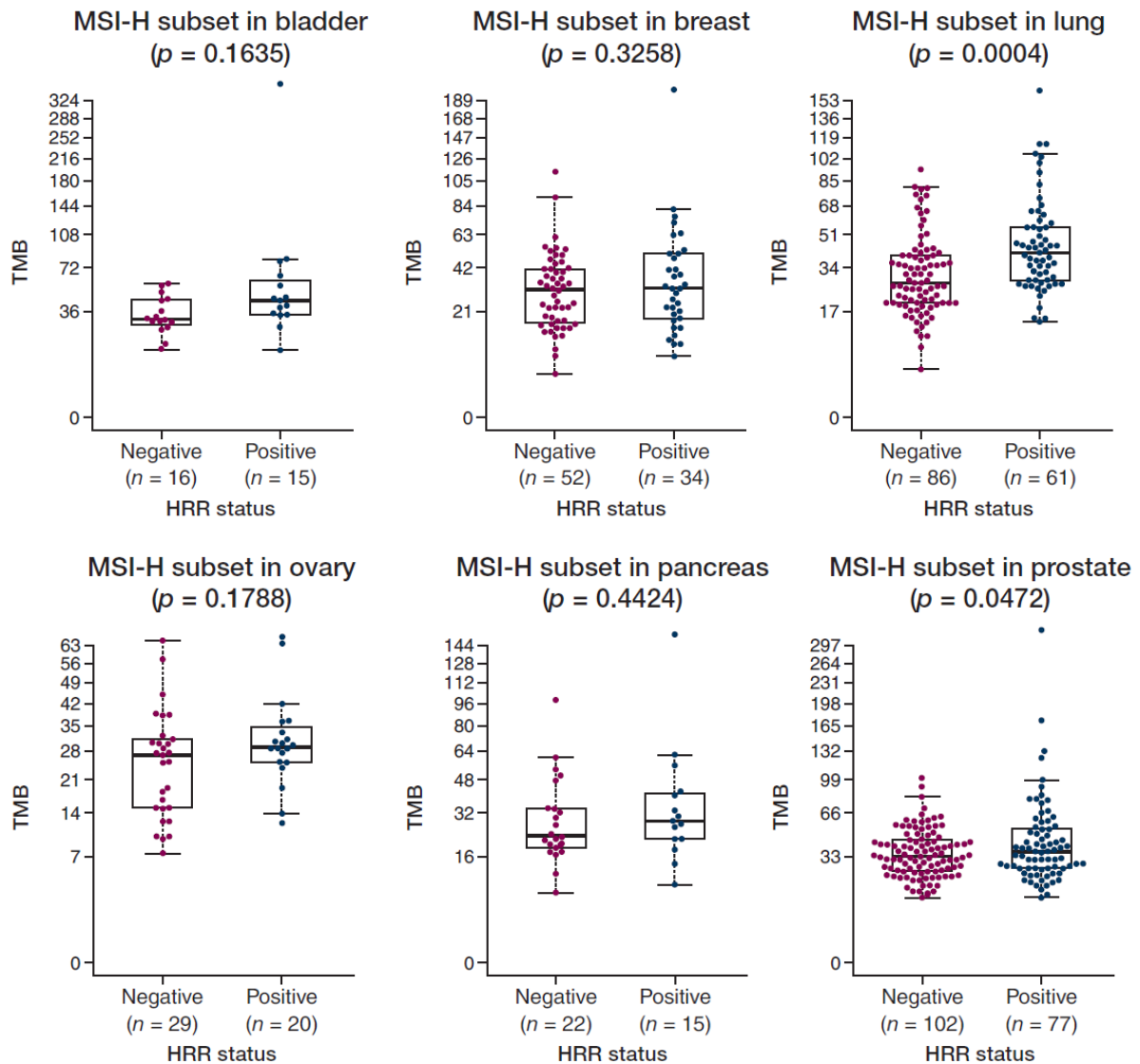
In breast and ovarian samples with BRCA mutations, gLOH scores were compared between those with BRCA reversion mutations and those without. Samples with reversion mutations detected have significantly higher gLOH scores with p values of $6.02\text{e-}5$ and $7.89\text{e-}5$, respectively for breast and ovarian.



gLOH, genomic loss of heterozygosity; HRD, homologous recombination deficiency; Rev, reversion mutation.

Supplementary Figure 9

In MSI-high subset of samples, those with HRR mutation detected have consistent trend of higher TMB than those without, though most do not achieve statistical significance.



HRR, homologous recombination repair; MSI-H, microsatellite instability-high; TMB, tumour mutation burden.

Supplementary Table 1

Bi-allelic loss of BRCA in ER+ and ER- breast cancer in the TCGA cohort.

	ER+	ER-	ER unknown
Homozygous (bi-allelic loss with LOH), <i>n</i> (%)	33 (85)	27 (90)	7 (100)
Composite heterozygous (without LOH but considered bi-allelic loss), <i>n</i> (%)	0	2 (7)	0
Heterozygous (mono-allelic without LOH), <i>n</i> (%)	4 (15)	1 (3)	0

ER, oestrogen receptor; LOH, loss of heterozygosity; TCGA, The Cancer Genome Atlas.

Supplementary Table 2

HRR gene mutation frequency in the Foundation Medicine dataset across six tumour types.

	Bladder (<i>n</i> = 3277)	Breast (<i>n</i> = 20,614)	Lung (<i>n</i> = 26,511)	Ovarian (<i>n</i> = 11,427)	Pancreatic (<i>n</i> = 6290)	Prostate (<i>n</i> = 6434)
HRR*, %	16.2	17.4	12.7	22.7	13.1	25.5
TP53, %	62.6	54.8	72.2	79.0	77.0	44.3
MSI-H, %	0.9	0.4	0.6	0.4	0.6	2.8

*HRR is defined as deleterious mutations in any of 15 genes in the panel: BRCA1, BRCA2, ATM, CDK12, RAD15B, RAD51C, RAD54L, RAD51D, BRIP1, FANCI, FANCL, PALB2, BARD1, CHEK1, CHEK2. HRR, homologous recombination repair; MSI-H, microsatellite instability-high.

Supplementary Table 3

Bi-allelic loss of function rates of HRR gene mutations in the Foundation Medicine dataset.

	Bladder (<i>n</i> = 3277)	Breast (<i>n</i> = 20,614)	Lung (<i>n</i> = 26,511)	Ovarian (<i>n</i> = 11,427)	Pancreatic (<i>n</i> = 6290)	Prostate (<i>n</i> = 6434)
HRR* bi-allelic rate, %	40.4	77.2	33.8	86.6%	65.2	72.9

*A HRR mutation was defined as a deleterious mutation in any of the 15 genes in the panel. HRR, homologous recombination repair.

Supplementary Table 4

Mean TMB and percent genome wide-LOH scores in the Foundation Medicine dataset.

Location	TMB (HRRm)	TMB (HRRwt)	P value (Mann-Whitney U test)	LOH score (HRRm)	LOH score (HRRwt)	P value (t-test)
Bladder	14.9	9.6	<0.0001	11.2	9.1	<0.0001
Breast	6.2	4.8	<0.0001	19.1	13.1	<0.0001
Lung	14.4	10.5	<0.0001	13.1	11.6	<0.0001
Ovarian	4.8	3.4	<0.0001	20.3	11.3	<0.0001
Pancreatic	4.8	2.9	<0.0001	14.6	9.7	<0.0001
Prostate	4.0	2.8	<0.0001	9.6	9.0	0.0002

P values were not corrected for multiple testing; MSI-H samples have been removed for TMB assessment, but kept in LOH assessment. HRRm, mutated homologous recombination repair; HRRwt, wild-type homologous recombination repair; LOH, loss of heterozygosity; MSI-H, microsatellite instability-high; TMB, tumour mutation burden.

Supplementary Table 5

The 47 samples with likely reversion mutations detected are listed, including the original sensitizing functional mutations.

(Shown on page 14)

Supplementary Table 6

MSI-H and HRR mutations in the Foundation Medicine dataset

Disease	MSI-H, n	HRRm, n	MSI-H + HRRm, n	%HRRm in MSI-H	%MSI-H in HRRm
Bladder	31	532	15	48	2.8
Breast	86	3597	34	40	0.9
Lung	147	3365	61	41	1.8
Ovarian	49	2590	20	41	0.8
Pancreatic	37	827	15	41	1.8
Prostate	179	1638	77	43	4.7

HRRm, mutated homologous recombination repair; MSI-H, microsatellite instability-high; TMB, tumour mutation burden.

Analysis of the relationship between MSI-high (MSI-H) and HRR showed that about half of MSI-H samples carry deleterious HRR mutations; however, only a fraction of samples with deleterious HRR mutations are MSI-H (1–4%). Interestingly, within these MSI-H tumours, those with a HRRm detected consistently tend to have even higher TMB than those without (Supplementary Fig. 9), suggesting HRR mutations might further contribute to the TMB even in MSI-H background.

Supplementary Table 7

Breakdown of somatic, germline, or unknown origins for deleterious mutations in HRR genes across tumour types. Numbers are patient counts. A patient is classified as germline if at least one deleterious mutation for the gene is classified as germline by SGZ algorithm, as somatic if all deleterious mutations of the gene are classified as somatic by SGZ algorithm. Otherwise, the patient will be classified as unknown

HRR gene	Status	Bladder (n=3277)	Breast (n=20614)	Lung (n=26511)	Ovary (n=11427)	Pancreas (n=6290)	Prostate (n=6434)
ATM	Germline	12	135	177	42	76	62
	Somatic	81	149	598	95	100	151
	Unknown	32	140	234	72	42	137
BARD1	Germline	2	25	26	10	10	4
	Somatic	4	32	87	10	3	7
	Unknown	9	47	37	12	6	14
BRCA1	Germline	8	266	55	358	47	11
	Somatic	22	191	135	350	15	21
	Unknown	36	364	180	410	43	47
BRCA2	Germline	13	404	125	177	139	152
	Somatic	45	242	240	184	64	124
	Unknown	39	343	169	199	79	342
BRIP1	Germline	8	35	52	52	17	9
	Somatic	10	31	131	17	9	14
	Unknown	14	120	51	46	8	11
CDK12	Germline	3	19	20	17	6	28
	Somatic	22	40	97	110	9	246
	Unknown	32	217	93	123	13	132
CHEK1	Germline	2	10	13	4	1	0
	Somatic	6	6	48	2	1	3
	Unknown	4	6	11	2	0	0
CHEK2	Germline	18	134	91	26	26	32
	Somatic	17	67	115	17	4	14
	Unknown	19	112	91	47	17	33
FANCI	Germline	0	8	12	7	0	0
	Somatic	3	16	36	8	2	5
	Unknown	2	11	17	9	2	2
FANCL	Germline	10	45	60	18	10	18
	Somatic	11	35	66	19	11	18
	Unknown	18	55	97	53	16	23
PALB2	Germline	5	129	37	23	26	24
	Somatic	11	69	98	9	11	15
	Unknown	14	83	54	32	13	15
RAD51B	Germline	1	15	10	7	5	2
	Somatic	1	14	26	5	1	1
	Unknown	23	89	40	18	8	25
RAD51C	Germline	0	16	11	25	9	0
	Somatic	6	24	19	9	4	2
	Unknown	3	38	22	32	12	5

RAD51D	Germline	0	13	13	26	5	2
	Somatic	2	11	33	10	1	1
	Unknown	2	16	20	29	3	4
RAD54L	Germline	1	9	26	7	5	4
	Somatic	8	14	28	6	1	3
	Unknown	2	16	13	10	3	7

HRR, homologous recombination repair

Supplementary text

Putative reversion mutations

Of the putative reversion mutations, 173 are either large deletions that delete the original sensitizing truncation or frameshift mutations, or SNVs that convert nonsense into missense (e.g., *BRCA1* c.5444G>A W1815* to c.5443_5444TG>AA W1815K) or known missense to unknown missense (e.g., *BRCA1* c.5324T>G M1775R to c.5324_5325TG>GT M1775S). The remaining 18 reversion mutations are frameshift causing mutations adjacent to the original sensitizing mutation, but when combined, will restore the reading frame. It is worth noting that for those SNV reversion mutations, the reversion mutations often happen next to the original mutation, thus becoming two or three nucleotide variants. There are two known deleterious mutations, *BRCA1* M1775R (c.5324T>G) and A1708E (c.5123C>A), we identified the candidate reversion mutations as *BRCA1* M1775S (c.5324_5325TG>GT) and M1708G (c.5123_5124CG>GT), respectively. The reversion mutations change to a different amino acid. This suggests that they are not hotspot, and only certain amino acid can cause loss of function. Furthermore, in the vast majority of cases, the reversion mutations have lower allele frequencies (AF) than the original sensitizing mutations.

Tissue	Sample	Gene	variant _ type	fmi_reportable _ status	hrr	variant_cds	variant_pe	variant_af	chrom	pos	somatic_germline _ status	zygosity	Reversion
bladder	XRN:0V4MHY	BRCA1	SV	likely	TRUE	3477_3479AAA>C	K1160fs*4	0.652	chr17	41244069	unknown	homozygous	Sen
bladder	XRN:0V4MHY	BRCA1	SV	likely	FALSE	3456_3503del48	L1153_N1168del	0.1773	chr17		unknown		Rev
breast	XRN:16G7UN	BRCA1	SV	likely	TRUE	3598C>T	Q1200*	0.7815	chr17	41243950	germline	homozygous	Sen
breast	XRN:16G7UN	BRCA1	SV	likely	TRUE	2591_4096+17del1523	splice site 2591_4096+17del1523	0.0512	chr17		unknown		Rev
breast	XRN:YAL8EH	BRCA1	SV	likely	TRUE	2504_2505insAAGTATCCATTGGGACA	H835fs*17	0.291	chr17	41245043	unknown	homozygous	Sen
breast	XRN:YAL8EH	BRCA1	SV	likely	FALSE	2099_2713del615	L700_E904del	0.4113	chr17		unknown		Rev
breast	XRN:PUDBAP	BRCA1	SV	unknown	FALSE	3228_3234AGGGCCA>GGCC	G1077_P1078>A	0.3986	chr17	41244314	unknown	homozygous	Rev
breast	XRN:PUDBAP	BRCA1	SV	likely	TRUE	3228_3229delAG	G1077fs*8	0.1729	chr17	41244318	germline	not in tumor	Sen
breast	XRN:S7UTVL	BRCA1	SV	unknown	FALSE	2786_3100del315	F929_N1034>Y	0.1494	chr17		unknown		Rev
breast	XRN:S7UTVL	BRCA1	SV	likely	TRUE	2834_2835delGT	S945fs*6	0.8407	chr17	41244712	unknown	het	Sen
breast	XRN:X12PKP	BRCA1	SV	likely	TRUE	1736_2135del400	A579fs*24	0.1899	chr17		unknown		Rev
breast	XRN:X12PKP	BRCA1	SV	likely	TRUE	1713_1717delAGAAAT	E572fs*12	0.7903	chr17	41245830	germline	homozygous	Sen
breast	XRN:X0Q7WC	BRCA1	SV	likely	FALSE	2674_3528del855	L892_V1176del	0.18	chr17		unknown		Rev
breast	XRN:X0Q7WC	BRCA1	SV	likely	FALSE	2921_2938delTACAAAACCCATATCGTA	Q975_I980del	0.09	chr17	41244609	somatic	homozygous	Rev
breast	XRN:X0Q7WC	BRCA1	SV	likely	TRUE	2934T>G	Y978*	0.5	chr17	41244614	unknown	homozygous	Sen
breast	XRN:VMUS6A	BRCA1	SV	likely	FALSE	1086_1211del126	N363_E404del	0.2817	chr17		unknown	.	Rev
breast	XRN:VMUS6A	BRCA1	SV	likely	TRUE	1121_1121delC	T374fs*2	0.4518	chr17	41246426	unknown	homozygous	Sen
breast	XRN:WLTCTH	BRCA1	SV	likely	FALSE	5266_5271delICAGGAC	Q1756_D1757del	0.1919	chr17	41209074	unknown	homozygous	Rev
breast	XRN:WLTCTH	BRCA1	SV	likely	TRUE	5266_5267insC	Q1756fs*74	0.7014	chr17	41209079	unknown	homozygous	Sen
breast	XRN:P3PANB	BRCA1	SV	likely	TRUE	1789G>T	E597*	0.6174	chr17	41245759	unknown	homozygous	Sen
breast	XRN:P3PANB	BRCA1	SV	likely	FALSE	1750_1791del42	A584_E597del	0.5164	chr17		unknown	.	Rev
breast	XRN:4CYL9C	BRCA1	SV	likely	FALSE	2057_2216>GACAAGTAAAAGACATGAC	E686_K739>GQVKDMT	0.1714	chr17	41245329	germline	not in tumor	Rev
breast	XRN:4CYL9C	BRCA1	SV	likely	TRUE	2057_2060delAACA	E686fs*14	0.4154	chr17	41245487	unknown	homozygous	Sen
breast	XRN:SLWBJM	BRCA1	SV	unknown	FALSE	5267_5274AGGACAGA>CAGGACAG	Q1756_R1758>PGQ	0.1367	chr17	41209072	germline	not in tumor	Rev
breast	XRN:SLWBJM	BRCA1	SV	likely	TRUE	5266_5267insC	Q1756fs*74	0.4468	chr17	41209079	unknown	homozygous	Sen
breast	XRN:66BFNJ	BRCA1	SV	likely	FALSE	2293_2295GAG>TAC	E765Y	0.2263	chr17	41245253	unknown	homozygous	Rev
breast	XRN:66BFNJ	BRCA1	SV	likely	TRUE	2293G>T	E765*	0.6057	chr17	41245255	somatic	homozygous	Sen
breast	XRN:2LXTB3	BRCA1	SV	likely	FALSE	3678_3827del150	F1226_I1275del	0.257	chr17		unknown	.	Rev
breast	XRN:2LXTB3	BRCA1	SV	likely	TRUE	3748G>T	E1250*	0.6501	chr17	41243800	unknown	homozygous	Sen
breast	XRN:SANFC7	BRCA1	SV	known	TRUE	5324T>G	M1775R	0.49	chr17	41203088	unknown	homozygous	Sen
breast	XRN:SANFC7	BRCA1	SV	likely	FALSE	5324_5325TG>GT	M1775S	0.39	chr17	41203087	unknown	homozygous	Rev
breast	XRN:61L4VG	BRCA1	SV	likely	TRUE	3700_3704delGTAAA	V1234fs*8	0.2113	chr17	41243843	unknown	homozygous	Sen
breast	XRN:61L4VG	BRCA1	SV	unknown	FALSE	3700_3721>CAATACTATG	V1234_S1241>QYYA	0.5987	chr17	41243827	unknown	homozygous	Rev
breast	XRN:61L4VG	BRCA1	SV	likely	TRUE	3624_3639delATTAGAGTCCTCAGAA	L1209fs*21	0.1331	chr17	41243908	germline	not in tumor	Rev
breast	XRN:XTF8U4	BRCA1	SV	known	TRUE	280C>T	Q94*	0.35	chr17	41256906	unknown	homozygous	Sen
breast	XRN:XTF8U4	BRCA1	SV	likely	FALSE	280_282CAG>TAC	Q94Y	0.2	chr17	41256904	germline	not in tumor	Rev
breast	XRN:XTF8U4	BRCA1	SV	likely	FALSE	280_281CA>TC	Q94S	0.1	chr17	41256905	unknown	homozygous	Rev
breast	XRN:MKKK7S	BRCA1	SV	likely	TRUE	4116_4117delITG	C1372fs*1	0.3141	chr17	41243028	germline	not in tumor	Sen
breast	XRN:MKKK7S	BRCA1	SV	likely	FALSE	4101_4118delAGCAGCATCTGGGTGTGA	A1368_E1373del	0.2836	chr17	41243027	germline	not in tumor	Rev
breast	XRN:231W8F	BRCA1	SV	likely	TRUE	2456_2456delC	D821fs*25	0.69	chr17	41245091	unknown	homozygous	Sen
breast	XRN:231W8F	BRCA1	SV	unknown	FALSE	2397_2510del114	N799_V837>N	0.05	chr17		unknown	.	Rev
breast	XRN:QAG2VJ	BRCA1	SV	likely	TRUE	2806_2809delIGATA	D936fs*63	0.686	chr17	41244738	germline	homozygous	Sen
breast	XRN:QAG2VJ	BRCA1	SV	likely	FALSE	2806_2840>AGCCAGTTGATAATGCCAAATGT	D936_K947>SQLIMPNV	0.4847	chr17	41244708	somatic	homozygous	Rev
breast	XRN:3D07LV	BRCA1	SV	known	TRUE	5123C>A	A1708E	0.7444	chr17	41215920	somatic	homozygous	Sen
breast	XRN:3D07LV	BRCA1	SV	likely	FALSE	5123_5124CG>GT	A1708G	0.0799	chr17	41215919	unknown	homozygous	Rev
breast	XRN:PTKK1Q	BRCA1	SV	unknown	FALSE	5161_5162CA>TT	Q1721L	0.68	chr17	41215381	somatic	homozygous	Rev
breast	XRN:PTKK1Q	BRCA1	SV	likely	TRUE	5161C>T	Q1721*	0.16	chr17	41215382	germline	not in tumor	Sen
breast	XRN:BA7GC0	BRCA1	SV	unknown	FALSE	5505A>G	R1835R	0.2791	chr17	41197782	unknown	homozygous	Rev
breast	XRN:BA7GC0	BRCA1	SV	known	TRUE	5503C>T	R1835*	0.5325	chr17	41197784	somatic	homozygous	Sen
breast	XRN:BA7GC0	BRCA1	SV	unknown	FALSE	5503_5505CGA>TGG	R1835W	0.2764	chr17	41197782	unknown	homozygous	Rev
breast	XRN:6KMA34	BRCA1	SV	likely	FALSE	1954_2033>AAAAAAAGTACAACCAAATGCCA GTCAGGCAC	K652_R664>KKSTTKCQSGT	0.1443	chr17	41245514	germline	not in tumor	Rev
breast	XRN:6KMA34	BRCA1	SV	known	TRUE	1961delA	K654fs*47	0.5616	chr17	41245586	unknown	homozygous	Sen
lung	XRN:HEV47D	BRCA1	SV	likely	TRUE	3514_3515GA>TG	E1172*	0.46	chr17	41244034	somatic	het	Sen
lung	XRN:HEV47D	BRCA1	SV	unknown	FALSE	3515A>G	E1172G	0.45	chr17	41244033	somatic	het	Rev
ovary	XRN:SAKNPU	BRCA1	SV	likely	TRUE	2995_3001delCTAGAGG	L999fs*23	0.1957	chr17	41244546	germline	not in tumor	Sen
ovary	XRN:SAKNPU	BRCA1	SV	likely	FALSE	2995_3008CTAGAGGAAAACCTT>AAAAC	L999_F1003>KT	0.2233	chr17	41244540	germline	not in tumor	Rev
ovary	XRN:XRTCMH	BRCA1	SV	likely	FALSE	3462_3522>TTTA	L1154_S1174>FL	0.2561	chr17	41244029	unknown	homozygous	Rev
ovary	XRN:XRTCMH	BRCA1	SV	likely	TRUE	3485delA	D1162fs*48	0.6316	chr17	41244062	somatic	homozygous	Sen
ovary	XRN:8420U7	BRCA1	SV	likely	TRUE	5444G>A	W1815*	0.2163	chr17	41199683	somatic	homozygous	Sen
ovary	XRN:8420U7	BRCA1	SV	unknown	FALSE	5443_5444TG>AA	W1815K	0.6	chr17	41199683	somatic	homozygous	Rev
ovary	XRN:SMWUX1	BRCA1	SV	likely	TRUE	685delT	S229fs*5	0.5667	chr17	41246862	somatic	homozygous	Sen
ovary	XRN:SMWUX1	BRCA1	SV	likely	FALSE	681_695delATTTTCTGAGACGGA	E227_T231del	0.215	chr17	41246852	germline	not in tumor	Rev
ovary	XRN:61HM5Y	BRCA1	SV	likely	TRUE	2475delIC	D825fs*21	0.5982	chr17	41245072	unknown	homozygous	Sen
ovary	XRN:61HM5Y	BRCA1	SV	likely	TRUE	2529_2554del26	S844fs*1	0.143	chr17		unknown	.	Rev
ovary	XRN:61HM5Y	BRCA1	SV	likely	FALSE	2448_2516del69	G817_H839del	0.0703	chr17		unknown	.	Rev
ovary	XRN:61HM5Y	BRCA1	SV	likely	FALSE	2394_3272del879	N799_P1091del	0.0954	chr17		unknown	.	Rev
ovary	XRN:VYQJ23	BRCA1	SV	likely	TRUE	2681_2682delAA	K894fs*8	0.4723	chr17	41244865	somatic	homozygous	Sen

ovary	XRN:VYQJ23	BRCA1	SV	likely	FALSE	2664_2729del66	H888_N909del	0.485	chr17		unknown	.	Rev
ovary	XRN:EBJ7H2	BRCA1	SV	likely	FALSE	843_880>TTACAGCATGAGAACAG	S282_K294>YSMRTE	0.3354	chr17	41246668	unknown	homozygous	Rev
ovary	XRN:EBJ7H2	BRCA1	SV	likely	TRUE	843_846delCTCA	S282fs*15	0.66	chr17	41246701	germline	homozygous	Sen
ovary	XRN:A33RD1	BRCA1	SV	likely	TRUE	3066delA	V1023fs*1	0.7788	chr17	41244481	unknown	homozygous	Sen
ovary	XRN:A33RD1	BRCA1	SV	likely	FALSE	2852_3409del558	R951_P1136del	0.1869	chr17		unknown	.	Rev
ovary	XRN:Q01P4P	BRCA1	SV	likely	TRUE	1016_1017insA	V340fs*6	0.4052	chr17	41246531	somatic	homozygous	Sen
ovary	XRN:Q01P4P	BRCA1	SV	likely	TRUE	953_998del46	H318fs*8	0.2466	chr17		unknown	.	Rev
ovary	XRN:A4J2GV	BRCA1	SV	unknown	FALSE	4327_4328CG>TC	R1443S	0.6522	chr17	41234450	somatic	homozygous	Rev
ovary	XRN:A4J2GV	BRCA1	SV	likely	TRUE	4327C>T	R1443*	0.192	chr17	41234451	germline	not in tumor	Sen
ovary	XRN:G77428	BRCA1	SV	unknown	FALSE	5267_5268AG>CA	Q1756P	0.6674	chr17	41209078	somatic	homozygous	Rev
ovary	XRN:G77428	BRCA1	SV	likely	TRUE	5266_5267insC	Q1756fs*74	0.1641	chr17	41209079	germline	not in tumor	Sen
ovary	XRN:C993XM	BRCA1	SV	likely	FALSE	4327_4329CGA>TGG	R1443W	0.3532	chr17	41234449	unknown	homozygous	Rev
ovary	XRN:C993XM	BRCA1	SV	likely	TRUE	4327C>T	R1443*	0.5043	chr17	41234451	unknown	homozygous	Sen
ovary	XRN:C993XM	BRCA1	SV	unknown	FALSE	4329A>G	R1443R	0.3501	chr17	41234449	unknown	homozygous	Rev
ovary	XRN:MRWJE2	BRCA1	SV	likely	FALSE	3045_3701del657	N1016_V1234del	0.61	chr17		unknown	.	Rev
ovary	XRN:MRWJE2	BRCA1	SV	likely	TRUE	3479_3489delIAGGAAGATACT	E1161fs*3	0.5	chr17	41244058	somatic	homozygous	Sen
ovary	XRN:SAWD73	BRCA1	SV	unknown	FALSE	1963T>G	Y655D	0.2475	chr17	41245585	germline	not in tumor	Rev
ovary	XRN:SAWD73	BRCA1	SV	known	TRUE	1961_1962insA	Y655fs*18	0.4537	chr17	41245586	unknown	homozygous	Sen
ovary	XRN:QTJ3FW	BRCA1	SV	likely	TRUE	4327C>T	R1443*	0.6038	chr17	41234451	somatic	homozygous	Sen
ovary	XRN:QTJ3FW	BRCA1	SV	likely	FALSE	4327_4329CGA>TGT	R1443C	0.2158	chr17	41234449	germline	not in tumor	Rev
ovary	XRN:QTJ3FW	BRCA1	SV	unknown	FALSE	4329A>T	R1443R	0.2182	chr17	41234449	germline	not in tumor	Rev
ovary	XRN:9PS28K	BRCA1	SV	likely	TRUE	5277delG	I1760fs*5	0.1186	chr17	41209068	somatic	homozygous	Rev
ovary	XRN:9PS28K	BRCA1	SV	likely	TRUE	5266_5267insC	Q1756fs*74	0.6902	chr17	41209079	unknown	homozygous	Sen
ovary	XRN:Y8EX6Q	BRCA1	SV	likely	FALSE	4183_4184CA>TC	Q1395S	0.1935	chr17	41242962	germline	not in tumor	Rev
ovary	XRN:Y8EX6Q	BRCA1	SV	likely	TRUE	4183C>T	Q1395*	0.6907	chr17	41242963	somatic	homozygous	Sen
ovary	XRN:PR99F5	BRCA1	SV	likely	TRUE	3874delT	S1292fs*15	0.8103	chr17	41243673	somatic	homozygous	Sen
ovary	XRN:PR99F5	BRCA1	SV	likely	FALSE	3874_3928>CTGCTAGCTTGTTTTCTTCACAGTG	S1292_T1310>LLACFLHSA	0.1615	chr17	41243617	unknown	homozygous	Rev
ovary	XRN:PR99F5	BRCA1	SV	unknown	FALSE	3871_3873TGT>ATG	C1291M	0.0744	chr17	41243675	unknown	homozygous	Rev
ovary	XRN:T3VFL1	BRCA1	SV	likely	FALSE	4117_4119GAG>TAC	E1373Y	0.2783	chr17	41243027	somatic	homozygous	Rev
ovary	XRN:T3VFL1	BRCA1	SV	likely	TRUE	4117G>T	E1373*	0.3616	chr17	41243029	germline	not in tumor	Sen
ovary	XRN:SFL0AP	BRCA1	SV	likely	TRUE	3893C>A	S1298*	0.75	chr17	41243655	unknown	homozygous	Sen
ovary	XRN:SFL0AP	BRCA1	SV	unknown	FALSE	3856_3900del45	S1286_C1300del	0.25	chr17		unknown	.	Rev
ovary	XRN:9PRM1R	BRCA1	SV	likely	FALSE	1316_1341>GCTTAATATTA	A439_V447>GLIL	0.3406	chr17	41246208	unknown	homozygous	Rev
ovary	XRN:9PRM1R	BRCA1	SV	likely	TRUE	1315_1316insG	A439fs*5	0.476	chr17	41246232	unknown	homozygous	Sen
ovary	XRN:G4XR44	BRCA1	SV	likely	TRUE	1102G>T	E368*	0.399	chr17	41246446	germline	not in tumor	Sen
ovary	XRN:G4XR44	BRCA1	SV	unknown	FALSE	1102_1104GAA>TAT	E368Y	0.2228	chr17	41246444	somatic	homozygous	Rev
ovary	XRN:MJMXX6	BRCA1	SV	likely	TRUE	2215A>T	K739*	0.199	chr17	41245333	germline	not in tumor	Sen
ovary	XRN:MJMXX6	BRCA1	SV	likely	FALSE	2215_2217AAA>TAT	K739Y	0.4315	chr17	41245331	unknown	homozygous	Rev
ovary	XRN:XJQL4T	BRCA1	SV	likely	TRUE	3748G>T	E1250*	0.4834	chr17	41243800	unknown	NA	Sen
ovary	XRN:XJQL4T	BRCA1	SV	likely	FALSE	3748_3750GAG>TAT	E1250Y	0.2755	chr17	41243798	unknown	NA	Rev
ovary	XRN:46E4J7	BRCA1	SV	likely	TRUE	1787_4096+340del2650	splice site 1787_4096+340del2650	0.535	chr17		unknown	.	Rev
ovary	XRN:46E4J7	BRCA1	SV	likely	TRUE	1953_1954insG	K652fs*21	0.6616	chr17	41245594	somatic	homozygous	Sen
ovary	XRN:AD95XJ	BRCA1	SV	likely	TRUE	2504_2511delATGAAGTT	H835fs*14	0.77	chr17	41245036	somatic	homozygous	Rev
ovary	XRN:AD95XJ	BRCA1	SV	likely	TRUE	2456_2456delC	D821fs*25	0.86	chr17	41245091	unknown	homozygous	Sen
ovary	XRN:8CKQXX	BRCA1	SV	likely	FALSE	2910_2952>CATGGACTTTTACAAAACCCATA TCGTATACCACCAC	K970_F984>NMDFYKTHIVYHH	0.2235	chr17	41244595	unknown	.	Rev
ovary	XRN:8CKQXX	BRCA1	SV	likely	TRUE	2910delA	K970fs*30	0.6942	chr17	41244637	somatic	homozygous	Sen
ovary	XRN:397H1Y	BRCA1	SV	likely	FALSE	955_1009>GTAATGATAGCGGACTCCCAGC ACAGA	N319_E337>VMIGGLPAQK	0.5653	chr17	41246531	unknown	NA	Rev
ovary	XRN:397H1Y	BRCA1	SV	likely	TRUE	955_982del28	N319fs*13	0.5659	chr17		unknown	.	Sen
ovary	XRN:QURPR4	BRCA1	SV	likely	FALSE	739_789>ACACCACTGAGAAGCGTGCAGCTT	N247_G263>TPLRSVQL	0.4022	chr17	41246807	unknown	homozygous	Rev
ovary	XRN:QURPR4	BRCA1	SV	likely	TRUE	763_788del26	E255fs*1	0.6019	chr17		unknown	.	Sen
ovary	XRN:8PNS11	BRCA1	SV	likely	FALSE	4060_4071delAATAATCAAGAA	N1354_E1357del	0.38	chr17	41243476	unknown	homozygous	Rev
ovary	XRN:8PNS11	BRCA1	SV	likely	TRUE	4065_4068delTCAA	N1355fs*10	0.3133	chr17	41243479	germline	not in tumor	Sen
prostate	XRN:KQJ6XE	BRCA1	SV	likely	TRUE	3770_3771delAG	E1257fs*9	0.2432	chr17	41243776	somatic	het	Rev
prostate	XRN:KQJ6XE	BRCA1	SV	likely	TRUE	3756_3759delGTCT	S1253fs*10	0.4323	chr17	41243788	somatic	het	Sen

Tissue	Sample	Gene	variant_type	fmi_reportable_status	hrr	variant_cds	variant_pe	variant_af	chrom	pos	somatic_germline_status	zygosity	Reversion
bladder	XRN:JF11GK	BRCA2	SV	likely	TRUE	3140_3174del35	I1047fs*8	0.2203	chr13		unknown	.	Rev
bladder	XRN:JF11GK	BRCA2	SV	likely	TRUE	3189_3192delGTCA	S1064fs*12	0.7958	chr13	32911680	somatic	homozygous	Sen
breast	XRN:T1489K	BRCA2	SV	likely	TRUE	8744_8747CTTA>AATGCA	Y2916fs*12	0.57	chr13	32950920	somatic	homozygous	Rev
breast	XRN:T1489K	BRCA2	SV	likely	TRUE	8755-1G>T	splice site 8755-1G>T	0.8	chr13	32953453	germline	homozygous	Sen
breast	XRN:6HJVM5	BRCA2	SV	likely	FALSE	2765_3829>ATCATCATT	F922_N1277>YHHY	0.5386	chr13	32911256	somatic	homozygous	Rev
breast	XRN:6HJVM5	BRCA2	SV	known	TRUE	2808_2811delACAA	A938fs*21	0.576	chr13	32911299	somatic	homozygous	Sen
breast	XRN:4B3E6Y	BRCA2	SV	likely	FALSE	5231_5668delIGCATGTCTAACAGCTATTCCTA CCATTCTGATGAGGTATATAATGATTCAGGA TATCTCTCAAAAAATAAAGTTGATTCTGGTAT TGAGCCAGTATTGAAGAATGTTGAAGATCAA AAAAACACTAGTTTTTCCAAAGTAATATCCAA	S1744_I1889del	0.16	chr13	32913722	germline	not in tumor	Rev

						TGTAAGATGCAATGCATACCCACAACT GTAAATGAAGATATTTGCGTTGAGGAACTTG TGACTAGCTCTTCACCCTGCAAAAAATAAAAA TGCAGCCATTAAATTGTCCATATCTAATAGTA ATAATTTTGAGGTAGGGCCACCTGCATTTAG GATAGCCAGTGGTAAATCGTTTGTGTTTCA CATGAAACAATTAAGGAGTAAAGACATATT TACAGACAGTTTCAGTAAAGTAATTAAGGAA AACAAACGAGAATAATCAAAAAATTTGCCAAA CGAAAATTA							
breast	XRN:4B3E6Y	BRCA2	SV	likely	TRUE	5542delA	S1848fs*15	0.96	chr13	32914033	germline	homozygous	Sen
breast	XRN:BF489D	BRCA2	SV	likely	FALSE	6615_6634GAAAACAAATATAGAAGTTT>AA	K2206_C2212>S	0.2354	chr13	32915107	germline	not in tumor	Rev
breast	XRN:BF489D	BRCA2	SV	likely	TRUE	6615_6628delGAAAACAAATATAG	K2206fs*14	0.3695	chr13	32915106	unknown	homozygous	Sen
breast	XRN:DY9QKR	BRCA2	SV	likely	TRUE	6275_6276delITT	L2092fs*7	0.3814	chr13	32914766	somatic	homozygous	Sen
breast	XRN:DY9QKR	BRCA2	SV	likely	FALSE	6088_6276>CTGAGCATAGTC	N2030_L2092>LSIV	0.4042	chr13	32914580	somatic	homozygous	Rev
breast	XRN:UE3KEM	BRCA2	SV	likely	TRUE	4131_4132insTGAGGA	T1378*	0.7131	chr13	32912623	somatic	homozygous	Sen
breast	XRN:UE3KEM	BRCA2	SV	likely	FALSE	3817_4170del354	F1273_L1390del	0.2999	chr13		unknown	.	Rev
breast	XRN:VBMD1L	BRCA2	SV	likely	FALSE	728_733delATGATA	N243_D244del	0.1474	chr13	32905101	somatic	het	Rev
breast	XRN:VBMD1L	BRCA2	SV	likely	TRUE	728_729delAT	N243fs*2	0.3161	chr13	32905101	somatic	het	Sen
breast	XRN:91VK98	BRCA2	SV	known	TRUE	2808_2811delACAA	A938fs*21	0.7764	chr13	32911299	somatic	homozygous	Sen
breast	XRN:91VK98	BRCA2	SV	likely	FALSE	2670_2840del171	F890_D946del	0.3698	chr13		unknown	.	Rev
breast	XRN:PU569Q	BRCA2	SV	likely	FALSE	5946_5967>G	S1982_S1989>R	0.1921	chr13	32914438	germline	not in tumor	Rev
breast	XRN:PU569Q	BRCA2	SV	known	TRUE	5946delIT	S1982fs*22	0.5444	chr13	32914437	somatic	homozygous	Sen
breast	XRN:NB8RA6	BRCA2	SV	likely	TRUE	5621_5624delTTAA	I1874fs*34	0.4409	chr13	32914112	somatic	homozygous	Sen
breast	XRN:NB8RA6	BRCA2	SV	likely	FALSE	5442_6041del600	T1815_V2014del	0.4708	chr13		unknown	.	Rev
breast	XRN:4G5QQX	BRCA2	SV	likely	FALSE	5794_6471del678	H1932_Q2157del	0.3529	chr13		unknown	.	Rev
breast	XRN:4G5QQX	BRCA2	SV	likely	TRUE	5799_5802delCCAA	N1933fs*29	0.7229	chr13	32914290	somatic	homozygous	Sen
breast	XRN:LDG2PG	BRCA2	SV	likely	FALSE	5680_5682TAC>GAG	Y1894E	0.3027	chr13	32914172	unknown	homozygous	Rev
breast	XRN:LDG2PG	BRCA2	SV	likely	TRUE	5682C>G	Y1894*	0.467	chr13	32914174	somatic	homozygous	Sen
breast	XRN:M5E422	BRCA2	SV	likely	TRUE	5675_6841+314del1481	splice site 5675_6841+314del1481	0.1673	chr13		unknown	.	Rev
breast	XRN:M5E422	BRCA2	SV	likely	TRUE	6618_6630delAACAAATATAGAA	T2207fs*18	0.2592	chr13	32915109	somatic	homozygous	Rev
breast	XRN:M5E422	BRCA2	SV	likely	TRUE	5362_5363insT	S1788fs*19	0.5659	chr13	32913854	germline	homozygous	Sen
breast	XRN:M5E422	BRCA2	SV	likely	TRUE	5875_5876insTGTA	K1959fs*2	0.2318	chr13	32914367	somatic	homozygous	Rev
breast	XRN:CGUH0J	BRCA2	SV	unknown	FALSE	2312_2611del1300	L771_I870del	0.8057	chr13		unknown	.	Rev
breast	XRN:CGUH0J	BRCA2	SV	likely	TRUE	2385_2386insAA	D796fs*15	0.4111	chr13	32910877	unknown	homozygous	Sen
breast	XRN:YS5MEA	BRCA2	SV	likely	TRUE	5800_6841+200del1242	splice site 5800_6841+200del1242	0.2916	chr13		unknown	.	Rev
breast	XRN:YS5MEA	BRCA2	SV	likely	TRUE	6268_6269delICA	H2090fs*1	0.4856	chr13	32914759	somatic	homozygous	Sen
breast	XRN:B9MDNQ	BRCA2	SV	likely	FALSE	3533_5185del1653	S1178_D1728del	0.2925	chr13		unknown	.	Rev
breast	XRN:B9MDNQ	BRCA2	SV	likely	TRUE	4936_4939delGAAA	E1646fs*23	0.6845	chr13	32913427	somatic	homozygous	Sen
breast	XRN:7BR333	BRCA2	SV	likely	FALSE	5038_5241>AATGGT	S1680_N1747>NG	0.1918	chr13	32913530	somatic	homozygous	Rev
breast	XRN:7BR333	BRCA2	SV	unknown	FALSE	4625_6013del1389	V1542_E2004del	0.0691	chr13		unknown	.	Rev
breast	XRN:7BR333	BRCA2	SV	likely	TRUE	5130_5133delITGTA	Y1710fs*1	0.508	chr13	32913621	unknown	homozygous	Sen
breast	XRN:LK1US2	BRCA2	SV	likely	FALSE	4121_4214>AGGAGGGAAACACTCAGATTAAA GAA	K1374_N1405>RRETLRLKN	0.47	chr13	32912612	unknown	homozygous	Rev
breast	XRN:LK1US2	BRCA2	SV	likely	TRUE	4121_4121delA	K1374fs*14	0.71	chr13	32912612	somatic	homozygous	Sen
breast	XRN:61XAYJ	BRCA2	SV	unknown	FALSE	5630_5785del156	N1877_E1928del	0.29	chr13		unknown	.	Rev
breast	XRN:61XAYJ	BRCA2	SV	known	TRUE	5645C>A	S1882*	0.78	chr13	32914137	somatic	homozygous	Sen
breast	XRN:KS86WH	BRCA2	SV	likely	TRUE	5350_5351delAA	N1784fs*2	0.2398	chr13	32913836	unknown	homozygous	Sen
breast	XRN:KS86WH	BRCA2	SV	likely	FALSE	5333_5346ATGTTGAAGATCAA>TC	N1778_N1784>IKN	0.1019	chr13	32913825	somatic	homozygous	Rev
breast	XRN:CJMBLW	BRCA2	SV	likely	FALSE	2808_2815ACAAGCAA>GCAAC	A938_T939>P	0.2915	chr13	32911305	unknown	homozygous	Rev
breast	XRN:CJMBLW	BRCA2	SV	known	TRUE	2808_2811delACAA	A938fs*21	0.5339	chr13	32911299	somatic	homozygous	Sen
breast	XRN:41A01U	BRCA2	SV	unknown	FALSE	6486_6506del21	K2162_T2169>N	0.6236	chr13		unknown	.	Rev
breast	XRN:41A01U	BRCA2	SV	likely	TRUE	6481_6484delIGACA	D2161fs*6	0.193	chr13	32914972	germline	not in tumor	Sen
breast	XRN:Y9HEXR	BRCA2	SV	likely	TRUE	5682C>G	Y1894*	0.5882	chr13	32914174	germline	homozygous	Sen
breast	XRN:Y9HEXR	BRCA2	SV	likely	FALSE	5089_6171del1083	I1697_G2057del	0.149	chr13		unknown	.	Rev
breast	XRN:CPG8LV	BRCA2	SV	likely	TRUE	5146_5149delITATG	Y1716fs*8	0.7192	chr13	32913637	germline	homozygous	Sen
breast	XRN:CPG8LV	BRCA2	SV	likely	FALSE	4695_5648del954	T1566_K1883del	0.0677	chr13		unknown	.	Rev
breast	XRN:TUCB63	BRCA2	SV	likely	FALSE	1799_1800AT>TA	Y600L	0.4219	chr13	32907414	somatic	homozygous	Rev
breast	XRN:TUCB63	BRCA2	SV	likely	TRUE	1800T>A	Y600*	0.2857	chr13	32907415	germline	not in tumor	Sen
breast	XRN:NPWHFC	BRCA2	SV	likely	TRUE	8869C>T	Q2957*	0.4444	chr13	32953568	unknown	homozygous	Sen
breast	XRN:NPWHFC	BRCA2	SV	unknown	FALSE	8872_8880delAAGGAACAA	K2958_Q2960del	0.4676	chr13	32953570	unknown	homozygous	Rev
breast	XRN:7BNDH6	BRCA2	SV	likely	FALSE	3265_3289>TCAGATGTTA	Q1089_F1097>SDVI	0.2035	chr13	32911757	germline	not in tumor	Rev
breast	XRN:7BNDH6	BRCA2	SV	likely	FALSE	3265_3296>TCAGATGTTATTTTCCAAGCAGG	Q1089_S1099>SDVIFQAG	0.1301	chr13	32911757	germline	not in tumor	Rev
breast	XRN:7BNDH6	BRCA2	SV	likely	TRUE	3264_3265insT	Q1089fs*10	0.4522	chr13	32911756	unknown	homozygous	Sen
breast	XRN:ARDKJ9	BRCA2	SV	likely	TRUE	6491delA	Q2164fs*4	0.9282	chr13	32914982	germline	homozygous	Sen
breast	XRN:ARDKJ9	BRCA2	SV	likely	TRUE	6472_6485delTTTCAACAAGACAA	F2158fs*13	0.5008	chr13	32914963	unknown	homozygous	Rev
breast	XRN:96QE4H	BRCA2	SV	likely	FALSE	5812_5841del30	G1938_P1947del	0.1632	chr13		unknown	.	Rev
breast	XRN:96QE4H	BRCA2	SV	likely	TRUE	5785_5798delATTTTACAACATAA	I1929fs*11	0.1187	chr13	32914276	unknown	homozygous	Rev
breast	XRN:96QE4H	BRCA2	SV	likely	TRUE	5828delIC	S1943fs*20	0.8227	chr13	32914319	unknown	homozygous	Sen
breast	XRN:YUARFF	BRCA2	SV	likely	TRUE	1796_1800delCTTAT	S599fs*1	0.3781	chr13	32907410	unknown	homozygous	Sen
breast	XRN:YUARFF	BRCA2	SV	likely	FALSE	1789_1798GAAACATCTT>AAAC	E597_Y600>KH	0.2637	chr13	32907404	unknown	homozygous	Rev

breast	XRN:14K7MQ	BRCA2	SV	likely	TRUE	5616_5620delAGTAA	K1872fs*2	0.7917	chr13	32914107	germline	homozygous	Sen
breast	XRN:14K7MQ	BRCA2	SV	likely	FALSE	5336_6160del825	V1779_S2053del	0.3015	chr13		unknown	.	Rev
breast	XRN:NETHD6	BRCA2	SV	likely	TRUE	2957_2958insG	N986fs*2	0.7602	chr13	32911449	somatic	homozygous	Sen
breast	XRN:NETHD6	BRCA2	SV	likely	FALSE	2957_2958insAAG	N986>KS	0.1073	chr13	32911449	germline	not in tumor	Rev
breast	XRN:CM7DU4	BRCA2	SV	likely	TRUE	2380_2381insA	M794fs*8	0.3514	chr13	32910872	somatic	het	Sen
breast	XRN:CM7DU4	BRCA2	SV	likely	FALSE	2358_2384del27	R787_S795del	0.0605	chr13		unknown	.	Rev
breast	XRN:V30G6V	BRCA2	SV	likely	FALSE	755_771ACAGTGAAAACACAAAT>TGAAAACA	D252_N257>VKT	0.0647	chr13	32905129	germline	not in tumor	Rev
breast	XRN:V30G6V	BRCA2	SV	likely	TRUE	755_758delACAG	D252fs*24	0.1529	chr13	32905128	germline	not in tumor	Sen
breast	XRN:V30G6V	BRCA2	SV	likely	FALSE	755_765ACAGTGAAAAC>TGAAA	D252_N255>VK	0.1353	chr13	32905129	germline	not in tumor	Rev
breast	XRN:V30G6V	BRCA2	SV	likely	TRUE	802_842del41	K268fs*13	0.0938	chr13		unknown	.	Rev
breast	XRN:RFRU6E	BRCA2	SV	likely	TRUE	5576_5579delTTAA	I1859fs*3	0.5535	chr13	32914067	unknown	het	Sen
breast	XRN:RFRU6E	BRCA2	SV	likely	FALSE	4267_5685del1419	T1423_E1895del	0.1011	chr13		unknown	.	Rev
breast	XRN:311QN1	BRCA2	SV	likely	TRUE	6405_6409delCTTAA	N2135fs*3	0.6773	chr13	32914896	unknown	homozygous	Sen
breast	XRN:311QN1	BRCA2	SV	likely	FALSE	6360_6443del84	E2121_S2148del	0.1694	chr13		unknown	.	Rev
breast	XRN:1908J2	BRCA2	SV	likely	FALSE	7480_7481CG>TC	R2494S	0.398	chr13	32930609	somatic	homozygous	Rev
breast	XRN:1908J2	BRCA2	SV	likely	TRUE	7480C>T	R2494*	0.2901	chr13	32930609	germline	not in tumor	Sen
breast	XRN:PVB7E9	BRCA2	SV	likely	FALSE	4763_6250del1488	A1588_F2083del	0.4852	chr13		unknown	.	Rev
breast	XRN:PVB7E9	BRCA2	SV	likely	TRUE	5682C>G	Y1894*	0.4973	chr13	32914174	somatic	homozygous	Sen
breast	XRN:NMXSWW	BRCA2	SV	likely	FALSE	810_1025>GGGAATTCATTT	N272_E342>IHL	0.3124	chr13	32906425	unknown	homozygous	Rev
breast	XRN:NMXSWW	BRCA2	SV	likely	TRUE	810delA	N272fs*5	0.8421	chr13	32906424	unknown	homozygous	Sen
breast	XRN:61RW6R	BRCA2	SV	likely	TRUE	3922G>T	E1308*	0.66	chr13	32912414	unknown	homozygous	Sen
breast	XRN:61RW6R	BRCA2	SV	unknown	FALSE	3924A>C	E1308D	0.15	chr13	32912416	unknown	homozygous	Rev
breast	XRN:SN2SFF	BRCA2	SV	likely	TRUE	655_681+333del360	splice site 655_681+333del360	0.2425	chr13		unknown	.	Rev
breast	XRN:SN2SFF	BRCA2	SV	likely	TRUE	631+1G>A	splice site 631+1G>A	0.7477	chr13	32900751	germline	homozygous	Sen
breast	XRN:NWYRKQ	BRCA2	SV	likely	TRUE	1929delG	R645fs*15	0.5933	chr13	32910420	germline	homozygous	Sen
breast	XRN:NWYRKQ	BRCA2	SV	likely	TRUE	1941_1957delTTCACAGAATGATTCTG	C647fs*1	0.2293	chr13	32910432	somatic	homozygous	Rev
breast	XRN:QTWLGH	BRCA2	SV	likely	FALSE	3860_3916>TAATAA	N1287_V1306>III	0.2588	chr13	32912352	unknown	homozygous	Rev
breast	XRN:QTWLGH	BRCA2	SV	likely	TRUE	3860delA	N1287fs*6	0.5435	chr13	32912351	unknown	homozygous	Sen
breast	XRN:TV5RE9	BRCA2	SV	likely	FALSE	2205_3155del951	A736_A1052del	0.1366	chr13		unknown	.	Rev
breast	XRN:TV5RE9	BRCA2	SV	likely	TRUE	2204_2205insC	A736fs*15	0.4057	chr13	32910696	germline	not in tumor	Sen
breast	XRN:2P9XL4	BRCA2	SV	likely	TRUE	5576_5579delTTAA	I1859fs*3	0.2867	chr13	32914067	germline	not in tumor	Sen
breast	XRN:2P9XL4	BRCA2	SV	likely	FALSE	5571_5603del33	E1857_T1867del	0.437	chr13		unknown	.	Rev
lung	XRN:TKS8GL	BRCA2	SV	likely	TRUE	2426T>G	L809*	0.5074	chr13	32910918	unknown	homozygous	Sen
lung	XRN:TKS8GL	BRCA2	SV	unknown	FALSE	2426_2427TA>GG	L809W	0.2944	chr13	32910918	unknown	homozygous	Rev
lung	XRN:B3ND03	BRCA2	SV	likely	TRUE	1789delG	E597fs*17	0.259	chr13	32907403	unknown	homozygous	Sen
lung	XRN:B3ND03	BRCA2	SV	likely	FALSE	1789_1814>AAACATCTTATAAAGGAAAAAAAAAT	E597_I605>KHLIKEKKI	0.2449	chr13	32907428	unknown	homozygous	Rev
lung	XRN:M434KS	BRCA2	SV	likely	TRUE	1817_1819CGA>TTT	P606_K607>L*	0.4735	chr13	32907432	germline	het	Sen
lung	XRN:M434KS	BRCA2	SV	unknown	FALSE	1818G>T	P606P	0.47	chr13	32907433	germline	het	Rev
lung	XRN:5FUJHA	BRCA2	SV	likely	TRUE	6110_6110delA	E2037fs*3	0.25	chr13	32914601	unknown	homozygous	Sen
lung	XRN:5FUJHA	BRCA2	SV	unknown	FALSE	6082_6111delGAAGAAAATACTGCTATACGTA CTCCAGAA	E2028_E2037del	0.76	chr13	32914573	somatic	homozygous	Rev
ovary	XRN:TVKR6E	BRCA2	SV	unknown	FALSE	2470_3207del738	L824_S1069del	0.279	chr13		unknown	.	Rev
ovary	XRN:TVKR6E	BRCA2	SV	likely	TRUE	2957_2958insA	N986fs*2	0.5336	chr13	32911449	somatic	homozygous	Sen
ovary	XRN:3GQ05E	BRCA2	SV	known	TRUE	5946delT	S1982fs*22	0.8923	chr13	32914437	somatic	homozygous	Sen
ovary	XRN:3GQ05E	BRCA2	SV	likely	FALSE	5385_6152del768	K1795_V2050del	0.2567	chr13		unknown	.	Rev
ovary	XRN:990QLG	BRCA2	SV	likely	FALSE	4613_4633del21	S1538_L1545>F	0.1766	chr13		unknown	.	Rev
ovary	XRN:990QLG	BRCA2	SV	likely	TRUE	4631delA	N1544fs*24	0.6552	chr13	32913122	unknown	homozygous	Sen
ovary	XRN:H474MF	BRCA2	SV	unknown	FALSE	2015_2032delGAAATGAAACATGTTCTA	R672_S677del	0.7969	chr13	32910506	unknown	homozygous	Rev
ovary	XRN:H474MF	BRCA2	SV	likely	TRUE	2020G>T	E674*	0.3333	chr13	32910512	unknown	homozygous	Sen
ovary	XRN:9DGL41	BRCA2	SV	likely	FALSE	4792_6597del1806	L1598_T2199del	0.25	chr13		unknown	.	Rev
ovary	XRN:9DGL41	BRCA2	SV	likely	TRUE	5130_5133delTGTA	Y1710fs*1	0.6	chr13	32913621	somatic	homozygous	Sen
ovary	XRN:GDTE3M	BRCA2	SV	likely	FALSE	4174_4542del369	V1392_E1514del	0.2087	chr13		unknown	.	Rev
ovary	XRN:GDTE3M	BRCA2	SV	likely	TRUE	4444G>T	E1482*	0.2041	chr13	32912936	unknown	homozygous	Sen
ovary	XRN:6UN9V2	BRCA2	SV	likely	TRUE	5864C>A	S1955*	0.2256	chr13	32914356	unknown	homozygous	Sen
ovary	XRN:6UN9V2	BRCA2	SV	likely	FALSE	5863_5864TC>GA	S1955E	0.0526	chr13	32914355	somatic	homozygous	Rev
ovary	XRN:6UN9V2	BRCA2	SV	likely	FALSE	5848_5868del21	V1950_D1956del	0.0777	chr13		unknown	.	Rev
ovary	XRN:6UN9V2	BRCA2	SV	likely	FALSE	5730_6056del327	D1911_N2019del	0.016	chr13		unknown	.	Rev
ovary	XRN:KUBX58	BRCA2	SV	likely	FALSE	3826_3848>AAAAC	E1276_V1283>KL	0.05	chr13	32912317	somatic	homozygous	Rev
ovary	XRN:KUBX58	BRCA2	SV	likely	TRUE	3847_3848delGT	V1283fs*2	0.63	chr13	32912338	somatic	homozygous	Sen
ovary	XRN:V9U0M8	BRCA2	SV	likely	TRUE	4284_4285insT	Q1429fs*9	0.6799	chr13	32912776	somatic	homozygous	Sen
ovary	XRN:V9U0M8	BRCA2	SV	likely	FALSE	4264_4281delGAGACTTCTGATACATTT	E1422_F1427del	0.089	chr13	32912755	unknown	homozygous	Rev
ovary	XRN:KYV121	BRCA2	SV	likely	FALSE	4478_4505>TGTCCCA	E1493_Q1502>VSQ	0.1099	chr13	32912980	germline	not in tumor	Rev
ovary	XRN:KYV121	BRCA2	SV	likely	FALSE	4431_4916del486	L1478_V1639del	0.0547	chr13		unknown	.	Rev
ovary	XRN:KYV121	BRCA2	SV	likely	TRUE	4478_4481delAAAG	E1493fs*10	0.7374	chr13	32912969	somatic	homozygous	Sen
ovary	XRN:KYV121	BRCA2	SV	likely	FALSE	4452_4541del90	D1484_D1513del	0.1569	chr13		unknown	.	Rev
ovary	XRN:KYV121	BRCA2	SV	likely	FALSE	4340_4639del300	V1447_F1546del	0.1109	chr13		unknown	.	Rev
ovary	XRN:8K2FY3	BRCA2	SV	known	TRUE	5946delT	S1982fs*22	0.4189	chr13	32914437	somatic	homozygous	Sen
ovary	XRN:8K2FY3	BRCA2	SV	likely	FALSE	5203_6012del810	K1735_E2004del	0.1378	chr13		unknown	.	Rev
ovary	XRN:8K2FY3	BRCA2	SV	likely	FALSE	5923_5955del33	C1975_S1985del	0.1645	chr13		unknown	.	Rev
ovary	XRN:28FVRL	BRCA2	SV	likely	FALSE	3226_5796del2571	V1076_H1932del	0.3921	chr13		unknown	.	Rev

ovary	XRN:28FVRL	BRCA2	SV	likely	TRUE	3978 3979insTGCT	A1327fs*4	0.7105	chr13	32912470	unknown	homozygous	Sen
ovary	XRN:YY3F11	BRCA2	SV	likely	TRUE	6468 6469delTC	Q2157fs*18	0.38	chr13	32914959	unknown	homozygous	Sen
ovary	XRN:YY3F11	BRCA2	SV	likely	FALSE	6468_6523>TCAATTTCAACAAGACAAACAAC AGTTGAG	S2156_E2175>SISTRQTTVE	0.3794	chr13	32914987	unknown	homozygous	Rev
ovary	XRN:W6ASDD	BRCA2	SV	likely	TRUE	3860 3861insA	N1287fs*2	0.4347	chr13	32912352	unknown	homozygous	Sen
ovary	XRN:W6ASDD	BRCA2	SV	unknown	FALSE	3860 3861insAAA	K1286_N1287insK	0.1505	chr13	32912352	unknown	homozygous	Rev
ovary	XRN:VYPUT0	BRCA2	SV	likely	FALSE	4750 6090del1341	E1584_N2030del	0.1788	chr13		unknown	.	Rev
ovary	XRN:VYPUT0	BRCA2	SV	likely	TRUE	5909C>A	S1970*	0.9369	chr13	32914401	somatic	homozygous	Sen
ovary	XRN:TM97UU	BRCA2	SV	likely	FALSE	6130 6135delGGCTTT	G2044_F2045del	0.1335	chr13	32914621	unknown	homozygous	Rev
ovary	XRN:TM97UU	BRCA2	SV	likely	TRUE	6129 6130insA	G2044fs*5	0.5556	chr13	32914621	somatic	homozygous	Sen
ovary	XRN:338WJ3	BRCA2	SV	likely	TRUE	5350 5351delAA	N1784fs*2	0.6436	chr13	32913841	somatic	homozygous	Sen
ovary	XRN:338WJ3	BRCA2	SV	likely	FALSE	5209 5658del450	D1737_Q1886del	0.2597	chr13		unknown	.	Rev
ovary	XRN:LWTH5S	BRCA2	SV	unknown	FALSE	4957 5397del441	T1653_A1799del	0.2326	chr13		unknown	.	Rev
ovary	XRN:LWTH5S	BRCA2	SV	likely	TRUE	4965C>G	Y1655*	0.6522	chr13	32913457	somatic	homozygous	Sen
ovary	XRN:9MGTU2	BRCA2	SV	likely	TRUE	4325C>A	S1442*	0.6096	chr13	32912817	germline	homozygous	Sen
ovary	XRN:9MGTU2	BRCA2	SV	unknown	FALSE	4298 4339del42	G1433_I1446del	0.1528	chr13		unknown	.	Rev
ovary	XRN:SJFWA3	BRCA2	SV	likely	TRUE	5576 5579delTTAA	I1859fs*3	0.1555	chr13	32914067	germline	not in tumor	Sen
ovary	XRN:SJFWA3	BRCA2	SV	likely	FALSE	5576 5581delTTAAAA	I1859_K1860del	0.6502	chr13	32914067	somatic	homozygous	Rev
ovary	XRN:LDEQCQ	BRCA2	SV	likely	FALSE	5946 5948TGG>GGA	S1982_G1983>RE	0.3088	chr13	32914438	unknown	homozygous	Rev
ovary	XRN:LDEQCQ	BRCA2	SV	known	TRUE	5946delIT	S1982fs*22	0.5167	chr13	32914437	unknown	homozygous	Sen
ovary	XRN:LDEQCQ	BRCA2	SV	likely	FALSE	5942 5968del27	A1981_S1989del	0.2467	chr13		unknown	.	Rev
ovary	XRN:A45J0L	BRCA2	SV	likely	FALSE	5737 6717del981	C1913_E2239del	0.2396	chr13		unknown	.	Rev
ovary	XRN:A45J0L	BRCA2	SV	likely	TRUE	6037A>T	K2013*	0.4764	chr13	32914529	unknown	homozygous	Sen
ovary	XRN:YU87W1	BRCA2	SV	likely	FALSE	3630 4451del822	E1211_D1484del	0.4253	chr13		unknown	.	Rev
ovary	XRN:YU87W1	BRCA2	SV	likely	FALSE	3832 3861del30	H1278_N1287del	0.2111	chr13		unknown	.	Rev
ovary	XRN:YU87W1	BRCA2	SV	likely	TRUE	3847 3848delGT	V1283fs*2	0.3862	chr13	32912338	unknown	homozygous	Sen
ovary	XRN:5DM7DW	BRCA2	SV	likely	TRUE	2151delIT	C717fs*13	0.272	chr13	32910642	unknown	homozygous	Rev
ovary	XRN:5DM7DW	BRCA2	SV	likely	TRUE	2235 2235delA	V746fs*26	0.1106	chr13	32910726	germline	not in tumor	Rev
ovary	XRN:5DM7DW	BRCA2	SV	likely	TRUE	2175 2176insA	V726fs*25	0.7204	chr13	32910667	somatic	homozygous	Sen
ovary	XRN:46J8EX	BRCA2	SV	likely	FALSE	4936 6233>CAGCAAAA	E1646_G2078>QQK	0.6525	chr13	32913428	somatic	homozygous	Rev
ovary	XRN:46J8EX	BRCA2	SV	likely	TRUE	4936 4939delIGAAA	E1646fs*23	0.8241	chr13	32913427	germline	homozygous	Sen
ovary	XRN:3X3GEJ	BRCA2	SV	likely	TRUE	7412delIC	T2471fs*8	0.1267	chr13	32929401	germline	not in tumor	Sen
ovary	XRN:3X3GEJ	BRCA2	SV	likely	FALSE	7412 7430CAAAGTGTGAAGAAGAACC>AAAG	T2471_P2477>KS	0.1242	chr13	32929402	germline	not in tumor	Rev
ovary	XRN:A3YSAK	BRCA2	SV	likely	TRUE	3847 3848delGT	V1283fs*2	0.4836	chr13	32912338	somatic	homozygous	Sen
ovary	XRN:A3YSAK	BRCA2	SV	likely	FALSE	3721 4443del723	F1241_E1481del	0.6704	chr13		unknown	.	Rev
ovary	XRN:J1DHF8	BRCA2	SV	likely	FALSE	8297_8309CACCTCTTGAAGC>A	T2766_A2770>N	0.5103	chr13	32937636	somatic	homozygous	Rev
ovary	XRN:J1DHF8	BRCA2	SV	likely	TRUE	8297delIC	T2766fs*11	0.1013	chr13	32937635	unknown	homozygous	Sen
ovary	XRN:S6JGEV	BRCA2	SV	known	TRUE	5946delIT	S1982fs*22	0.4619	chr13	32914437	unknown	homozygous	Sen
ovary	XRN:S6JGEV	BRCA2	SV	likely	TRUE	5818 6841+277del1301	splice site 5818 6841+277del1301	0.5469	chr13		unknown	.	Rev
ovary	XRN:TEH47M	BRCA2	SV	likely	FALSE	5649 5679>CGAAAATTATGGCAGGTTGTTAAC	K1883_Y1893>RKLWQVVN	0.12	chr13	32914141	unknown	homozygous	Rev
ovary	XRN:TEH47M	BRCA2	SV	likely	TRUE	5681 5682insA	Y1894fs*1	0.63	chr13	32914173	somatic	homozygous	Sen
ovary	XRN:AQP6N4	BRCA2	SV	likely	TRUE	6448 6449insTA	K2150fs*19	0.3825	chr13	32914940	somatic	homozygous	Sen
ovary	XRN:AQP6N4	BRCA2	SV	likely	FALSE	6427 6456del30	S2143_S2152del	0.0785	chr13		unknown	.	Rev
ovary	XRN:AQP6N4	BRCA2	SV	likely	FALSE	6449 6471>TAAAG	K2150_Q2157>IK	0.1997	chr13	32914943	unknown	homozygous	Rev
ovary	XRN:KGXFFC	BRCA2	SV	likely	TRUE	4638delIT	F1546fs*22	0.59	chr13	32913129	unknown	homozygous	Sen
ovary	XRN:KGXFFC	BRCA2	SV	likely	FALSE	4638 4672>GATGAAAAAGAGCA	F1546_S1558>LMKKSS	0.26	chr13	32913144	unknown	homozygous	Rev
ovary	XRN:7JMD9B	BRCA2	SV	likely	TRUE	6136delIT	S2046fs*5	0.13	chr13	32914627	somatic	homozygous	Sen
ovary	XRN:7JMD9B	BRCA2	SV	likely	FALSE	6129 6152delAGGCTTTTCATATAATGTGGTAAA	K2043_V2050del	0.12	chr13	32914620	somatic	homozygous	Rev
ovary	XRN:7JMD9B	BRCA2	SV	unknown	FALSE	6105 6106insGCTATACGTACT	T2035_P2036insAIRT	0.09	chr13	32914597	somatic	homozygous	Rev
ovary	XRN:7JMD9B	BRCA2	SV	likely	FALSE	6136 6155>CATATAATGTGGTATAT	S2046_S2052>HIMYI	0.13	chr13	32914627	somatic	homozygous	Rev
ovary	XRN:L1RHM7	BRCA2	SV	likely	FALSE	2818 2820CAA>TAT	Q940Y	0.4368	chr13	32911310	somatic	homozygous	Rev
ovary	XRN:L1RHM7	BRCA2	SV	likely	TRUE	2818C>T	Q940*	0.2788	chr13	32911310	somatic	homozygous	Sen
ovary	XRN:YUNK0W	BRCA2	SV	known	TRUE	5946delIT	S1982fs*22	0.378	chr13	32914437	unknown	homozygous	Sen
ovary	XRN:YUNK0W	BRCA2	SV	unknown	FALSE	5908 5958del51	S1970_V1986del	0.562	chr13		unknown	.	Rev
pancreas	XRN:903H28	BRCA2	SV	likely	TRUE	5966C>G	S1989*	0.4327	chr13	32914458	unknown	homozygous	Sen
pancreas	XRN:903H28	BRCA2	SV	unknown	FALSE	5956 5973delIGTCCAGGTATCAGATGCT	V1986_A1991del	0.0895	chr13	32914447	somatic	homozygous	Rev
pancreas	XRN:P3ATLW	BRCA2	SV	known	TRUE	5946delIT	S1982fs*22	0.5014	chr13	32914437	somatic	homozygous	Sen
pancreas	XRN:P3ATLW	BRCA2	SV	likely	FALSE	5946 5988>GGAAAAATCTGTCC	S1982_A1996>RENLS	0.2057	chr13	32914453	unknown	homozygous	Rev
pancreas	XRN:RHNBLF	BRCA2	SV	likely	FALSE	5465 5922>TCCACCC	N1822_T1974>IPP	0.2452	chr13	32913982	unknown	homozygous	Rev
pancreas	XRN:RHNBLF	BRCA2	SV	likely	TRUE	5465 5487del23	N1822fs*4	0.3455	chr13		unknown	.	Rev
pancreas	XRN:RHNBLF	BRCA2	SV	likely	TRUE	5851 5854delAGTT	S1951fs*11	0.4505	chr13	32914342	unknown	homozygous	Sen
pancreas	XRN:XUTG0A	BRCA2	SV	likely	FALSE	3170 3337>CTGAGC	K1057_E1113>TEQ	0.846	chr13	32911662	unknown	homozygous	Rev
pancreas	XRN:XUTG0A	BRCA2	SV	likely	TRUE	3170 3174delAGAAA	K1057fs*8	0.071	chr13	32911661	unknown	homozygous	Sen
pancreas	XRN:RKU9TD	BRCA2	SV	likely	FALSE	6380 6490>30	S2127_Q2164>ISLSISTRQTK	0.14	chr13	32914871	unknown	homozygous	Rev
pancreas	XRN:RKU9TD	BRCA2	SV	likely	TRUE	6490 6490delIC	Q2164fs*4	0.58	chr13	32914981	somatic	homozygous	Sen
pancreas	XRN:5LVJ54	BRCA2	SV	likely	TRUE	2830A>T	K944*	0.8904	chr13	32911322	unknown	homozygous	Sen
pancreas	XRN:5LVJ54	BRCA2	SV	likely	FALSE	2173 3096del924	K725_K1032del	0.2247	chr13		unknown	.	Rev
prostate	XRN:2Y9BY0	BRCA2	SV	likely	FALSE	9382 9384CGA>TGG	R3128W	0.794	chr13	32968951	somatic	homozygous	Rev
prostate	XRN:2Y9BY0	BRCA2	SV	likely	TRUE	9382C>T	R3128*	0.103	chr13	32968951	germline	not in tumor	Sen
prostate	XRN:2Y9BY0	BRCA2	SV	unknown	FALSE	9384A>G	R3128R	0.7881	chr13	32968953	somatic	homozygous	Rev

prostate	XRN:7DT78E	BRCA2	SV	known	TRUE	5946delT	S1982fs*22	0.833	chr13	32914437	germline	homozygous	Sen
prostate	XRN:7DT78E	BRCA2	SV	likely	FALSE	5259_6215del957	D1754_S2072del	0.3711	chr13		unknown	.	Rev
prostate	XRN:Y8S3DF	BRCA2	SV	likely	TRUE	3847_3848delIGT	V1283fs*2	0.3546	chr13	32912338	somatic	het	Sen
prostate	XRN:Y8S3DF	BRCA2	SV	likely	FALSE	3817_3847>ATAAAAC	F1273_V1283>IKL	0.3782	chr13	32912308	somatic	het	Rev
prostate	XRN:KCPJQK	BRCA2	SV	likely	FALSE	5843_6064del222	C1948_H2021del	0.1256	chr13		unknown	.	Rev
prostate	XRN:KCPJQK	BRCA2	SV	likely	FALSE	5863_5864TC>GA	S1955E	0.1274	chr13	32914355	somatic	het	Rev
prostate	XRN:KCPJQK	BRCA2	SV	likely	FALSE	5864_5865CA>AT	S1955Y	0.15	chr13	32914356	somatic	het	Rev
prostate	XRN:KCPJQK	BRCA2	SV	likely	TRUE	5864C>A	S1955*	0.1155	chr13	32914356	somatic	het	Sen
prostate	XRN:5BG74Q	BRCA2	SV	likely	TRUE	6308C>A	S2103*	0.64	chr13	32914800	unknown	homozygous	Sen
prostate	XRN:5BG74Q	BRCA2	SV	unknown	FALSE	6308CA>AC	S2103Y	0.2	chr13	32914800	unknown	homozygous	Rev
prostate	XRN:5CNANX	BRCA2	SV	likely	FALSE	752_779>AAACACAAATCAAAGA	T251_E260>KTQIKE	0.74	chr13	32905125	somatic	homozygous	Rev
prostate	XRN:5CNANX	BRCA2	SV	likely	TRUE	778_779delGA	E260fs*15	0.04	chr13	32905151	somatic	homozygous	Sen
prostate	XRN:C38R2M	BRCA2	SV	likely	TRUE	2330_2331insA	D777fs*11	0.2466	chr13	32910822	unknown	homozygous	Sen
prostate	XRN:C38R2M	BRCA2	SV	likely	FALSE	2331_2346TGTTCTGTCAAACCTA>ATGTTCT	D777_L782>ECS	0.1344	chr13	32910823	somatic	homozygous	Rev
prostate	XRN:5MWY46	BRCA2	SV	known	TRUE	5946delT	S1982fs*22	0.57	chr13	32914437	somatic	homozygous	Sen
prostate	XRN:5MWY46	BRCA2	SV	unknown	FALSE	5632_5985del354	N1878_N1995del	0.19	chr13		unknown	.	Rev
prostate	XRN:5MWY46	BRCA2	SV	unknown	FALSE	5644_6732del1089	S1882_K2244del	0.29	chr13		unknown	.	Rev
prostate	XRN:5MWY46	BRCA2	SV	unknown	FALSE	5699_6558>TA	S1901_S2186>L	0.16	chr13	32914192	germline	not in tumor	Rev
prostate	XRN:WMDK15	BRCA2	SV	likely	FALSE	2566_2835del270	N856_K945del	0.3909	chr13		unknown	.	Rev
prostate	XRN:WMDK15	BRCA2	SV	likely	TRUE	2779delA	M927fs*33	0.6352	chr13	32911270	unknown	homozygous	Sen
prostate	XRN:9F9N1D	BRCA2	SV	likely	TRUE	2809C>T	Q937*	0.4889	chr13	32911301	somatic	homozygous	Sen
prostate	XRN:9F9N1D	BRCA2	SV	likely	FALSE	2779_2817del39	M927_T939del	0.5619	chr13		unknown	.	Rev