

Table S1a

		INT, Milano	INT, Milano	HVH, Barcelone	HVH, Barcelone	HVH, Barcelone	HCSC, Madrid	
		INT, Milano	INT, Milano and QIMR, Brisbane	HVH, Barcelone	QIMR, Brisbane	HVH, Barcelone	HCSC, Madrid	
		PBLs (capillary EP)	LCLs (capillary EP)	LEUs (agarose)	LCLs (agarose)	PBMCs (agarose)	LEUs (capillary EP)	
	Splicing event	mRNA position						
	Δ2	r.38_67del106	0/1	0/6	not tested	not tested	not tested	0/13
	Δ3	r.68_316del249	1/1	6/6	18/18	10/10	8/8	13/13
	Δ3,4	r.68_c.425del359	0/1	5/6	0/18	0/10	0/8	13/13
	Δ3-7	r.68_631del564	0/1	5/6	not tested	not tested	not tested	not tested
	Δ4	r.317_425del109	0/1	0/6	0/18	0/10	0/8	0/13
	Δ4-7	r.317_631del315	0/1	6/6	not tested	not tested	not tested	5/20
	Δ5	r.426_475del50	0/1	0/6	0/19	0/10	0/8	2/20
	Δ5,6	r.426_516del91	0/1	1/6	0/19	0/10	0/8	2/13
	Δ5-7	r.426_631del206	0/1	5/6	0/19	0/10	0/8	3/20
	Δ6	r.476_516del41	0/1	0/6	0/19	0/10	0/8	17/20
	Δ6q,7	r.478-631del154	1/1	6/6	19/19	10/10	8/8	20/20
	Δ12	r.6842_6937del96	1/1	4/4	not tested	not tested	not tested	5/8
	Δ12,13	r.6842_7007del166	0/1	0/4	not tested	not tested	not tested	1/13
	Δ17	r.7806_7976del171	not tested	not tested	0/21	0/10	0/8	0/13
	Δ17,18	r.7806_8331del526	2/2	3/3	21/21	10/10	8/8	23/23
	Δ18	r.7977_8331del355	2/2	3/3	21/21	10/10	8/8	19/28

Δ19	r.8332_8487del156	not tested	9/9	0/21	0/10	0/8	1/13
Δ20	r.8488_8632del145	1/2	1/3	0/16	0/10	0/8	2/3
▼20A	c.8633-1327_c.8633-1264ins64	2/2	3/3	0/16	10/10	0/8	4/5
Δ22	c.8755_8953del199	0/2	0/3	23/23	0/10	8/8	5/10
Δ22,23p	c.8755_9004del250	not tested	not tested	23/23	0/10	8/8	4/10
Δ23p	c.8954_9004del51	0/2	0/3	0/23	0/10	0/8	0/13

Table S1b

HCSC, Madrid	HCSC, Madrid	HCSC, Madrid	HCSC, Madrid	HCSC, Madrid	MU, Maastrich	QIMR, Brisbane	Cologne University	Southampton General Hospital
HVH, Barcelone	USC, Santiago de Compostela	MU, Maastrich	QIMR, Brisbane	HCSC, Madrid	MU, Maastrich	QIMR, Brisbane	Cologne University	Southampton General Hospital
PBMCs (capillary EP)	PBLs (capillary EP)	PBLs (capillary EP)	LCLs (capillary EP)	One healthy breast tissue (capillary EP)	PBLs (agarose)	LCLs (agarose)	LCLs (agarose)	LEU detected/tested (agarose)

0/8	9/16	not tested	6/10	0/1	2/2	0/4	not tested	not tested
8/8	14/16	not tested	10/10	1/1	2/2	3/4	2/2	3/3
8/8	7/16	not tested	10/10	0/1	not tested	0/4	not tested	not tested
5/8	2/6	not tested	7/9	not tested	not tested	not tested	not tested	not tested
3/8	2/16	not tested	10/10	0/1	not tested	0/4	not tested	not tested
7/8	6/6	not tested	9/10	0/1	not tested	not tested	not tested	not tested
4/8	4/6	not tested	10/10	1/1	not tested	not tested	not tested	not tested
0/8	0/6	not tested	0/10	0/1	not tested	0/15	not tested	not tested
8/8	5/6	not tested	10/10	1/1	not tested	0/15	not tested	not tested
0/8	0/6	not tested	0/10	1/1	not tested	0/15	not tested	not tested
8/8	6/6	not tested	10/10	1/1	4/4	15/15	not tested	not tested
5/8	6/6	not tested	not tested	1/1	3/3	not tested	2/2	3/3
0/8	0/6	not tested	not tested	0/1	not tested	not tested	not tested	not tested
0/8	0/12	0/12	7/10	1/1	not tested	not tested	not tested	not tested
8/8	12/12	12/12	10/10	1/1	not tested	15/15	not tested	not tested
8/8	12/12	11/12	10/10	1/1	not tested	15/15	not tested	3/3
5/8	3/10	6/12	9/10	not tested	not tested	not tested	not tested	not tested
2/8	2/6	0/12	7/10	1/1	not tested	not tested	not tested	not tested
7/8	5/6	3/12	10/10	0/1	1/1	not tested	2/2	not tested
8/8	3/6	8/12	9/9	0/1	not tested	not tested	not tested	not tested
7/8	1/6	2/12	9/9	not tested	not tested	not tested	not tested	not tested
5/8	5/6	0/6	7/8	not tested	not tested	not tested	not tested	not tested

Table S2

Alternate splicing event to be detected	Forward or reverse	Primer name and sequence
$\Delta 2$	F (full length) F (alternate) R	BR2ex1-2F: AGAACTGCACCTCTGGAGCGGACTTATTT BR2ex1-3F: AGAACTGCACCTCTGGAGCGGATTTAGGA BR2CA2 Ex 7R: CTAAAGAACTTGACCAAGAC
$\Delta 3$	F (full length) F (alternate) R	BRCA2 EX2-3F(a): ACACGCTGCAACAAAGCAGATT BRCA2 EX2-4F: ACACGCTGCAACAAAGCAGGAA BRCA2 Ex 7R: CTAAAGAACTTGACCAAGAC
$\Delta 3,4$	F (full length) F (alternate) R	BRCA2ex2-3F(b): TTTAAGACACGCTGCAACAAAGCAGATTTA BRCA2ex2-5F: TTTAAGACACGCTGCAACAAAGCAGTCCTG BRCA2 Ex8-7R: CTCATTTCTGACTATGAGC
$\Delta 3-7$	F (full length) F (alternate) R	BR2ex2-3F(c): AAGACACGCTGCAACAAAGCAGATT BR2ex2-8F: AAGACACGCTGCAACAAAGCAGTCA BRCA2 Ex 10R: GATCAGTATCATTTGGTTCC
$\Delta 4$	F (full length) F (alternate) R	BRCA2ex3-4F(a): ATAAATTCAAATTAGACTTAGGAAG BRCA2ex3-5F: ATAAATTCAAATTAGACTTAGTCCT BRCA2 Ex8-7R: CTCATTTCTGACTATGAGC
$\Delta 4-7$	F (full length) F (alternate) R	BR2ex3-4F(b): GATAAATTCAAATTAGACTTAGGAAGG BR2ex3-8F: GATAAATTCAAATTAGACTTAGTCAGA BRCA2 Ex 10R: GATCAGTATCATTTGGTTCC
$\Delta 5$	F (full length) F (alternate) R	BRCA2 Ex4-5F(a): CTAAATTCTTGTCTTAGTGAAAGTCCTG BRCA2 Ex4-6F: CTAAATTCTTGTCTTAGTGAAAGTGGTA BRCA2 Ex8-7R: CTCATTTCTGACTATGAGC
$\Delta 5,6$	F (full length) F (alternate) R	BR2ex4-5F(b): CCACTTCTAAATTCTTGTCTTAGTGAAAGTCCT BR2ex4-7F: CCACTTCTAAATTCTTGTCTTAGTGAAAGGGTC BRCA2 Ex 10R: GATCAGTATCATTTGGTTCC
$\Delta 5-7$	F (full length) F (alternate) R	BRCA2ex4-5F(c): AAATTCTTGTCTTAGTGAAAGTCCTGT BRCA2ex4-8F: AAATTCTTGTCTTAGTGAAAGTCAGAA BRCA2 Ex 10R: GATCAGTATCATTTGGTTCC

▼5p	F (full length) F (alternate) R	BR2ex4-5F(b): CCACTTCTAAATTCTTGTCTTAGTGAAAGTCCT BR2ex5+23F: CTAAATTCTTGTCTTAGTGAAAGGGA BRCA2 Ex8-7R: CTCATTTCTGACTATGAGC
Δ6	F (full length) F (alternate) R	BRCA2ex5-6F(a): CACCACAAAGAGATAAGTCAGTGGTA BRCA2ex5-7F: CACCACAAAGAGATAAGTCAGGGTCG BRCA2 Ex10R: GATCAGTATCATTTGGTTCC
Δ6q7	F (full length) F (alternate) R	BRCA2 EX 5-6F(b): ACAAAGAGATAAGTCAGTGGTAT BRCA2 EX 5-8+2: ACAAAGAGATAAGTCAGTGTCAG BRCA2 Ex10R: GATCAGTATCATTTGGTTCC
Δ9-11	F (full length) F (alternate) R	BR2ex8-9F: GTATTTCTCATGATACTACTGCTAATG* BR2ex8-12F: GTATTTCTCATGATACTACTGCTGAGA BRCA2 Ex 14R: TGCTAAATTGCTTGAAGATT
Δ12	F (full length) F (alternate) R	BR2EX11-12F(a): AGCCCCTTATCTTAGTGGGAGA BR2EX11-13F: AGCCCCTTATCTTAGTGGGCAC BRCA2 Ex 14R: TGCTAAATTGCTTGAAGATT
Δ12,13	F (full length) F (alternate) R	BR2ex11-12F(b): AAGAAGAGGAGAGCCCCTTATCTTAGTGGGAG BR2ex11-14F: AAGAAGAGGAGAGCCCCTTATCTTAGTGGCAC BRCA2 Ex14R: TGCTAAATTGCTTGAAGATT
Δ17	F (full length) F (alternate) R	BR2ex 16-17F(a): GGAAAAGAAGAATTTTATAGGGC BR2ex 16-18F: GGAAAAGAAGAATTTTATAGATA BRCA2 Ex18R: TTTCAGATATATTTGCGCTC
Δ17-18	F (full length) F (alternate) R	BR2ex16-17F(b): GGAAAGGCTGGAAAAGAAGAATTTTATAGGGC BR2ex16-19F: GGAAAGGCTGGAAAAGAAGAATTTTATAGATT BRCA2ex22R: AACATTTGCCTGTGATTATT
Δ18	F (full length) F (alternate) R	BR2ex17-18F: GCTTCTTCAACTAAAATACAGATATGA BR2ex17-19F: GCTTCTTCAACTAAAATACAGATTTCT BRCA2 Ex23R: TGTATGTTAGCTCTTTCAGA
Δ 19	F (full length) F (alternate) R	BR2ex 18-19F: GAATCTCTTATGTTAAAGATT BR2ex 18-20F: GAATCTCTTATGTTAAAGTGG BRCA2 Ex23R: TGTATGTTAGCTCTTTCAGA
Δ20	F (full length) F (alternate) R	BR2ex19-20F: ATTATTCAAAGAGCATACCCTATACAGTGG BR2ex19-21F: ATTATTCAAAGAGCATACCCTATACAGAAA BRCA2 Ex23R:TGTATGTTAGCTCTTTCAGA

▼ 20A	F (full length)	BRCA2ex20-21F: GGAATTTGAAGAACATGAAGAAAAC
	F (alternate)	BRCA2ex20-i20F: GGAATTTGAAGAACATGAAGTTACT
	R	BRCA2 EX22R: AACATTTGCCTGTGATTATT
Δ22	F (full length)	BRCA2ex21-22F(a): CAGACCCAGCTTACCTTGAGGGT
	F (alternate)	BRCA2ex21-23F: CAGACCCAGCTTACCTTGAGTTATA
	R	BRCA2 Ex23R: TGTATGTTAGCTCTTTCAGA
Δ22,23p	F (full length)	BR2ex21-22(b): GACCCAGCTTACCTTGAGGGT
	F (alternate)	BR2ex21-delex23p: GACCCAGCTTACCTTGAGAAG
	R	BRCA2 Ex23R: TGTATGTTAGCTCTTTCAGA
Δ23p	F (full length)	BR2ex 22-23F: GCTATTCAAAAAAAGAAAAAGATTCAGTTA
	F (alternate)	BR2ex22-delex23pF: GCTATTCAAAAAAAGAAAAAGATTCAGAAG
	R	BRCA2 Ex23R: TGTATGTTAGCTCTTTCAGA

*Note: this may not always be a practical positive control as the predicted RT-PCR product is 6.5 kb.