

**S2 Table.** Detected *BRCA1/2* mutations and clinical information of patients who underwent both germline and somatic testing

No.	Classification	Germline test			Somatic test			Age	POFTC			Personal history of cancer	Family history of cancer
		Gene	Nucleotide change	Protein change	Gene	Nucleotide change	Protein change		Primary site	Histology	FIGO stage		
1	Cordant, same	<i>BRCA1</i> mut	c.922_924delinsT	p.Ser308*	<i>BRCA1</i> mut	c.922_924delinsT	p.Ser308*	44	Ovary	HGSC	3C		None
2	Cordant, same	<i>BRCA1</i> mut	c.922_924delinsT	p.Ser308*	<i>BRCA1</i> mut	c.922_924delinsT	p.Ser308*	43	Ovary	HGSC	3C		Sister-Ovarian ca
3	Cordant, same	<i>BRCA1</i> mut	c.1716delA	p.Glu572fs	<i>BRCA1</i> mut	c.1716delA	p.Glu572fs	71	Ovary	HGSC	2B		None
4	Cordant, different	<i>BRCA1</i> mut	c.5496_5506delinsA	p.Val1833fs	<i>BRCA1</i> mut	c.5559_5569delinsA	p.Val1854fs	39	Ovary	HGSC	3C		Mother-BC, Mother's sister-BC
5	Cordant, same	<i>BRCA1</i> mut	c.3627dupA	p.Glu1210fs	<i>BRCA1</i> mut	c.3627dupA	p.Glu1210fs	60	Ovary	HGSC	4B	Thyroid ca	Mother-Ovarian ca
6	Cordant, same	<i>BRCA1</i> mut	c.3758_3759delinsA	p.Ser1253*	<i>BRCA1</i> mut	c.3758_3759delinsA	p.Ser1253*	54	Ovary	HGSC	4B		Sister-BC, Father-Lung ca, Mother-Lymphoma
7	Cordant, same	<i>BRCA1</i> mut	c.390C>A	p.Tyr130*	<i>BRCA1</i> mut	c.390C>A	p.Tyr130*	53	Ovary	HGSC	1C		Sister-Peritoneal ca
8	Cordant, same	<i>BRCA1</i> mut	c.390C>A	p.Tyr130*	<i>BRCA1</i> mut	c.390C>A	p.Tyr130*	62	Ovary	HGSC	4B		None
9	Cordant, same	<i>BRCA1</i> mut	c.390C>A	p.Tyr130*	<i>BRCA1</i> mut	c.390C>A	p.Tyr130*	44	Ovary	HGSC	3C	BC	Father-Leukemia
10	Discordant, true reversion	<i>BRCA1</i> mut	c.5074+1G>T	Unknown	<i>BRCA</i> wt			56	Ovary	HGSC	3C		Sister1-BC, Sister2-Gastric ca, Sister3-Lung ca
11	Cordant, same	<i>BRCA2</i> mut	c.2899_2900delCT	p.Leu967fs	<i>BRCA2</i> mut	c.2899_2900delCT	p.Leu967fs	41	Ovary	HGSC	4B		None
12	Cordant, same	<i>BRCA2</i> mut	c.97G>T	p.Glu33*	<i>BRCA2</i> mut	c.97G>T	p.Glu33*	75	Ovary	HGSC	1C	Thyroid ca	None
13	Cordant, different	<i>BRCA2</i> mut	c.9097dupA	p.Thr3033fs	<i>BRCA2</i> mut <i>BRCA1</i> mut	c.9097dupA c.2206_2207delGA	p.Thr3033fs p.Glu736fs	59	Ovary	HGSC	4B		Sister1-BC, Sister2-BC
14	Discordant, acquired	<i>BRCA</i> wt			<i>BRCA1</i> mut	c.4471G>T	p.Glu1491*	53	Ovary	HGSC	3C		None
15	Discordant, acquired	<i>BRCA</i> wt			<i>BRCA1</i> mut	c.1016delA	p.Lys339fs	66	Ovary	HGSC	4B		None
16	Cordant	<i>BRCA</i> wt			<i>BRCA</i> wt			54	Ovary	HGSC	1C		None
17	Cordant	<i>BRCA</i> wt			<i>BRCA</i> wt			49	Ovary	HGSC	2B	BC	None
18	Cordant	<i>BRCA</i> wt			<i>BRCA</i> wt			64	Ovary	HGSC	2B	BC	Mother-BC
19	Cordant	<i>BRCA</i> wt			<i>BRCA</i> wt			57	Ovary	HGSC	3A		None
20	Cordant	<i>BRCA</i> wt			<i>BRCA</i> wt			52	Ovary	HGSC	3A		None
21	Cordant	<i>BRCA</i> wt			<i>BRCA</i> wt			66	Ovary	HGSC	3A		None
22	Cordant	<i>BRCA</i> wt			<i>BRCA</i> wt			52	Ovary	HGSC	3A		None

23	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	33	Ovary	HGSC	3C		None
24	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	63	Peritoneum	HGSC	3C		None
25	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	61	Ovary	HGSC	3C		None
26	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	78	Ovary	HGSC	3C		None
27	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	72	Ovary	HGSC	3C		None
28	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	53	Ovary	HGSC	3C		None
29	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	71	Ovary	HGSC	3C		None
30	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	55	Ovary	HGSC	3C		None
31	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	52	Ovary	HGSC	3C		None
32	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	75	Ovary	HGSC	3C		Sister-Ovarian ca
33	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	42	Ovary	HGSC	3C		Father-Colorectal ca
34	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	56	Ovary	HGSC	3C		Mother-Melanoma
35	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	57	Ovary	HGSC	3C	BC	None
36	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	63	Ovary	HGSC	3C	BC	None
37	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	44	Ovary	HGSC	3C	BC	None
38	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	70	Ovary	HGSC	4B		None
39	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	44	Ovary	HGSC	4B		None
40	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	58	Ovary	HGSC	4B		None
41	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	57	Ovary	HGSC	4B		None
42	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	56	Ovary	HGSC	4B		None
43	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	66	Ovary	HGSC	4B		None
44	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	81	Ovary	HGSC	4B		None
45	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	52	Peritoneum	HGSC	4B		None
46	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	50	Ovary	HGSC	4B		Father-Lung ca, Mother-Leukemia
47	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	63	Ovary	HGSC	4B		Mother-BC
48	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	63	Ovary	HGSC	4B	Gastric ca	Sister1-BC, Sister2-Colorectal ca
49	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	50	Ovary	HGSC	4B	BC	None
50	Cordant	<i>BRC Awt</i>	<i>BRC Awt</i>	70	Ovary	HGSC	4B	BC	Father-Gastric ca

51	Cordant	<i>BRC<sub>Awt</sub></i>	<i>BRC<sub>Awt</sub></i>	59	Ovary	HGSC	4B	BC	Sister-BC, Brother- Esophageal ca
52	Cordant	<i>BRC<sub>Awt</sub></i>	<i>BRC<sub>Awt</sub></i>	65	Ovary	LGSC	4B		None
53	Cordant	<i>BRC<sub>Awt</sub></i>	<i>BRC<sub>Awt</sub></i>	64	Ovary	Endometrioid	4B		None
54	Cordant	<i>BRC<sub>Awt</sub></i>	<i>BRC<sub>Awt</sub></i>	38	Ovary	Clear cell	1A		None
55	Cordant	<i>BRC<sub>Awt</sub></i>	<i>BRC<sub>Awt</sub></i>	54	Ovary	Clear cell	1C	BC	None
56	Cordant	<i>BRC<sub>Awt</sub></i>	<i>BRC<sub>Awt</sub></i>	41	Ovary	Clear cell	3C		None
57	Cordant	<i>BRC<sub>Awt</sub></i>	<i>BRC<sub>Awt</sub></i>	73	Ovary	Unknown	3C		None

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POFTC, peritoneal, ovarian, and fallopian tube cancer; FIGO, International Federation of Gynecology and Obstetrics; HGSC, high-grade serous ovarian cancer; ca, cancer;

BC, breast cancer; LGSC, low-grade serous ovarian cancer.