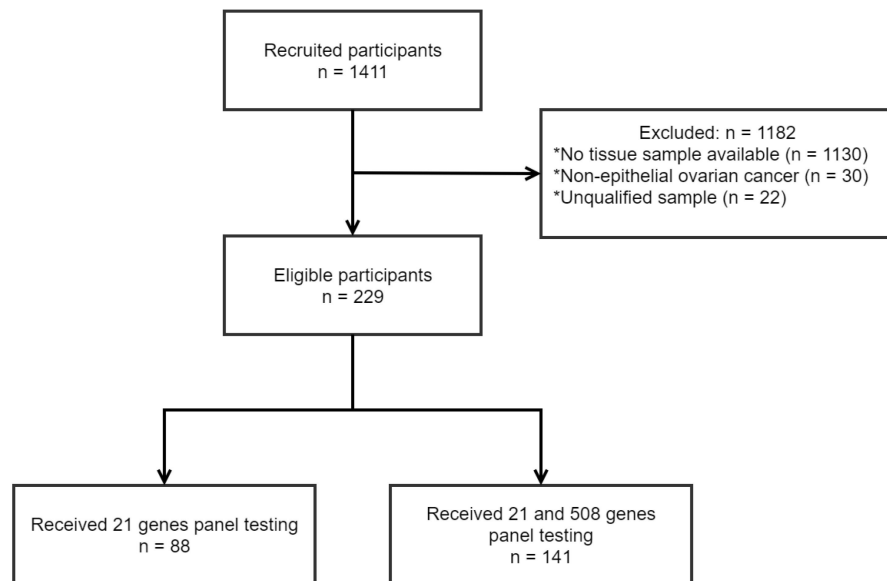
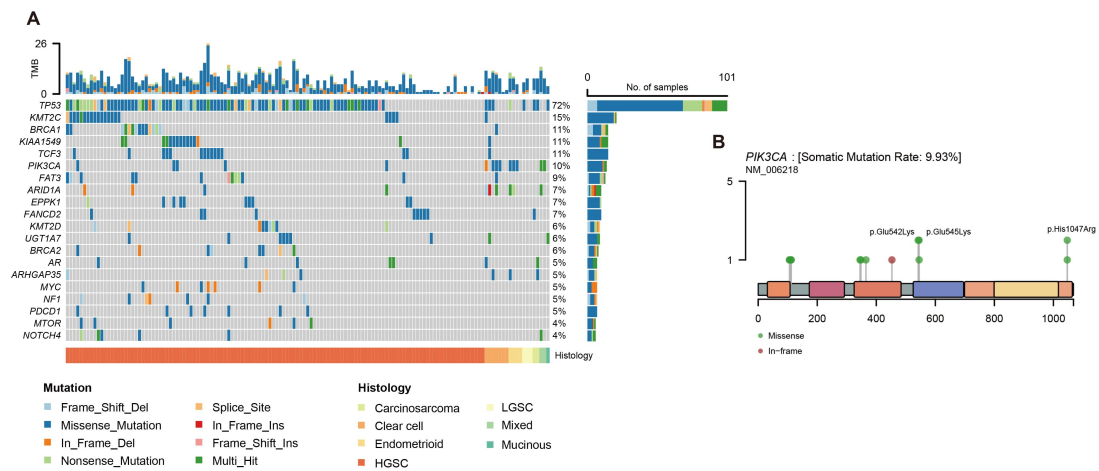


1 **Supplementary Information**

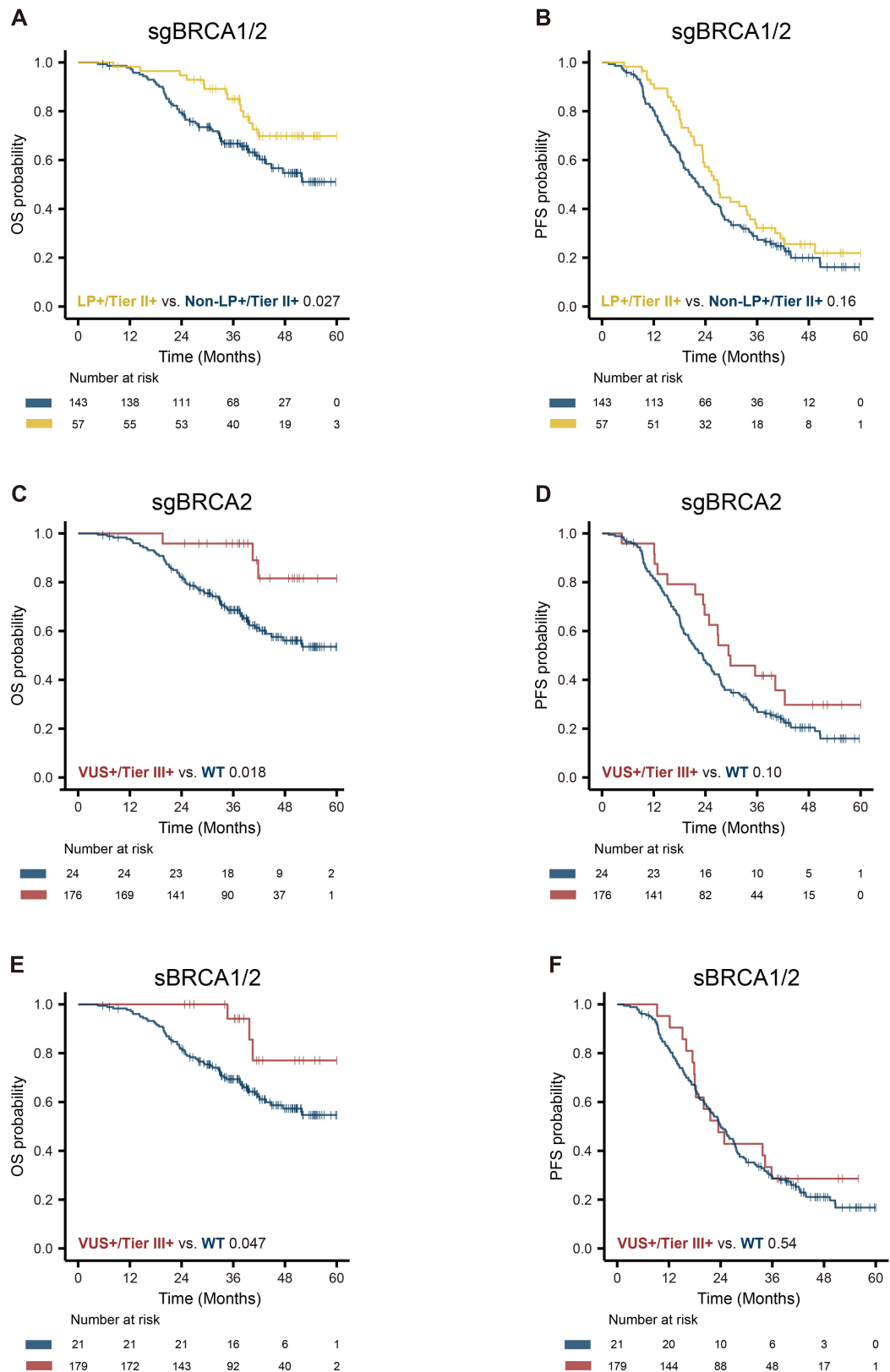


2
3 **Figure S1. Participant enrollment flowchart.**

4



5
6 **Figure S2. Mutation landscape of 141 patients in 508 gene panel**



7

8 **Figure S3. OS and PFS by mutation status.**

9 Five-year Kaplan–Meier curve for OS and PFS in EOC patients stratified by (A, B)
10 germline+somatic mutation carriers of *BRCA1/2* gene under LP+ strategy, (C, D)
11 germline+somatic mutation carriers of *BRCA2* genes under VUS+ strategy, and (E, F) somatic

12 mutation carriers of *BRCA1/2* genes under VUS+ strategy. The p values were calculated with
13 the log-rank test. WT, wild-type (including no variants, benign and likely benign variants); LP+,
14 likely pathogenic and pathogenic variants. VUS+, LP+ and VUS variants. Tier II+, class I and II
15 somatic variants, Tier III+, class I, II and III somatic variants.

Table S1. Details of clinicopathological information

ID	508	Age	Gravidy	Parity	Histology	FIGO	Cancer site	Disease status	Chemosensitivity	Bevacizumab therapy	PARPI therapy	PARPI sensitivity	PFS status	PFS	OS status	OS	Smoking	Drinking	Oral contraceptive	MHT	Personal history	Personal history (breast)	Family history	Family history (HBOC)
OC000001	Yes	44	2	2	HGSC	II A	Ovary	Recurrent	Sensitive	NR	No	NA	Recurrence/Progression	36.73	Alive	158.75	No	No	No	No	No	No	Yes	Yes
OC000008	Yes	54	1	1	HGSC	II A	Ovary	Recurrent	Sensitive	NR	No	NA	Recurrence/Progression	20.47	Dead	31.47	No	No	No	No	No	No	Yes	No
OC000010	Yes	59	4	2	HGSC	III C	Ovary	Recurrent	Resistant	NR	No	NA	Recurrence/Progression	10.78	Alive	52.80	No	No	No	No	No	No	No	No
OC000011	Yes	52	2	0	HGSC	III C	Ovary	Recurrent	Sensitive	NR	No	NA	Recurrence/Progression	29.17	Alive	81.18	No	No	No	No	Yes	Yes	Yes	Yes
OC000012	No	63	4	1	HGSC	III C	Fallopian tube	Primary	Sensitive	NR	No	NA	Recurrence/Progression	41.40	Alive	48.36	No	No	No	No	No	No	No	No
OC000036	Yes	64	2	2	HGSC	III C	Ovary	Recurrent	Sensitive	NR	No	NA	Recurrence/Progression	5.52	Dead	21.13	No	No	No	No	No	No	No	No
OC000053	Yes	60	3	2	HGSC	III C	Ovary	Recurrent	Sensitive	NR	No	NA	Recurrence/Progression	33.35	Dead	69.68	No	No	No	No	No	No	No	No
OC000056	No	57	1	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Stable	52.30	Alive	52.30	No	No	No	No	Yes	Yes	Yes	Yes
OC000059	Yes	63	3	2	HGSC	III C	Ovary	Primary	Resistant	NR	No	NA	Recurrence/Progression	19.32	Dead	31.18	No	No	No	No	No	No	No	No
OC000060	Yes	48	2	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	19.46	Alive	69.98	No	No	No	No	No	No	No	No
OC000068	Yes	44	2	2	HGSC	III C	Peritoneum	Primary	Sensitive	NR	No	NA	Recurrence/Progression	27.14	Alive	29.14	No	No	No	No	No	No	Yes	Yes
OC000070	Yes	52	3	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	17.97	Dead	33.81	No	No	No	No	No	No	Yes	No
OC000071	Yes	58	2	1	HGSC	IV B	Ovary	Primary	Sensitive	NR	No	NA	Stable	46.55	Alive	46.55	No	No	No	No	No	No	Yes	No
OC000079	Yes	65	3	2	HGSC	III C	Peritoneum	Primary	Sensitive	NR	No	NA	Recurrence/Progression	34.73	Alive	43.40	No	No	No	No	No	No	No	No
OC000082	Yes	72	6	3	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	27.40	Alive	33.35	No	No	No	No	No	No	Yes	No
OC000085	Yes	72	2	1	HGSC	III C	Ovary	Primary	Sensitive	NR	NR	NR	Recurrence/Progression	12.09	Alive	49.74	No	No	No	No	No	No	Yes	No
OC000119	No	59	4	3	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	15.93	Dead	32.69	No	No	No	No	No	No	No	No
OC000124	No	55	1	1	LGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	23.98	Alive	41.03	No	No	No	No	No	No	No	No
OC000126	Yes	48	2	1	LGSC	IV B	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	50.56	Alive	50.56	No	No	Yes	No	No	No	Yes	No
OC000128	Yes	51	1	1	HGSC	IV A	Ovary	Primary	Sensitive	NR	No	NA	Stable	50.60	Alive	50.60	No	No	Yes	No	No	No	No	No
OC000129	No	71	3	3	HGSC	IV B	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	31.84	Dead	37.72	No	No	No	No	No	No	Yes	No
OC000130	No	36	5	3	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	21.65	Dead	27.66	No	No	No	No	No	No	No	No
OC000138	No	63	3	2	HGSC	III C	Ovary	Primary	Resistant	NR	No	NA	Recurrence/Progression	6.74	Dead	18.73	No	No	No	No	No	No	No	No
OC000140	No	54	2	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	34.96	Alive	36.96	No	No	No	No	No	No	No	No
OC000141	No	29	1	1	Clear cell	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	23.46	Alive	70.44	No	No	No	No	No	No	Yes	No
OC000145	No	63	2	2	HGSC	III C	Ovary	Primary	Resistant	NR	No	NA	Recurrence/Progression	9.76	Dead	15.90	No	No	No	No	No	No	No	No
OC000147	Yes	59	2	2	HGSC	III C	Ovary	Primary	Refractory	NR	No	NA	Recurrence/Progression	9.99	Dead	19.98	No	No	No	No	No	No	No	No
OC000148	No	57	3	3	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Stable	46.23	Alive	46.23	No	No	No	No	Yes	Yes	Yes	No
OC000149	No	63	2	1	HGSC	II B	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	27.70	Dead	39.69	No	No	No	No	No	No	Yes	No
OC000150	Yes	50	3	3	HGSC	IV B	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	34.33	Alive	36.34	No	No	No	No	No	No	Yes	No
OC000152	No	62	1	1	HGSC	IV A	Ovary	Primary	Sensitive	NR	No	NA	Stable	51.35	Alive	51.35	No	No	No	No	No	No	Yes	No
OC000153	Yes	50	3	1	HGSC	IV C	Ovary	Primary	Sensitive	NR	No	NA	Stable	52.24	Alive	52.24	No	No	No	No	No	No	No	No
OC000159	Yes	48	1	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Stable	44.91	Alive	44.91	No	No	No	No	No	No	Yes	No
OC000162	Yes	50	2	2	HGSC	II B	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	35.52	Dead	44.48	No	No	No	No	No	No	No	No
OC000163	Yes	49	2	2	HGSC	IV A	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	23.36	Dead	34.40	No	No	No	No	No	No	Yes	No
OC000166	No	38	2	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	18.96	Alive	32.99	No	No	No	No	No	No	No	No
OC000167	Yes	58	1	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	20.21	Alive	33.22	No	No	No	No	No	No	Yes	No
OC000169	No	42	0	0	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	22.37	Dead	44.85	No	No	No	No	No	No	No	No
OC000171	Yes	46	2	2	HGSC	IV B	Ovary	Recurrent	Resistant	NR	No	NA	Recurrence/Progression	8.80	Dead	25.82	No	No	No	No	Yes	No	Yes	No
OC000172	Yes	51	2	2	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	29.93	Alive	33.94	No	No	No	No	No	No	No	No
OC000174	Yes	55	2	1	Endometrioid	I C2	Ovary	Primary	Resistant	NR	No	NA	Recurrence/Progression	8.84	Dead	24.87	No	No	No	No	No	No	Yes	No
OC000176	Yes	53	5	2	HGSC	III A	Ovary	Primary	Sensitive	NR	No	NA	Stable	48.85	Alive	48.85	No	No	No	No	No	No	No	No
OC000179	Yes	47	3	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	21.06	Dead	33.08	No	No	No	No	No	No	Yes	No
OC000182	Yes	58	2	2	HGSC	III A	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	20.63	Alive	30.65	No	No	No	No	No	No	No	No
OC000183	Yes	55	1	1	HGSC	II B	Ovary	Primary	Resistant	NR	No	NA	Recurrence/Progression	9.46	Dead	27.24	No	No	No	No	No	No	No	No
OC000185	Yes	48	2	1	Clear cell	I C	Ovary	Primary	Sensitive	NR	No	NA	Stable	47.93	Alive	47.93	No	No	No	No	No	No	No	No
OC000186	Yes	54	2	1	HGSC	II C	Ovary	Primary	Sensitive	NR	No	NA	Stable	45.93	Alive	45.93	No	No	No	No	No	No	No	No
OC000187	Yes	45	4	2	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	28.39	Alive	35.35	No	No	No	No	No	No	No	No
OC000189	Yes	52	2	1	Clear cell	I C1	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	32.13	Alive	37.16	No	No	No	No	No	No	No	No
OC000192	Yes	58	3	1	HGSC	IV A	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	24.48	Dead	32.46	No	No	No	No	No	No	No	No
OC000193	Yes	61	3	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Stable	40.84	Alive	40.84	No	No	No	No	No	No	Yes	No
OC000201	Yes	73	5	4	HGSC	II B	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	23.59	Alive	30.55	No	No	No	No	No	No	Yes	No
OC000202	Yes	60	2	1	HGSC	I C2	Fallopian tube	Primary	Sensitive	NR	No	NA	Stable	37.45	Alive	37.45	No	No	No	No	No	No	Yes	No
OC000218	No	63	2	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	42.18	Alive	50.86	No	No	Yes	Yes	No	No	Yes	No
OC000220	Yes	58	3	3	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	26.02	Alive	38.05	No	No	No	No	No	No	Yes	No
OC000221	Yes	63	2	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	23.79	Alive	35.81	No	No	Yes	No	No	No	Yes	No
OC000224	Yes	55	2	2	HGSC	III C	Ovary	Recurrent	Sensitive	NR	No	NA	Recurrence/Progression	28.06	Dead	45.47	No	No	No	No	No	No	No	No
OC000225	Yes	62	3	2	HGSC	III C	Ovary	Primary	Resistant	NR	No	NA	Recurrence/Progression	11.01	Dead	18.23	No	No	No	No	No	No	Yes	No
OC000226	Yes	52	3	1	HGSC	IV B	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	35.84	Alive	42.81	No	No	No	No	No	No	Yes	No
OC000228	Yes	52	4	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	25.92	Alive	31.93	No	No	No	No	No	No	Yes	No
OC000233	Yes	62	2	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	27.40	Alive	37.39	No	No	No	No	No	No	No	No
OC000236	Yes	45	4	1	HGSC	IV B	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	25.59	Alive	37.59	No	No	No	No	No	No	No	No
OC000238	Yes	49	2	2	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	29.80	Dead	41.79	No	No	No	No	No	No	Yes	No
OC000249	Yes	64	3	3	HGSC	III C	Ovary	Primary	Sensitive	NR	NR	NR	Stable	48.30	Alive	48.30	No	No	No	No	No	Yes	Yes	No
OC000250	Yes	55	4	1	HGSC	IV A	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	18.66	Dead	23.43	No	No	No	No	No	No	No	No
OC000252	Yes	35	2	2	HGSC	IV C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	25.00	Alive	25.99	No	No	No	No	No	No	No	No
OC000253	Yes	55	2	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Stable	39.36	Alive	39.36	No	No	No	No	No	No	No	No
OC000254	Yes	58	3	2	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	33.74	Dead	39.72	No	No	No	No	No	No	No	No
OC000266	No	59	3	1	HGSC	II B	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	26.84	Alive	50.86	No	No	No	No	No	No	No	No
OC000343	No	59	4	2	HGSC	IV	Peritoneum	Primary	Sensitive	NR	NR	NR	Recurrence/Progression	40.21	Alive	42.22	No	No	No	No	No	No	No	No
OC000528	Yes	71	6	4	HGSC	I C	Ovary	Recurrent	Sensitive	NR	NR	NR	Recurrence/Progression	18.60	Dead	33.54	No	No	No	No	No	No	No	No
OC000547	Yes	54	4	1	HGSC	III C	Ovary	Primary	Sensitive	NR	No	NA	Recurrence/Progression	29.34	Alive	34.37	No	No	No	No	No	No	No	No
OC000548	Yes	46	1	1	HGSC	II A	Ovary	Primary	Resistant	NR	No	NA	Recurrence/Progression	16.53	Alive	24.02	No	No	No	No	No	No	Yes	

OC000799	No	58	3	2	HGSC	IV B	Ovary	Recurrent	Sensitive	No	No	NA	Recurrence/Progression	17.97	Dead	59.01	No	No	No	No	No	No	No	Yes	Yes
OC000800	No	45	1	1	HGSC	III C	Ovary	Primary	Resistant	No	No	NA	Recurrence/Progression	10.38	Dead	29.11	No	No	No	No	No	No	Yes	Yes	
OC000802	Yes	50	5	2	HGSC	III C	Fallopian tube	Primary	Sensitive	No	No	NA	Recurrence/Progression	15.34	Dead	20.37	No	No	No	No	No	No	Yes	No	
OC000803	Yes	64	2	2	HGSC	III C	Ovary	Primary	Refractory	No	No	NA	Recurrence/Progression	5.06	Dead	12.62	No	No	No	No	No	No	Yes	No	
OC000804	No	49	4	1	Endometrioid	I C	Ovary	Recurrent	Sensitive	No	No	NA	Recurrence/Progression	41.36	Alive	94.36	No	No	No	No	No	No	No	No	
OC000805	No	45	2	1	HGSC	I V A	Ovary	Primary	Sensitive	No	Yes (R)	Sensitive	Recurrence/Progression	23.23	Alive	51.84	No	No	No	No	No	No	Yes	No	
OC000806	Yes	63	4	1	HGSC	III C	Peritoneum	Primary	Resistant	No	No	NA	Recurrence/Progression	8.25	Dead	12.19	No	No	No	No	No	No	Yes	No	
OC000808	Yes	61	3	3	HGSC	III C	Peritoneum	Primary	Resistant	No	No	NA	Recurrence/Progression	8.02	Dead	12.75	Yes	No	No	No	No	No	No	No	
OC000810	Yes	44	3	1	HGSC	III C	Ovary	Primary	Sensitive	No	NR	NR	Recurrence/Progression	15.11	Dead	42.12	No	No	No	No	No	No	No	No	
OC000811	No	54	3	1	HGSC	I B	Ovary	Recurrent	Sensitive	No	No	NA	Recurrence/Progression	21.49	Alive	75.56	No	No	No	Yes	Yes	Yes	Yes	Yes	
OC000812	No	47	5	2	HGSC	III C	Ovary	Primary	Sensitive	No	Yes (R)	Sensitive	Recurrence/Progression	18.27	Dead	34.66	No	No	No	No	No	No	No	No	
OC000813	Yes	65	1	2	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	12.39	Dead	49.31	No	No	No	No	No	No	Yes	No	
OC000814	Yes	53	1	1	HGSC	III C	Ovary	Primary	Resistant	No	No	NA	Recurrence/Progression	7.56	Dead	21.49	No	No	No	No	No	No	No	No	
OC000815	No	64	2	2	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	24.05	Alive	53.65	No	No	No	No	No	No	No	No	
OC000816	Yes	50	4	1	HGSC	III C	Ovary	Primary	Resistant	No	No	NA	Recurrence/Progression	10.12	Dead	21.99	No	No	No	No	No	No	Yes	No	
OC000819	Yes	59	3	3	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	27.85	Alive	54.67	No	No	No	No	No	No	No	No	
OC000822	No	56	2	1	Clear cell	I C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	27.60	Dead	37.62	No	No	No	No	No	No	No	No	
OC000824	No	48	1	1	Clear cell	I B	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	32.49	Dead	39.13	No	No	No	No	No	No	No	No	
OC000825	No	77	3	3	HGSC	III C	Ovary	Primary	Sensitive	No	NR	NR	Recurrence/Progression	13.90	Dead	19.94	No	No	No	No	No	Yes	Yes	No	
OC000826	Yes	50	1	1	HGSC	II B	Fallopian tube	Primary	Sensitive	No	No	NA	Stable	55.62	Alive	55.62	No	No	No	No	No	No	No	No	
OC000827	Yes	58	2	1	HGSC	III B	Ovary	Primary	Sensitive	No	No	NA	Stable	55.62	Alive	55.62	No	No	No	No	No	No	Yes	No	
OC000828	No	62	1	1	HGSC	III C	Ovary	Primary	Sensitive	No	NR	NA	Stable	55.62	Alive	55.62	No	No	No	No	No	No	No	No	
OC000829	No	82	6	6	HGSC	III C	Ovary	Primary	Sensitive	No	NR	NA	Recurrence/Progression	13.60	Dead	17.61	No	No	No	No	No	No	Yes	No	
OC000830	Yes	46	2	1	Mixed	II B	Ovary	Recurrent	Sensitive	No	Yes (R)	Resistant	Recurrence/Progression	113.45	Alive	166.37	No	No	No	No	No	No	No	No	
OC000833	No	52	2	2	HGSC	III C	Ovary	Primary	Sensitive	No	Yes (R)	Sensitive	Recurrence/Progression	17.87	Alive	54.90	No	No	No	No	No	No	Yes	No	
OC000837	Yes	62	1	1	HGSC	III C	Ovary	Primary	Sensitive	No	NR	NR	Stable	55.33	Alive	55.33	No	No	No	No	No	No	Yes	Yes	
OC000841	No	63	1	1	Endometrioid	III C	Ovary	Primary	Refractory	No	NR	NR	Recurrence/Progression	1.54	Dead	4.57	No	No	No	No	No	No	No	No	
OC000847	No	64	2	1	Endometrioid	III C	Ovary	Primary	Sensitive	No	Yes (R)	Resistant	Recurrence/Progression	20.76	Dead	32.92	No	No	No	No	No	No	No	No	
OC000850	Yes	53	4	1	HGSC	IV	Ovary	Recurrent	Resistant	No	Yes (R)	NA	Recurrence/Progression	9.40	Dead	46.49	No	No	No	No	No	No	No	No	
OC000855	No	51	1	1	HGSC	III C	Ovary	Recurrent	Sensitive	No	No	NA	Recurrence/Progression	16.99	Dead	42.32	No	No	No	No	No	No	Yes	No	
OC000856	No	52	2	1	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	15.61	Dead	43.60	No	No	No	No	No	No	No	No	
OC000858	No	55	2	2	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Stable	56.02	Alive	56.02	No	No	No	No	No	No	Yes	No	
OC000859	No	58	7	4	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	50.66	Alive	50.66	No	No	No	No	No	No	No	No	
OC000860	No	67	2	2	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	29.90	Dead	51.91	No	No	No	No	No	No	No	No	
OC000865	Yes	55	1	1	HGSC	III C	Ovary	Recurrent	Sensitive	No	No	NA	Recurrence/Progression	19.32	Alive	36.99	No	No	No	No	No	No	No	No	
OC000947	Yes	41	3	1	HGSC	III C	Ovary	Primary	Sensitive	No	Yes (I)	Sensitive	Stable	47.05	Alive	47.05	No	No	No	No	No	No	Yes	No	
OC000961	Yes	51	1	1	HGSC	III C	Ovary	Primary	Sensitive	Yes	NR	NR	Recurrence/Progression	21.49	Dead	38.34	No	No	No	No	No	Yes	No	No	
OC000970	Yes	49	3	1	Clear cell	III C	Ovary	Recurrent	Sensitive	No	Yes (R)	Resistant	Recurrence/Progression	14.92	Dead	46.26	No	No	No	Yes	No	No	No	No	
OC000979	Yes	50	1	1	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	12.85	Alive	41.49	No	No	No	No	No	No	No	No	
OC000980	Yes	50	4	1	HGSC	III C	Ovary	Primary	Sensitive	No	Yes (R)	Resistant	Recurrence/Progression	18.89	Dead	33.08	No	No	No	No	No	No	No	No	
OC000982	Yes	49	3	1	HGSC	III C	Ovary	Primary	Sensitive	Yes	No	NA	Recurrence/Progression	15.15	Alive	41.40	No	No	No	No	No	No	No	No	
OC000984	Yes	44	5	1	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	23.46	Alive	39.46	No	No	No	No	No	Yes	Yes	No	
OC001000	Yes	53	1	1	Endometrioid	II B	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	39.10	Alive	39.10	No	No	No	No	No	No	No	No	
OC001003	Yes	41	3	1	HGSC	III B	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	13.21	Alive	36.86	No	No	No	No	No	No	No	No	
OC001008	Yes	66	2	2	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	16.03	Alive	36.40	No	No	No	No	No	No	No	No	
OC001010	Yes	45	5	2	HGSC	I B	Ovary	Primary	Sensitive	Yes	No	NA	Stable	43.37	Alive	43.37	No	No	No	No	No	No	No	No	
OC001017	Yes	33	0	0	Mixed	I C	Ovary	Primary	Sensitive	No	No	NA	Stable	43.24	Alive	43.24	No	No	No	No	No	No	No	No	
OC001018	NA	39	2	1	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	17.22	Alive	39.59	No	No	No	No	No	No	No	No	
OC001022	No	45	1	0	HGSC	III A	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	34.04	Dead	41.07	No	No	No	No	No	No	No	No	
OC001029	No	52	1	1	HGSC	III C	Ovary	Primary	Refractory	Yes	No	NA	Recurrence/Progression	42.71	Alive	42.71	No	No	No	No	No	Yes	No	No	
OC001035	No	40	2	1	Mucinous	I A	Ovary	Primary	Sensitive	No	No	NA	Stable	42.68	Alive	42.68	No	No	No	No	No	No	No	No	
OC001045	Yes	65	5	2	HGSC	I V A	Ovary	Primary	Sensitive	No	No	NA	Stable	41.95	Alive	41.95	No	No	No	No	No	No	No	No	
OC001046	Yes	66	2	2	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	21.62	Alive	38.44	No	No	No	No	No	No	No	No	
OC001047	Yes	48	2	1	HGSC	III C	Ovary	Primary	Sensitive	No	NR	NR	Recurrence/Progression	16.92	Dead	27.96	No	No	No	No	No	No	No	No	
OC001050	Yes	51	1	1	HGSC	III C	Ovary	Primary	Sensitive	Yes (I)	Resistant	NA	Recurrence/Progression	23.52	Dead	24.74	No	No	No	No	No	No	No	No	
OC001056	Yes	63	2	0	HGSC	II B	Ovary	Primary	Sensitive	No	No	NA	Stable	41.56	Alive	41.56	No	No	No	No	No	No	No	No	
OC001057	Yes	68	2	2	HGSC	III C	Ovary	Primary	Sensitive	Yes	No	NA	Stable	41.40	Alive	41.40	No	No	No	No	No	No	No	No	
OC001065	Yes	42	7	1	HGSC	III C	Ovary	Primary	Sensitive	No	Yes (R)	Sensitive	Recurrence/Progression	18.00	Alive	34.04	No	No	No	No	No	No	No	No	
OC001069	Yes	71	3	2	HGSC	I C	Ovary	Primary	Sensitive	No	No	NA	Stable	40.48	Alive	40.48	No	No	No	No	No	No	No	No	
OC001075	Yes	31	3	1	HGSC	I C2	Fallopian tube	Primary	Sensitive	NR	No	NA	Stable	39.72	Alive	39.72	No	No	No	No	No	No	No	No	
OC001076	Yes	35	1	1	HGSC	III C	Ovary	Primary	Sensitive	No	Yes (R)	Sensitive	Recurrence/Progression	18.27	Alive	32.72	No	No	No	No	No	No	No	No	
OC001084	Yes	66	4	4	HGSC	II B	Ovary	Primary	Sensitive	No	No	NA	Stable	39.26	Alive	39.26	No	No	No	No	No	No	No	No	
OC001091	Yes	46	3	1	HGSC	II A	Ovary	Primary	Sensitive	Yes (I)	NR	NA	Stable	39.00	Alive	39.00	No	No	No	No	No	No	No	No	
OC001098	Yes	60	2	2	HGSC	IV B	Ovary	Primary	Resistant	No	No	NA	Recurrence/Progression	14.16	Dead	19.84	No	No	No	No	No	No	No	No	
OC001103	Yes	45	1	1	HGSC	III C	Ovary	Primary	Sensitive	No	Yes (R)	Resistant	Recurrence/Progression	18.17	Dead	25.92	No	No	No	No	Yes	No	Yes	No	
OC001107	Yes	57	5	1	HGSC	III C	Ovary	Primary	Resistant	No	No	NA	Recurrence/Progression	9.56	Dead	20.17	No	No	No	No	No	No	No	No	
OC001109	Yes	39	4	2	HGSC	III C	Ovary	Primary	Sensitive	No	Yes (I)	Sensitive	Recurrence/Progression	33.48	Dead	37.52	No	No	No	No	No	No	No	No	
OC001134	Yes	59	3	2	HGSC	IV B	Ovary	Primary	Resistant	No	No	NA	Recurrence/Progression	9.40	Alive	30.65	No	No	No	No	No	No	No	No	
OC001137	No	40	4	1	HGSC	II B	Ovary	Recurrent	Sensitive	No	No	NA	Recurrence/Progression	53.03	Alive	87.26	No	No	No	No	No	No	No	No	
OC001140	No	44	3	3	LGSC	III C	Ovary	Primary	Sensitive	Yes	No	NA	Stable	30.46	Alive	30.46	No	No	No	No	No	No	No	No	
OC001144	Yes	48	1	1	HGSC	III C	Ovary	Recurrent	Sensitive	No	Yes (R)	Sensitive	Recurrence/Progression	55.06	Alive	98.04	No	No	No	No	No	No	No	No	
OC001145	Yes	48	1	1	HGSC	IV B	Peritoneum	Primary	Sensitive	Yes	Yes (I)	Sensitive	Recurrence/Progression	34.20	Alive	37.16	No	No	No	No	No	No	No	No	
OC001146	Yes	66	2	1	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Stable	37.16	Alive	37.16	No	No	No	No	No	Yes	No	No	
OC001152	Yes	42	4	2	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	12.88	Alive	29.90	No	No	No	No	No	No	No	No	
OC001154																									

OC001315	Yes	49	2	1	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	13.50	Alive	34.04	No	No	No	No	No	No	Yes	No
OC001327	Yes	24	0	0	Endometrioid	I A	Ovary	Recurrent	Sensitive	NR	No	NA	Recurrence/Progression	108.32	Alive	146.33	No	No	No	No	No	No	No	No
OC001337	No	65	5	3	Endometrioid	III B	Ovary	Recurrent	Sensitive	No	No	NA	Recurrence/Progression	23.52	Dead	86.37	No	No	No	No	No	No	No	No
OC001342	No	48	3	1	Clear cell	III C	Ovary	Recurrent	Sensitive	No	No	NA	Recurrence/Progression	17.97	Alive	122.51	No	No	No	No	No	Yes	No	No
OC001354	No	41	2	1	Clear cell	I C	Ovary	Recurrent	Sensitive	No	No	NA	Recurrence/Progression	53.26	Alive	103.82	No	No	No	No	No	No	Yes	No
OC001359	No	40	3	0	HGSC	III C	Ovary	Primary	Sensitive	No	No	NA	Recurrence/Progression	37.68	Alive	50.27	No	No	No	No	No	No	No	No
OC001364	Yes	62	2	2	HGSC	III C	Fallopian tube	Primary	Resistant	No	Yes (I)	Resistant	Recurrence/Progression	9.07	Dead	30.78	No	No	No	No	No	No	No	No
OC001373	No	52	3	1	HGSC	III C	Ovary	Recurrent	Sensitive	NR	NR	NR	Recurrence/Progression	43.99	Alive	78.98	No	No	No	No	No	No	No	No
OC001407	Yes	63	NR	NR	HGSC	III C	Ovary	Primary	Resistant	NR	NR	NR	Recurrence/Progression	9.23	Dead	14.23	No	No	No	No	No	No	No	No
OC001408	Yes	60	NR	NR	HGSC	III C	Ovary	Primary	Sensitive	NR	NR	NR	Recurrence/Progression	16.00	Dead	22.97	No	No	No	No	No	No	Yes	No
OC001409	Yes	56	NR	NR	HGSC	III C	Ovary	Primary	Sensitive	NR	NR	NR	Recurrence/Progression	4.57	Dead	19.61	No	No	No	No	No	No	Yes	No
OC001410	Yes	48	NR	NR	HGSC	III C	Ovary	Primary	Sensitive	NR	NR	NR	Recurrence/Progression	18.95	Alive	29.96	No	No	No	No	No	No	Yes	Yes
OC001411	Yes	60	NR	NR	HGSC	III C	Ovary	Primary	Sensitive	NR	NR	NR	Recurrence/Progression	35.98	Alive	41.92	No	No	No	No	No	No	Yes	No

Table S2. Details of germline deleterious variants.

ID	Gene	Transcript	cDNA	Protein	Mutation type	Classification
OC000001	BRCA1	NM_007294.4	c.190T>C	p.Cys64Arg	Missense	Pathogenic
OC000008	BRCA1	NM_007294.4	c.5251C>T	p.Arg1751Ter	Nonsense	Pathogenic
OC000011	BRCA2	NM_000059.4	c.1796_1800del	p.Ser599Ter	Frameshift	Pathogenic
OC000012	BRCA1	NM_007294.4	c.1016del	p.Lys339ArgfsTer2	Frameshift	Pathogenic
OC000053	BRCA2	NM_000059.4	c.6206dup	p.Leu2069PhefsTer9	Frameshift	Pathogenic
OC000056	BRCA1	NM_007294.4	c.3937C>T	p.Gln1313Ter	Nonsense	Pathogenic
OC000060	BRCA1	NM_007294.4	c.3756_3759del	p.Ser1253ArgfsTer1	Frameshift	Pathogenic
OC000068	BRCA1	NM_007294.4	c.4335_4338dup	p.Gln1447ArgfsTer1	Frameshift	Pathogenic
OC000085	BRCA2	NM_000059.4	c.8951C>G	p.Ser2984Ter	Nonsense	Pathogenic
OC000129	BRCA1	NM_007294.4	c.2463_2464del	p.Asp821GlufsTer2	Frameshift	Likely Pathogenic
OC000148	BRCA1	NM_007294.4	c.954dup	p.Asn319Ter	Frameshift	Pathogenic
OC000162	BRCA2	NM_000059.4	c.5993_5994del	p.Gln1998ArgfsTer4	Frameshift	Pathogenic
OC000163	BRCA1	NM_007294.4	c.5193+1G>T	-	Splice	Pathogenic
OC000182	BRCA1	NM_007294.4	c.283_286del	p.Leu95ThrfsTer23	Frameshift	Pathogenic
OC000186	BRCA1	NM_007294.4	c.4041_4042del	p.Gly1348AsnfsTer7	Frameshift	Pathogenic
OC000221	BRCA1	NM_007294.4	c.876_879del	p.Thr293LysfsTer4	Frameshift	Pathogenic
OC000224	BRCA1	NM_007294.4	c.5278-1G>C	-	Splice	Pathogenic
OC000228	BRCA1	NM_007294.4	c.5542C>T	p.Gln1848Ter	Nonsense	Pathogenic
OC000233	BRCA1	NM_007294.4	c.1733_1734del	p.Ser578CysfsTer7	Frameshift	Pathogenic
OC000238	BRCA1	NM_007294.4	c.132C>T	p.Cys44=	Synonymous	Likely Pathogenic
OC000249	BRCA1	NM_007294.4	c.958_961dup	p.Trp321Ter	Frameshift	Pathogenic
OC000253	BRCA1	NM_007294.4	c.1282A>T	p.Lys428Ter	Nonsense	Likely Pathogenic
OC000266	BRCA2	NM_000059.4	c.464_468del	p.Arg155LysfsTer26	Frameshift	Pathogenic
OC000343	BRCA2	NM_000059.4	EX14_20 DEL	-	CNV-Del	Likely Pathogenic
OC000584	BRCA1	NM_007294.4	c.4148C>G	p.Ser1383Ter	Nonsense	Pathogenic
OC000612	BRCA2	NM_000059.4	c.3883C>T	p.Gln1295Ter	Nonsense	Pathogenic
OC000612	BRCA1	NM_007294.4	c.1214C>G	p.Ser405Ter	Nonsense	Pathogenic
OC000658	PALB2	NM_024675.4	c.3121A>T	p.Lys1041Ter	Nonsense	Likely Pathogenic
OC000744	BRCA1	NM_007294.4	EX18_19 DEL	-	CNV-Del	Pathogenic
OC000771	STK11	NM_000455.5	EX1_10 DEL	-	CNV-Del	Pathogenic
OC000784	BRCA1	NM_007294.4	c.3756_3759del	p.Ser1253ArgfsTer1	Frameshift	Pathogenic
OC000789	BRCA1	NM_007294.4	c.520C>T	p.Gln174Ter	Nonsense	Pathogenic
OC000790	BRCA1	NM_007294.4	c.2751del	p.Lys918SerfsTer82	Frameshift	Pathogenic
OC000791	BRCA1	NM_007294.4	c.5470_5477del	p.Ile1824AspfsTer3	Frameshift	Pathogenic
OC000794	BRCA1	NM_007294.4	c.1660G>T	p.Glu554Ter	Nonsense	Pathogenic
OC000798	BRCA1	NM_007294.4	c.212+3A>G	-	Splice	Pathogenic
OC000799	RAD51C	NM_058216.3	c.635del	p.Arg212ProfsTer27	Frameshift	Likely Pathogenic
OC000800	BRCA1	NM_007294.4	c.5095C>T	p.Arg1699Trp	Missense	Pathogenic
OC000805	BRCA1	NM_007294.4	c.4986+1G>C	-	Splice	Pathogenic
OC000811	BRCA1	NM_007294.4	c.5092G>T	p.Glu1698Ter	Nonsense	Pathogenic
OC000827	ATM	NM_000051.4	c.7006G>T	p.Glu2336Ter	Nonsense	Likely Pathogenic
OC000828	BRCA2	NM_000059.4	c.5578A>T	p.Lys1860Ter	Nonsense	Pathogenic
OC000837	BRCA1	NM_007294.4	c.3294del	p.Pro1099LeufsTer1	Frameshift	Pathogenic
OC000837	CHEK2	NM_007194.4	c.917G>C	p.Gly306Ala	Missense	Likely Pathogenic
OC000847	PALB2	NM_024675.4	c.246dup	p.His83ThrfsTer7	Frameshift	Likely Pathogenic
OC000947	BRCA1	NM_007294.4	c.5470_5477del	p.Ile1824AspfsTer3	Frameshift	Pathogenic
OC000961	BRCA1	NM_007294.4	c.4357+1G>A	-	Splice	Pathogenic
OC000984	BRCA1	NM_007294.4	c.5085dup	p.Val1696CysfsTer3	Frameshift	Pathogenic
OC001109	BRCA1	NM_007294.4	c.3700_3704del	p.Val1234GlnfsTer8	Frameshift	Pathogenic
OC001144	BRCA1	NM_007294.4	c.2505del	p.His835GlnfsTer11	Frameshift	Likely Pathogenic
OC001171	BRCA1	NM_007294.4	c.3468del	p.Asp1156GlufsTer4	Frameshift	Pathogenic
OC001172	BRCA1	NM_007294.4	c.335del	p.Asn112IlefsTer7	Frameshift	Pathogenic
OC001208	BRCA1	NM_007294.4	c.1892dup	p.Ser632LysfsTer4	Frameshift	Pathogenic
OC001262	BRCA1	NM_007294.4	c.1352_1364del	p.Ser451LeufsTer20	Frameshift	Pathogenic
OC001305	BRCA1	NM_007294.4	c.4801A>T	p.Lys1601Ter	Nonsense	Pathogenic
OC001411	BARD1	NM_000465.4	c.1786A>T	p.Lys596Ter	Nonsense	Likely Pathogenic

Table S3. Details of somatic variants.

ID	Gene	Transcript	CDS	Amino acid	Mutation type	Classification
OC000001	TP53	NM_000546.6	c.686_687del	p.Cys229TyrfsTer1	Frameshift	II
OC000008	TP53	NM_000546.6	c.733G>A	p.Gly245Ser	Missense	II
OC000012	TP53	NM_000546.6	c.920-2A>G	-	Splice	II
OC000036	TP53	NM_000546.6	c.636dup	p.Arg213SerfsTer3	Frameshift	II
OC000053	TP53	NM_000546.6	c.713G>T	p.Cys238Phe	Missense	II
OC000053	STK11	NM_000455.5	-	-	CNV-Del	II
OC000053	MRE11A	NM_005590.4	c.454C>A	p.His152Asn	Missense	III
OC000056	BRCA2	NM_000059.4	c.6206dup	p.Leu2069PhefsTer	Frameshift	I
OC000056	TP53	NM_000546.6	c.524G>A	p.Arg175His	Missense	II
OC000060	TP53	NM_000546.6	c.1027G>T	p.Glu343Ter	Nonsense	II
OC000068	TP53	NM_000546.6	c.517G>T	p.Val173Leu	Missense	II
OC000070	TP53	NM_000546.6	c.375+1G>A	-	Splice	II
OC000071	TP53	NM_000546.6	c.839G>A	p.Arg280Lys	Missense	II
OC000085	TP53	NM_000546.6	c.824G>T	p.Cys275Phe	Missense	II
OC000119	PALB2	NM_024675.4	c.2558G>C	p.Gly853Ala	Missense	II
OC000119	TP53	NM_000546.6	c.573del	p.Gln192SerfsTer5	Frameshift	II
OC000126	TP53	NM_000546.6	c.646G>T	p.Val216Leu	Missense	II
OC000126	BRIP1	NM_032043.3	c.1489G>A	p.Val497Ile	Missense	III
OC000128	TP53	NM_000546.6	c.817C>T	p.Arg273Cys	Missense	II
OC000129	PMS2	NM_000535.7	c.752_770del	p.Val251GlyfsTer5	Frameshift	I
OC000129	TP53	NM_000546.6	c.578A>G	p.His193Arg	Missense	II
OC000133	TP53	NM_000546.6	c.314_323del	p.Gly105ValfsTer1	Frameshift	II
OC000141	ATM	NM_000051.4	c.5446A>G	p.Ser1816Gly	Missense	II
OC000141	ATM	NM_000051.4	c.5977dup	p.Ser1993LysfsTer	Frameshift	II
OC000141	BRCA2	NM_000059.4	c.676A>G	p.Thr226Ala	Missense	III
OC000141	BRCA2	NM_000059.4	c.7055C>A	p.Pro2352His	Missense	II
OC000141	BRCA2	NM_000059.4	c.7760T>A	p.Leu2587His	Missense	II
OC000141	MLH1	NM_000249.4	c.790+1G>A	-	Splice	I
OC000141	MSH2	NM_000251.3	c.691G>A	p.Asp231Asn	Missense	III
OC000141	MSH2	NM_000251.3	c.1276+1G>A	-	Splice	I
OC000141	PMS1	NM_000534.5	c.1582G>A	p.Val528Ile	Missense	IV
OC000141	PTEN	NM_000314.8	c.180G>T	p.Lys60Asn	Missense	II
OC000141	TP53	NM_000546.6	c.296C>T	p.Ser99Phe	Missense	II
OC000145	TP53	NM_000546.6	c.375G>T	p.Thr125=	Synonymous	II
OC000147	TP53	NM_000546.6	c.97-2A>G	-	Splice	II
OC000148	TP53	NM_000546.6	c.1009C>T	p.Arg337Cys	Missense	II
OC000149	TP53	NM_000546.6	c.699del	p.Tyr234ThrfsTer1	Frameshift	II
OC000150	BRCA1	NM_007294.4	c.5153-1G>A	-	Splice	I
OC000150	TP53	NM_000546.6	c.580_600del	p.Ile195_Leu201de	Deletion	II
OC000152	BRCA1	NM_007294.4	c.5074+1G>T	-	Splice	I
OC000152	BRCA2	NM_000059.4	c.2504C>T	p.Pro835Leu	Missense	III
OC000152	TP53	NM_000546.6	c.102dup	p.Pro36AlafsTer7	Frameshift	II
OC000153	TP53	NM_000546.6	c.780del	p.Ser261ValfsTer8	Frameshift	II
OC000159	TP53	NM_000546.6	c.701A>G	p.Tyr234Cys	Missense	II
OC000162	TP53	NM_000546.6	c.817C>T	p.Arg273Cys	Missense	II
OC000163	TP53	NM_000546.6	c.281C>A	p.Ser94Ter	Nonsense	II
OC000169	TP53	NM_000546.6	c.743G>A	p.Arg248Gln	Missense	II
OC000171	PTEN	NM_000314.8	c.385G>A	p.Gly129Arg	Missense	II
OC000171	TP53	NM_000546.6	c.586C>T	p.Arg196Ter	Nonsense	II
OC000176	TP53	NM_000546.6	c.700T>C	p.Tyr234His	Missense	II
OC000179	TP53	NM_000546.6	c.617T>A	p.Leu206Ter	Nonsense	II
OC000182	TP53	NM_000546.6	c.817C>T	p.Arg273Cys	Missense	II
OC000182	PTEN	NM_000314.8	-	-	CNV-Del	II
OC000185	TP53	NM_000546.6	c.713G>A	p.Cys238Tyr	Missense	II
OC000186	TP53	NM_000546.6	c.659A>G	p.Tyr220Cys	Missense	II
OC000189	TP53	NM_000546.6	c.722C>T	p.Ser241Phe	Missense	II
OC000193	TP53	NM_000546.6	c.693_699dup	p.Tyr234HisfsTer8	Frameshift	II
OC000201	TP53	NM_000546.6	c.747G>T	p.Arg249Ser	Missense	II
OC000201	PTEN	NM_000314.8	c.625G>A	p.Gly209Arg	Missense	II

OC000202	BRCA2	NM_000059.4	-	-	CNV-Del	I
OC000202	BRCA2	NM_000059.4	c.6077C>G	p.Thr2026Arg	Missense	III
OC000202	BRCA1	NM_007294.4	-	-	CNV-Del	I
OC000202	TP53	NM_000546.6	c.751_757del	p.Ile251ProfsTer92	Frameshift	II
OC000202	PTEN	NM_000314.8	-	-	CNV-Del	II
OC000202	RAD51C	NM_058216.3	-	-	CNV-Del	II
OC000202	PMS2	NM_000535.7	c.1039G>C	p.Glu347Gln	Missense	III
OC000218	TP53	NM_000546.6	c.821T>G	p.Val274Gly	Missense	II
OC000220	TP53	NM_000546.6	c.653T>G	p.Val218Gly	Missense	II
OC000221	TP53	NM_000546.6	c.523C>G	p.Arg175Gly	Missense	II
OC000221	CDH1	NM_004360.5	c.1270G>T	p.Val424Phe	Missense	III
OC000226	BRCA1	NM_007294.4	c.1723G>T	p.Glu575Ter	Nonsense	I
OC000228	TP53	NM_000546.6	c.1028_1029delinsp	p.Glu343ValfsTer2	Frameshift	II
OC000236	TP53	NM_000546.6	c.1024C>T	p.Arg342Ter	Nonsense	II
OC000249	TP53	NM_000546.6	c.469G>T	p.Val157Phe	Missense	II
OC000254	BRCA1	NM_007294.4	c.1996_1997del	p.Leu666ThrfsTerf	Frameshift	I
OC000254	TP53	NM_000546.6	c.577C>G	p.His193Asp	Missense	II
OC000528	TP53	NM_000546.6	c.659A>G	p.Tyr220Cys	Missense	II
OC000547	TP53	NM_000546.6	c.817C>T	p.Arg273Cys	Missense	II
OC000569	TP53	NM_000546.6	c.438G>A	p.Trp146Ter	Nonsense	II
OC000612	TP53	NM_000546.6	c.641A>G	p.His214Arg	Missense	II
OC000627	TP53	NM_000546.6	c.439del	p.Val147LeufsTer2	Frameshift	II
OC000652	TP53	NM_000546.6	c.844C>T	p.Arg282Trp	Missense	II
OC000654	TP53	NM_000546.6	c.527G>T	p.Cys176Phe	Missense	II
OC000658	CHEK2	NM_007194.4	c.1117A>G	p.Lys373Glu	Missense	II
OC000658	TP53	NM_000546.6	c.488A>G	p.Tyr163Cys	Missense	II
OC000672	TP53	NM_000546.6	c.844C>T	p.Arg282Trp	Missense	II
OC000679	TP53	NM_000546.6	c.536A>G	p.His179Arg	Missense	II
OC000738	TP53	NM_000546.6	c.151del	p.Glu51AsnfsTer7	Frameshift	II
OC000741	TP53	NM_000546.6	c.1027G>T	p.Glu343Ter	Nonsense	II
OC000742	TP53	NM_000546.6	c.711G>A	p.Met237Ile	Missense	II
OC000743	BRCA2	NM_000059.4	c.3460del	p.Thr1154ProfsTer	Frameshift	I
OC000744	TP53	NM_000546.6	c.536A>T	p.His179Leu	Missense	II
OC000768	CDH1	NM_004360.5	c.2302G>A	p.Asp768Asn	Missense	III
OC000769	CHEK2	NM_007194.4	c.1117A>G	p.Lys373Glu	Missense	II
OC000771	TP53	NM_000546.6	c.817C>T	p.Arg273Cys	Missense	II
OC000773	CHEK2	NM_007194.4	c.1117A>G	p.Lys373Glu	Missense	II
OC000773	TP53	NM_000546.6	c.626_627del	p.Arg209LysfsTer6	Frameshift	II
OC000782	TP53	NM_000546.6	c.709del	p.Met237CysfsTer	Frameshift	II
OC000791	TP53	NM_000546.6	c.782+2_782+6del	-	Splice	II
OC000792	TP53	NM_000546.6	c.577C>T	p.His193Tyr	Missense	II
OC000793	TP53	NM_000546.6	c.659A>G	p.Tyr220Cys	Missense	II
OC000795	CHEK2	NM_007194.4	c.1117A>G	p.Lys373Glu	Missense	II
OC000797	TP53	NM_000546.6	c.524G>A	p.Arg175His	Missense	II
OC000798	CHEK2	NM_007194.4	c.1117A>G	p.Lys373Glu	Missense	II
OC000798	TP53	NM_000546.6	c.700T>C	p.Tyr234His	Missense	II
OC000799	TP53	NM_000546.6	c.659A>G	p.Tyr220Cys	Missense	II
OC000802	TP53	NM_000546.6	c.524G>A	p.Arg175His	Missense	II
OC000802	BARD1	NM_000465.4	c.1508A>G	p.Lys503Arg	Missense	III
OC000803	TP53	NM_000546.6	c.1015G>T	p.Glu339Ter	Nonsense	II
OC000804	PTEN	NM_000314.8	c.302_305delinsAC	p.Ile101AsnfsTer1	Frameshift	II
OC000804	PTEN	NM_000314.8	c.406del	p.Cys136ValfsTer1	Frameshift	II
OC000804	PTEN	NM_000314.8	c.635-1G>T	-	Splice	II
OC000805	TP53	NM_000546.6	c.916C>T	p.Arg306Ter	Nonsense	II
OC000811	BRCA2	NM_000059.4	c.3349A>G	p.Ile1117Val	Missense	III
OC000811	TP53	NM_000546.6	c.743G>A	p.Arg248Gln	Missense	II
OC000812	BRCA1	NM_007294.4	c.3133_3134del	p.Asn1045Ter	Frameshift	I
OC000812	TP53	NM_000546.6	c.850A>C	p.Thr284Pro	Missense	II
OC000813	TP53	NM_000546.6	c.578A>G	p.His193Arg	Missense	II
OC000814	TP53	NM_000546.6	c.832C>T	p.Pro278Ser	Missense	II
OC000815	TP53	NM_000546.6	c.857A>G	p.Glu286Gly	Missense	II

OC000825	TP53	NM_000546.6	c.659A>G	p.Tyr220Cys	Missense	II
OC000826	TP53	NM_000546.6	c.761T>G	p.Ile254Ser	Missense	II
OC000827	TP53	NM_000546.6	c.673-2A>C	-	Splice	II
OC000828	TP53	NM_000546.6	c.584T>A	p.Ile195Asn	Missense	II
OC000829	TP53	NM_000546.6	c.661G>T	p.Glu221Ter	Nonsense	II
OC000833	BRCA1	NM_007294.4	c.2764_2767del	p.Thr922LeufsTer7Frameshift		I
OC000833	TP53	NM_000546.6	c.602del	p.Leu201CysfsTerFrameshift		II
OC000837	TP53	NM_000546.6	c.818G>A	p.Arg273His	Missense	II
OC000841	TP53	NM_000546.6	c.532C>G	p.His178Asp	Missense	II
OC000847	TP53	NM_000546.6	c.770T>G	p.Leu257Arg	Missense	II
OC000850	TP53	NM_000546.6	c.376-1G>A	-	Splice	II
OC000855	MLH1	NM_000249.4	c.841G>A	p.Ala281Thr	Missense	III
OC000855	RAD51C	NM_058216.3	c.1097G>A	p.Arg366Gln	Missense	II
OC000855	TP53	NM_000546.6	c.839G>C	p.Arg280Thr	Missense	II
OC000856	ATM	NM_000051.4	c.7428T>G	p.Ser2476Arg	Missense	III
OC000856	TP53	NM_000546.6	c.994-2A>G	-	Splice	II
OC000856	TP53	NM_000546.6	c.97-8A>C	-	Splice	II
OC000858	BRCA1	NM_007294.4	c.3380_3402del	p.Tyr1127SerfsTerFrameshift		I
OC000858	TP53	NM_000546.6	c.713G>T	p.Cys238Phe	Missense	II
OC000860	TP53	NM_000546.6	c.833C>G	p.Pro278Arg	Missense	II
OC000865	ATM	NM_000051.4	c.2458_2466+8del	-	Splice	II
OC000947	TP53	NM_000546.6	c.707A>G	p.Tyr236Cys	Missense	II
OC000961	TP53	NM_000546.6	c.659A>G	p.Tyr220Cys	Missense	II
OC000979	TP53	NM_000546.6	c.1024C>T	p.Arg342Ter	Nonsense	II
OC000982	BRCA2	NM_000059.4	c.2157_2173delins	p.Asn719LysfsTer2Nonsense		I
OC000982	TP53	NM_000546.6	c.743G>A	p.Arg248Gln	Missense	II
OC000984	TP53	NM_000546.6	c.723del	p.Cys242AlafsTer5Frameshift		II
OC001000	PTEN	NM_000314.8	c.388C>G	p.Arg130Gly	Missense	II
OC001000	PTEN	NM_000314.8	c.497T>G	p.Val166Gly	Missense	III
OC001000	TP53	NM_000546.6	c.637C>T	p.Arg213Ter	Nonsense	II
OC001003	TP53	NM_000546.6	c.574C>T	p.Gln192Ter	Nonsense	II
OC001008	BRCA1	NM_007294.4	c.5498_5511del	p.Val1833GlyfsTerFrameshift		I
OC001008	TP53	NM_000546.6	c.817C>G	p.Arg273Gly	Missense	II
OC001010	TP53	NM_000546.6	c.1025G>C	p.Arg342Pro	Missense	II
OC001010	NBN	NM_002485.5	-	-	CNV-Dup	II
OC001022	TP53	NM_000546.6	c.1024C>T	p.Arg342Ter	Nonsense	II
OC001029	TP53	NM_000546.6	c.341T>A	p.Leu114Ter	Nonsense	II
OC001035	TP53	NM_000546.6	c.517G>A	p.Val173Met	Missense	II
OC001045	BRCA1	NM_007294.4	c.3960_3963del	p.Ser1321AsnfsTerFrameshift		I
OC001045	TP53	NM_000546.6	c.536A>G	p.His179Arg	Missense	II
OC001046	TP53	NM_000546.6	c.715A>G	p.Asn239Asp	Missense	II
OC001046	BRCA2	NM_000059.4	c.6169G>C	p.Gly2057Arg	Missense	III
OC001047	TP53	NM_000546.6	c.778_779del	p.Ser260GlnfsTer3Frameshift		II
OC001050	TP53	NM_000546.6	c.817C>T	p.Arg273Cys	Missense	II
OC001056	TP53	NM_000546.6	c.818G>A	p.Arg273His	Missense	II
OC001057	TP53	NM_000546.6	c.672+1G>A	-	Splice	II
OC001057	ATM	NM_000051.4	c.3773A>G	p.His1258Arg	Missense	III
OC001065	BRCA1	NM_007294.4	c.5254G>C	p.Ala1752Pro	Missense	I
OC001065	TP53	NM_000546.6	c.578A>G	p.His193Arg	Missense	II
OC001069	TP53	NM_000546.6	c.524G>A	p.Arg175His	Missense	II
OC001075	TP53	NM_000546.6	c.517G>A	p.Val173Met	Missense	II
OC001076	TP53	NM_000546.6	c.497C>G	p.Ser166Ter	Nonsense	II
OC001084	TP53	NM_000546.6	c.880G>T	p.Glu294Ter	Nonsense	II
OC001091	TP53	NM_000546.6	c.824G>A	p.Cys275Tyr	Missense	II
OC001091	ATM	NM_000051.4	c.2228C>G	p.Ser743Ter	Nonsense	II
OC001103	TP53	NM_000546.6	c.439del	p.Val147LeufsTer2Frameshift		II
OC001103	PMS1	NM_000534.5	c.1663A>C	p.Asn555His	Missense	IV
OC001107	TP53	NM_000546.6	c.342del	p.Leu114PhefsTerFrameshift		II
OC001134	TP53	NM_000546.6	c.659A>G	p.Tyr220Cys	Missense	II
OC001137	TP53	NM_000546.6	c.560-7_562delins	-	Splice	II
OC001144	TP53	NM_000546.6	c.704_709del	p.Asn235_Tyr236cDeletion		II

OC001145	TP53	NM_000546.6	c.224del	p.Pro75LeufsTer4Frameshift	II
OC001146	BRCA2	NM_000059.4	c.6689_6731del	p.Ile2230AsnfsTerFrameshift	I
OC001146	TP53	NM_000546.6	c.422G>A	p.Cys141Tyr Missense	II
OC001146	PALB2	NM_024675.4	c.1415A>C	p.Gln472Pro Missense	III
OC001152	TP53	NM_000546.6	c.423_427del	p.Pro142AlafsTer5Frameshift	II
OC001171	TP53	NM_000546.6	c.817C>T	p.Arg273Cys Missense	II
OC001172	TP53	NM_000546.6	c.527G>A	p.Cys176Tyr Missense	II
OC001172	STK11	NM_000455.5	-	- CNV-Del	II
OC001175	TP53	NM_000546.6	c.536A>G	p.His179Arg Missense	II
OC001176	TP53	NM_000546.6	c.469G>T	p.Val157Phe Missense	II
OC001177	ATM	NM_000051.4	c.748C>T	p.Arg250Ter Nonsense	II
OC001177	CHEK2	NM_007194.4	c.1117A>G	p.Lys373Glu Missense	II
OC001178	BRCA1	NM_007294.4	c.5406+3A>T	- Splice	I
OC001178	TP53	NM_000546.6	c.754_762del	p.Leu252_Ile254deletion	II
OC001182	TP53	NM_000546.6	c.743G>A	p.Arg248Gln Missense	II
OC001186	TP53	NM_000546.6	c.673-2A>T	- Splice	II
OC001194	BRCA1	NM_007294.4	c.2269del	p.Val757PhefsTerFrameshift	I
OC001194	TP53	NM_000546.6	c.637C>T	p.Arg213Ter Nonsense	II
OC001195	TP53	NM_000546.6	c.775G>T	p.Asp259Tyr Missense	II
OC001220	TP53	NM_000546.6	c.722C>T	p.Ser241Phe Missense	II
OC001226	TP53	NM_000546.6	c.306del	p.Tyr103ThrfsTer2Frameshift	II
OC001237	TP53	NM_000546.6	c.817C>T	p.Arg273Cys Missense	II
OC001241	TP53	NM_000546.6	c.637C>T	p.Arg213Ter Nonsense	II
OC001242	TP53	NM_000546.6	c.584T>C	p.Ile195Thr Missense	II
OC001244	TP53	NM_000546.6	c.1006G>T	p.Glu336Ter Nonsense	II
OC001244	BRCA2	NM_000059.4	c.8067_8114del	p.Val2690_Ser270Deletion	III
OC001256	CHEK2	NM_007194.4	c.1055A>C	p.Asn352Thr Missense	III
OC001256	BRCA1	NM_007294.4	c.2072G>A	p.Arg691Lys Missense	III
OC001262	TP53	NM_000546.6	c.422G>A	p.Cys141Tyr Missense	II
OC001262	MRE11A	NM_005590.4	-	- CNV-Dup	II
OC001265	TP53	NM_000546.6	c.452C>A	p.Pro151His Missense	II
OC001292	TP53	NM_000546.6	c.742C>T	p.Arg248Trp Missense	II
OC001293	MLH1	NM_000249.4	c.1039-8_1039-7in-	- Splice	III
OC001293	TP53	NM_000546.6	c.96+1G>T	- Splice	II
OC001296	TP53	NM_000546.6	c.298C>T	p.Gln100Ter Nonsense	II
OC001305	PMS2	NM_000535.7	c.251-4del	- Splice	III
OC001305	PTEN	NM_000314.8	c.616_632del	p.Phe206GlnfsTerFrameshift	II
OC001305	TP53	NM_000546.6	c.214_215delinsG	p.Pro72AlafsTer51Frameshift	II
OC001308	ATM	NM_000051.4	c.8668C>A	p.Leu2890Ile Missense	II
OC001312	TP53	NM_000546.6	c.413C>T	p.Ala138Val Missense	II
OC001315	TP53	NM_000546.6	c.752T>A	p.Ile251Asn Missense	II
OC001337	TP53	NM_000546.6	c.455del	p.Pro152ArgfsTer1Frameshift	II
OC001342	PTEN	NM_000314.8	c.797_801+4del	- Splice	II
OC001354	ATM	NM_000051.4	c.8343_8344del	p.Asn2782GlnfsTerFrameshift	II
OC001359	TP53	NM_000546.6	c.742C>T	p.Arg248Trp Missense	II
OC001364	TP53	NM_000546.6	c.818G>A	p.Arg273His Missense	II
OC001373	TP53	NM_000546.6	c.499C>T	p.Gln167Ter Nonsense	II
OC001408	TP53	NM_000546.6	c.638G>T	p.Arg213Leu Missense	II
OC001409	TP53	NM_000546.6	c.569C>T	p.Pro190Leu Missense	II
OC001410	TP53	NM_000546.6	c.701A>G	p.Tyr234Cys Missense	II
OC001410	ATM	NM_000051.4	c.7661A>G	p.His2554Arg Missense	III

Table S4. Frequency of LP+ and VUS+ variants in the cohort of 200 individuals for survival analysis.

Genes/Gene sets†	Germline		Somatic		Germline + Somatic	
	LP+ no. (%)	VUS+ no. (%)	LP+ no. (%)	VUS+ no. (%)	LP+ no. (%)	VUS+ no. (%)
<i>ATM</i>	1 (0.5)	13 (6.5)	4 (2.0)	7 (3.5)	5 (2.5)	20 (10.0)
<i>BARB1</i>	1 (0.5)	7 (3.5)	-	1 (0.5)	1 (0.5)	8 (4.0)
<i>BRCA1</i>	35 (17.5)	45 (22.5)	13 (6.5)	14 (7.0)	48 (24.0)	59 (29.5)
<i>BRCA2</i>	6 (3.0)	15 (7.5)	6 (3.0)	9 (4.5)	12 (6.0)	24 (12.0)
<i>BRIP1</i>	-	2 (1.0)	-	1 (0.5)	-	3 (1.5)
<i>CDH1</i>	-	3 (1.5)	-	2 (1.0)	-	5 (2.5)
<i>CHEK2</i>	1 (0.5)	6 (3.0)	6 (3.0)	7 (3.5)	7 (3.5)	12 (6.0)
<i>MLH1</i>	-	3 (1.5)	1 (0.5)	2 (1.0)	1 (0.5)	5 (2.5)
<i>MRE11A</i>	-	5 (2.5)	1 (0.5)	1 (0.5)	1 (0.5)	6 (3.0)
<i>MSH2</i>	-	2 (1.0)	1 (0.5)	1 (0.5)	1 (0.5)	3 (1.5)
<i>MSH6</i>	-	10 (5.0)	-	-	-	10 (5.0)
<i>MUTYH</i>	-	9 (4.5)	-	-	-	9 (4.5)
<i>NBN</i>	-	2 (1.0)	1 (0.5)	1 (0.5)	1 (0.5)	3 (1.5)
<i>PALB2</i>	2 (1.0)	6 (3.0)	1 (0.5)	2 (1.0)	3 (1.5)	8 (4.0)
<i>PMS1</i>	-	3 (1.5)	-	-	-	3 (1.5)
<i>PMS2</i>	-	2 (1.0)	1 (0.5)	3 (1.5)	1 (0.5)	5 (2.5)
<i>PTEN</i>	-	1 (0.5)	6 (3.0)	6 (3.0)	6 (3.0)	7 (3.5)
<i>RAD50</i>	-	4 (2.0)	-	-	-	4 (2.0)
<i>RAD51C</i>	-	4 (2.0)	1 (0.5)	1 (0.5)	1 (0.5)	5 (2.5)
<i>STK11</i>	1 (0.5)	4 (2.0)	1 (0.5)	1 (0.5)	2 (1.0)	5 (2.5)
<i>TP53</i>	-	-	136 (68.0)	136 (68.0)	136 (68.0)	136 (68.0)
BRCA1/2	40 (20.0)	56 (28.0)	18 (9.0)	21 (10.5)	57 (28.5)	76 (38.0)
HR	44 (22.0)	89 (44.5)	29 (14.5)	37 (18.5)	69 (34.5)	114 (57.0)
HRo	5 (2.5)	43 (21.5)	13 (6.5)	20 (10.0)	17 (8.5)	57 (28.5)
Non-HR	1 (0.5)	33 (16.5)	136 (68.0)	137 (68.5)	136 (68.0)	149 (74.5)

†Genes or gene sets with mutation frequencies greater than 2% were analyzed.

Table S5. Effects of different classification of BRCA1/2 and all HR genes mutation on PARPi response

Genes/Gene sets	PARPi sensitivity			PARPi sensitivity		
	Sensitive, N =	Non-sensitive†, N = 10	p-value	Sensitive, N = 15	Non-sensitive, N = 10	p-value
	15 n (%)	n (%)		n (%)	n (%)	
Germline	LP+			VUS+		
<i>BRCA1</i>	5 (33.3)	0 (0.0)	0.061	5 (33.3)	1 (10.0)	0.345
<i>BRCA2</i>	0 (0.0)	0 (0.0)	-	1 (6.7)	1 (10.0)	1.000
BRCA1/2	5 (33.3)	0 (0.0)	0.061	6 (40.0)	2 (20.0)	0.402
HRo	0 (0.0)	1 (10.0)	0.400	4 (26.7)	2 (20.0)	1.000
HR	5 (33.3)	1 (10.0)	0.345	8 (53.3)	4 (40.0)	0.688
non-HR	0 (0.0)	0 (0.0)	-	3 (20.0)	1 (10.0)	0.626
Somatic						
<i>BRCA1</i>	3 (20.0)	0 (0.0)	0.250	3 (20.0)	0 (0.0)	0.250
<i>BRCA2</i>	0 (0.0)	0 (0.0)	-	1 (6.7)	0 (0.0)	1.000
	3 (20.0)	0 (0.0)	-	4 (26.7)	0 (0.0)	0.125
HRo	0 (0.0)	0 (0.0)	-	0 (0.0)	0 (0.0)	-
HR†	3 (20.0)	0 (0.0)	-	4 (26.7)	0 (0.0)	-
non-HR	12 (80.0)	5 (50.0)	0.194	12 (80.0)	5 (50.0)	0.194
Somatic +						
<i>BRCA1</i>	8 (53.3)	0 (0.0)	0.008	8 (53.3)	1 (10.0)	0.040
<i>BRCA2</i>	0 (0.0)	0 (0.0)	-	2 (13.3)	1 (10.0)	1.000
	8 (53.3)	0 (0.0)	-	10 (66.7)	2 (20.0)	0.041
HRo	0 (0.0)	1 (10.0)	0.400	4 (26.7)	2 (20.0)	1.000
HR	8 (53.3)	1 (10.0)	0.040	11 (73.3)	4 (40.0)	0.122
non-HR	12 (80.0)	5 (50.0)	0.194	12 (80.0)	6 (60.0)	0.378

P-values are not reported where mutation frequencies were zero in both groups.

†Due to no BRCA2 (LP+: somatic or somatic + germline) or HRo (LP+ and VUS+: somatic) mutations were detected, the statistical results for the BRCA1/2 and HR categories are not reported, as they are equivalent to those of BRCA1 alone.

Table S6. Association of germline deleterious variants with clinicopathological features in EOC patients.

Characteristics	<i>BRCA1</i> n (%)	<i>BRCA2</i> n (%)	<i>BRCA1/2</i> n (%)	HRO n (%)	HR n (%)	Non-HR n (%)
Whole EOC patients (n = 229)	41 (17.9)	8 (3.5)	48 (21.0)	6 (2.6)	53 (23.1)	1 (0.4)
Age, years						
< 50 (n = 72)	14 (19.4)	0 (0.0)	14 (19.4)	1 (1.4)	15 (20.8)	0 (0.0)
≥ 50 (n = 157)	27 (17.2)	8 (5.1)	34 (21.7)	5 (3.2)	38 (24.2)	1 (0.6)
p values	0.821	0.118	0.836	0.731	0.695	1.000
Histology						
Serous (n = 200)	40 (20.0)	8 (4.0)	47 (23.5)	6 (3.0)	52 (26.0)	1 (0.5)
non-Serous (n = 29)	1 (3.4)	0 (0.0)	1 (3.4)	0 (0.0)	1 (3.4)	0 (0.0)
p values	0.056	0.579	0.025	1.000	0.014	1.000
FIGO stage						
I-II (n = 48)	5 (10.4)	3 (6.2)	7 (14.6)	0 (0.0)	7 (14.6)	0 (0.0)
III-IV (n = 141)	36 (19.9)	5 (2.8)	41 (22.7)	6 (3.3)	46 (25.4)	1 (0.6)
p values	0.190	0.467	0.307	0.441	0.165	1.000
Cancer site						
Ovary (n = 214)	38 (17.8)	7 (3.3)	44 (20.6)	6 (2.8)	49 (22.9)	1 (0.5)
FT and Peritoneum (n = 15)	3 (20.0)	1 (6.7)	4 (26.7)	0 (0.0)	4 (26.7)	0 (0.0)
p values	1.000	0.423	0.815	1.000	0.986	1.000
Personal history of cancer						
Yes (n = 15)	5 (33.3)	1 (6.7)	6 (40.0)	0 (0.0)	6 (40.0)	0 (0.0)
No (n = 214)	36 (16.8)	7 (3.3)	42 (19.6)	6 (2.8)	47 (22.0)	1 (0.5)
p values	0.206	0.423	0.122	1.000	0.199	1.000
Personal history of breast cancer						
Yes (n = 9)	5 (55.6)	1 (11.1)	6 (66.7)	0 (0.0)	6 (66.7)	0 (0.0)
No (n = 220)	36 (16.4)	7 (3.2)	42 (19.1)	6 (2.7)	47 (21.4)	1 (0.5)
p values	0.010	0.278	0.003	1.000	0.006	1.000
Family history of cancer						
Yes (n = 97)	25 (25.8)	3 (3.1)	27 (27.8)	5 (5.2)	31 (32.0)	0 (0.0)
No (n = 132)	16 (12.1)	5 (3.8)	21 (15.9)	1 (0.8)	22 (16.7)	1 (0.8)
p values	0.013	1.000	0.043	0.101	0.011	1.000
Family history of cancer (HBOC)						
Yes (n = 20)	12 (60.0)	2 (10.0)	13 (65.0)	2 (10.0)	14 (70.0)	0 (0.0)
No (n = 209)	29 (13.9)	6 (2.9)	35 (16.7)	4 (1.9)	39 (18.7)	1 (0.5)
p values	< 0.001	0.148	< 0.001	0.088	< 0.001	1.000

Abbreviations: EOC, epithelial ovarian cancer; HRO, HR genes other than *BRCA1* and *BRCA2*; FIGO, International Federation of Gynecology and Obstetrics; FT, fallopian tube; HBOC, hereditary breast and ovarian cancer.

Table S7. Association of somatic deleterious variants with clinicopathological features in EOC patients.

Characteristics	<i>BRCA1</i> n (%)	<i>BRCA2</i> n (%)	<i>BRCA1/2</i> n (%)	HRO n (%)	HR n (%)	Non-HR n (%)
Whole EOC patients (n = 229)	13 (5.7)	6 (2.6)	18 (7.9)	16 (7.0)	32 (14.0)	154 (67.2)
Age, years						
< 50 (n = 72)	2 (2.8)	2 (2.8)	4 (5.6)	7 (9.7)	10 (13.9)	49 (68.1)
≥ 50 (n = 157)	11 (7.0)	4 (2.5)	14 (8.9)	9 (5.7)	22 (14.0)	105 (66.9)
p values	0.329	1.000	0.540	0.412	1.000	0.980
Histology						
Serous (n = 200)	13 (6.5)	5 (2.5)	17 (8.5)	12 (6.0)	28 (14.0)	141 (70.5)
non-Serous (n = 29)	0 (0.0)	1 (3.4)	1 (3.4)	4 (13.8)	4 (13.8)	13 (44.8)
p values	0.325	0.560	0.565	0.251	1.000	0.011
FIGO stage						
I-II (n = 48)	2 (4.2)	1 (2.1)	2 (4.2)	5 (10.4)	6 (12.5)	31 (64.6)
III-IV (n = 141)	11 (6.1)	5 (2.8)	16 (8.8)	11 (6.1)	26 (14.4)	123 (68.0)
p values	0.875	1.000	0.443	0.465	0.923	0.787
Cancer site						
Ovary (n = 214)	12 (5.6)	5 (2.3)	17 (7.9)	14 (6.5)	30 (14.0)	144 (67.3)
FT and Peritoneum (n = 15)	1 (6.7)	1 (6.7)	1 (6.7)	2 (13.3)	2 (13.3)	10 (66.7)
p values	0.596	0.337	1.000	0.636	1.000	1.000
Personal history of cancer						
Yes (n = 15)	0 (0.0)	1 (6.7)	1 (6.7)	0 (0.0)	1 (6.7)	11 (73.3)
No (n = 214)	13 (6.1)	5 (2.3)	17 (7.9)	16 (7.5)	31 (14.5)	143 (66.8)
p values	1.000	0.337	1.000	0.566	0.646	0.814
Personal history of breast cancer						
Yes (n = 9)	0 (0.0)	1 (11.1)	1 (11.1)	0 (0.0)	1 (11.1)	6 (66.7)
No (n = 220)	13 (5.9)	5 (2.3)	17 (7.7)	16 (7.3)	31 (14.1)	148 (67.3)
p values	1.000	0.216	0.528	1.000	1.000	1.000
Family history of cancer						
Yes (n = 97)	5 (5.2)	5 (5.2)	9 (9.3)	8 (8.2)	15 (15.5)	69 (71.1)
No (n = 132)	8 (6.1)	1 (0.8)	9 (6.8)	8 (6.1)	17 (12.9)	85 (64.4)
p values	0.997	0.101	0.663	0.705	0.715	0.352
Family history of cancer (HBOC)						
Yes (n = 20)	0 (0.0)	1 (5.0)	1 (5.0)	1 (5.0)	2 (10.0)	14 (70.0)
No (n = 209)	13 (6.2)	5 (2.4)	17 (8.1)	15 (7.2)	30 (14.4)	140 (67.0)
p values	0.520	0.426	0.950	1.000	0.842	0.980

Abbreviations: EOC, epithelial ovarian cancer; HRO, HR genes other than *BRCA1* and *BRCA2*; FIGO, International Federation of Gynecology and Obstetrics; FT, fallopian tube; HBOC, hereditary breast and ovarian cancer.