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## The effect of BRCA1/2 mutation on breast cancer and its impact on PARP inhibitor treatments: Differential expression genes approach

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### SUPPLEMENTARY MATERIAL

Table S1. Overlapping DEGs of GSE25835 and GSE40115 datasets

	Upregulated	Downregulated
1	<b>ASPM</b>	AKAP8
2	<b>AURKA</b>	ANKRD12
3	<b>BIRC5</b>	BCLAF1
4	BMP1	C6orf120
5	<b>BUB1</b>	CBX6
6	<b>BUB1B</b>	CNOT4
7	C4orf19	CREBBP
8	CAPN1	CRY2
9	<b>CCNA2</b>	DCP1A
10	<b>CCNB2</b>	DGKD
11	CDC27	FEM1C

	<b>Upregulated</b>	<b>Downregulated</b>
12	<b>CDK1</b>	FGFR1
13	COA1	FGL2
14	COA3	<b>HNRNPA0</b>
15	COMMD8	IMPDH2
16	COQ2	INTS6
17	CTSD	ITPR1
18	<b>DLGAP5</b>	KLHL9
19	DPY19L4	KMT2A
20	DUS2	KRBOX4
21	<b>FOXM1</b>	LIMCH1
22	<b>GINS2</b>	LUC7L2
23	GLP1R	MARK3
24	GRB14	MED7
25	<b>HELLS</b>	NUMB
26	IL19	OGT
27	ISG15	OSBPL2
28	ITFG1	<b>PAPOLA</b>
29	<b>KNTC1</b>	PCF11
30	LAPTM4B	PIM1
31	LGALS3BP	PYROXD1
32	<b>MAD2L1</b>	RAB3GAP1
33	MMP16	RABGEF1
34	MRPL12	RASA2
35	MSH2	<b>RBM25</b>
36	NACC2	RBM5
37	<b>NEK2</b>	RCOR1
38	NPY1R	RPS6KA5
39	OAS3	SCAF8
40	OSGIN2	SEL1L
41	<b>PLK4</b>	<b>SF3A1</b>
42	POLR2G	SLC25A36
43	<b>RACGAP1</b>	SLC25A51

	<b>Upregulated</b>	<b>Downregulated</b>
44	RAD51C	SLC6A8
45	RAD54B	SPTLC2
46	RBP1	SRP19
47	RFC1	<b>SRSF5</b>
48	RIDA	TMEM259
49	RNFT2	TSC22D1
50	RPA3	<b>U2SURP</b>
51	<b>RRM2</b>	USP16
52	SERPINA5	ZBTB1
53	STRN	ZNF394
54	TMA16	
55	<b>TOP2A</b>	
56	<b>TPX2</b>	
57	TSPAN6	
58	<b>TYMS</b>	
59	WWP1	
60	<b>ZWINT</b>	

\*DEGs with bold were genes that were significant from the PPI network

**Table S2.** DEGs of GSE55399 datasets that were significant from the PPI network

	<b>Upregulated</b>	<b>Downregulated</b>
1	BST2	CXCL1
2	CXCL10	CXCL2
3	DDX58	CXCL8
4	DHX58	IL11
5	GBP1	IL1A
6	GBP2	IL1B
7	HERC5	IL6
8	IFI16	LIF
9	IFI27	PTGS2
10	IFI44	PTPRC
11	IFI44L	
12	IFI6	
13	IFIT1	
14	IFIT2	
15	IFIT3	
16	IFITM1	
17	IFNB1	
18	IRF7	
19	IRF9	
20	ISG15	
21	ISG20	
22	MX1	
23	MX2	
24	OAS1	
25	OAS2	
26	OAS3	
27	OASL	
28	PARP14	
29	PARP9	
30	RNASEL	

	<b>Upregulated</b>	<b>Downregulated</b>
31	RSAD2	
32	RTP4	
33	SAMD9	
34	SAMD9L	
35	SAMHD1	
36	STAT1	
37	XAF1	