

Supplementary**Table2**List of *PARP4* somatic mutation in breast cancer (TCGA)

Sample ID*	Cancer type	Mutation	Copy number †
TCGA-AN-A046-01	Breast cancer	G35R	Loss
TCGA-AN-A046-01	Breast cancer	S40L	Loss
TCGA-A8-A06Q-01	Breast cancer	E391K	Normal
TCGA-AC-A2FG-01	Breast cancer	V458I	Normal
TCGA-A2-A25E-01	Breast cancer	V458I	Loss
TCGA-AC-A5XS-01	Breast cancer	G532A	Normal
TCGA-D8-A1JN-01	Breast cancer	D615N	Normal
TCGA-B6-A0RG-01	Breast cancer	N720Y	Loss
TCGA-D8-A1J8-01	Breast cancer	L785F	Loss
TCGA-AC-A5XU-01	Breast cancer	Q861E	Gain
TCGA-B6-A0RG-01	Breast cancer	A1021S	Loss
TCGA-E2-A1IF-01	Breast cancer	Q1059R	Normal
TCGA-A1-A0SI-01	Breast cancer	Q1059R	Loss
TCGA-BH-A2L8-01	Breast cancer	Q1059R	Normal
TCGA-BH-A42V-01	Breast cancer	Q1059R	Normal
TCGA-A2-A0EY-01	Breast cancer	V1075M	Gain
TCGA-AO-A128-01	Breast cancer	T1170I	Normal

* Total 960 samples (frequency of *PARP4* somatic mutation; 1%)

† Gain / Loss of heterozygosity (LOH) were defined with the value of +/- 1 in GISTIC algorithm