

## Supplementary

**Table S1. Oligonucleotide sequences for siRNA constructs**

Small interference RNAs	sense (5'-3')
siMGMT-1	5'- AAGCTGGAGCTGTCTGGTTGT - 3''
siMGMT-2	5'- CCAGACAGGTGTTATGGAA - 3'

**Table S2. Primers used in real-time PCR**

Gene	Forward primer	Reverse primer
MGMT	5'- ATGGAT GTTTGAGCGACACA -3'	5'- ATAGAGCAAGGGCAG CGTTA -3'
PTEN	5'- CAGAAAGACTTGAAGCGTAT -3'	5'- AACGGCTGAGGGAACCTC -3'
B-actin	5'- AGCGAGCATCCCCCAAAGTT -3'	5'- GGGCACGAAGGCTCATCATT -3'

**Table S3. Antibodies used in this study**

Antibody	Cat. #	Company	Con.	Species
Anti-MGMT	AF0228	ZhongshanJinqiao (Beijing,China)	1:2000	Rabbit
Anti-PTEN	ab170941	Abcam (Danvers,MA,USA)	1:1000	Rabbit
Anti-AKT	C67E7	Cell Signaling Technology (Danvers,MA,USA)	1:1000	Rabbit
Anti-p-AKT	D9E	Cell Signaling Technology (Danvers,MA,USA)	1:1000	Rabbit
Anti- B-actin	8H10D10	Cell Signaling Technology (Danvers,MA,USA)	1:3000	Mouse

**Table S4: The results of Dunnett-Tukey-Kramer's test for pairwise comparison in different molecular subtypes of breast cancer.**

mRNA	Pairwise comparison of molecular subtypes	P value
MGMT	LumA>Basal	< 0.0001
	LumA> HER2	< 0.0001
	LumB>Basal	< 0.0001
	LumB> HER2	< 0.0001
	LumB=LumA	>0.1
	HER2= Basal	>0.1