

Supplementary Table 1. PCR-RFLP based mutation primers

Gene	Forward Primer sequence	Reverse Primer sequence	Product size
<i>XRCC1</i> <i>codon399</i>	5'- GGACTGTCACCGCATGC GTCGG-3'	5'- GGCTGGGACCACCTGT GTT-3'	115 bp + 34 bp (Wild)
			149 bp (Mutant)
<i>XRCC1</i> <i>codon280</i>	5'- TTGACCCCCAGTGGTGC T-3'	5'- CCCTGAAGGATCTTCCC CAGC-3'	126 bp + 62 bp (Wild)
			188 bp (Mutant)
<i>hOGG1</i> <i>codon326</i>	5'- ACTGTCACTAGTCTCACC AG-3'	5'- GGAAGGTGCTTGGGGA AT-3'	200bp (wild)
			100 bp + 100 bp (mutant)

Supplementary Table 2. Gene specific expression primers

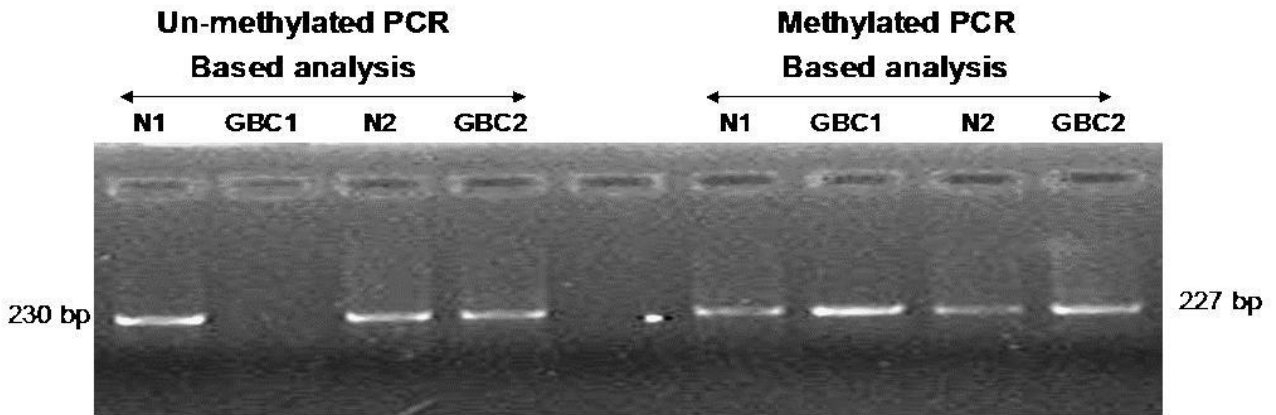
Gene	Forward Primer sequence	Reverse Primer sequence	Product size
<i>Beta-actin</i>	5'- AGATGTGGATCAGCAAG CAG -3'	5'- GCGCAAGTTAGGTTTTG TCA -3'	122 bp
<i>XRCC1</i>	5'- CAGCTGTCGCCATCTGTT C-3'	5'- TGAAGGATCTTCCCCA GCTC-3'	173 bp

<i>hOGG1</i>	5'- ATCTGTTCTCCAACAAC AAC-3'	5'- 'TTCCTGAGATGAGCCT CCAC-3'	161 bp
<i>PARP1</i>	5'- AAGAAATGCAGCGAGAG CAT-3'	5'- CCAGTGTGGGACTTTTC CAT-3'	90 bp
<i>POL-β</i>	5'- TACATTGCTACAGTCTGT GGCAGTT-3'	5'- TGGGATGGGTCAGGAG AACA-3'	79 bp
<i>PCNA</i>	5'- CCATCCTCAAGAAGGTG TTGG-3'	5'- TAGGTGTCGAAGCCCT CAGA-3'	151 bp
<i>APE</i>	5'- TGGAATGTGGATGGGCT TCGAGCC-3'	5'- AAGGAGCTGACCAGTA TTGATGA-3'	169 bp

Supplementary Table 3. Methylation detection primers

Gene	Forward Primer sequence	Reverse Primer sequence
<i>XRCC1</i> methylated	5'- TTTTTAGAAAGTAGGGTTCGG ACGT-3'	5'- GCCCTACGCTAACTAAAAT ACGCA-3'
<i>XRCC1</i> unmethylated	5'- TTTTTAGAAAGTAGGGTTTGG	5'- TACACCCTACACTAACTAA

	ATGT-3'	AATACACA-3'
<i>hOGG1</i> methylated	5'- AATTTAGAAGAATATAGTTGT GCGC-3'	5'- TACATACCTCGCCCTTTAC GA-3'
<i>hOGG1</i> unmethylated	5'- TTTAGAAGAATATAGTTGTGT GTGT-3'	5'- CTCCTACATACCTCACCCTT TACAA-3'



Supplementary Figure 1. Representative agarose gel showing differential methylation profile of XRCC1 promoter in GBC cases compared to controls showing hyper-methylation in GBC cases.