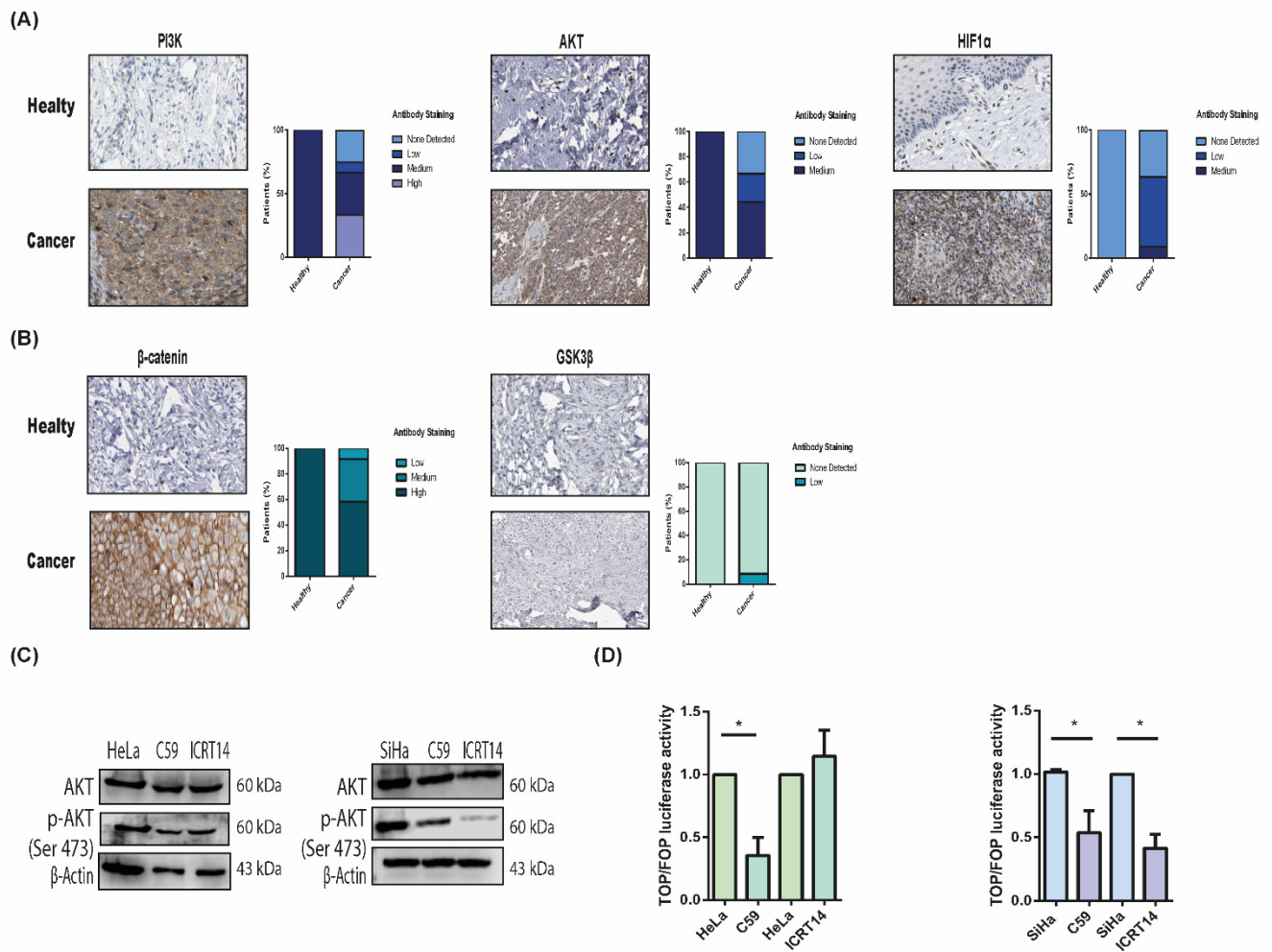
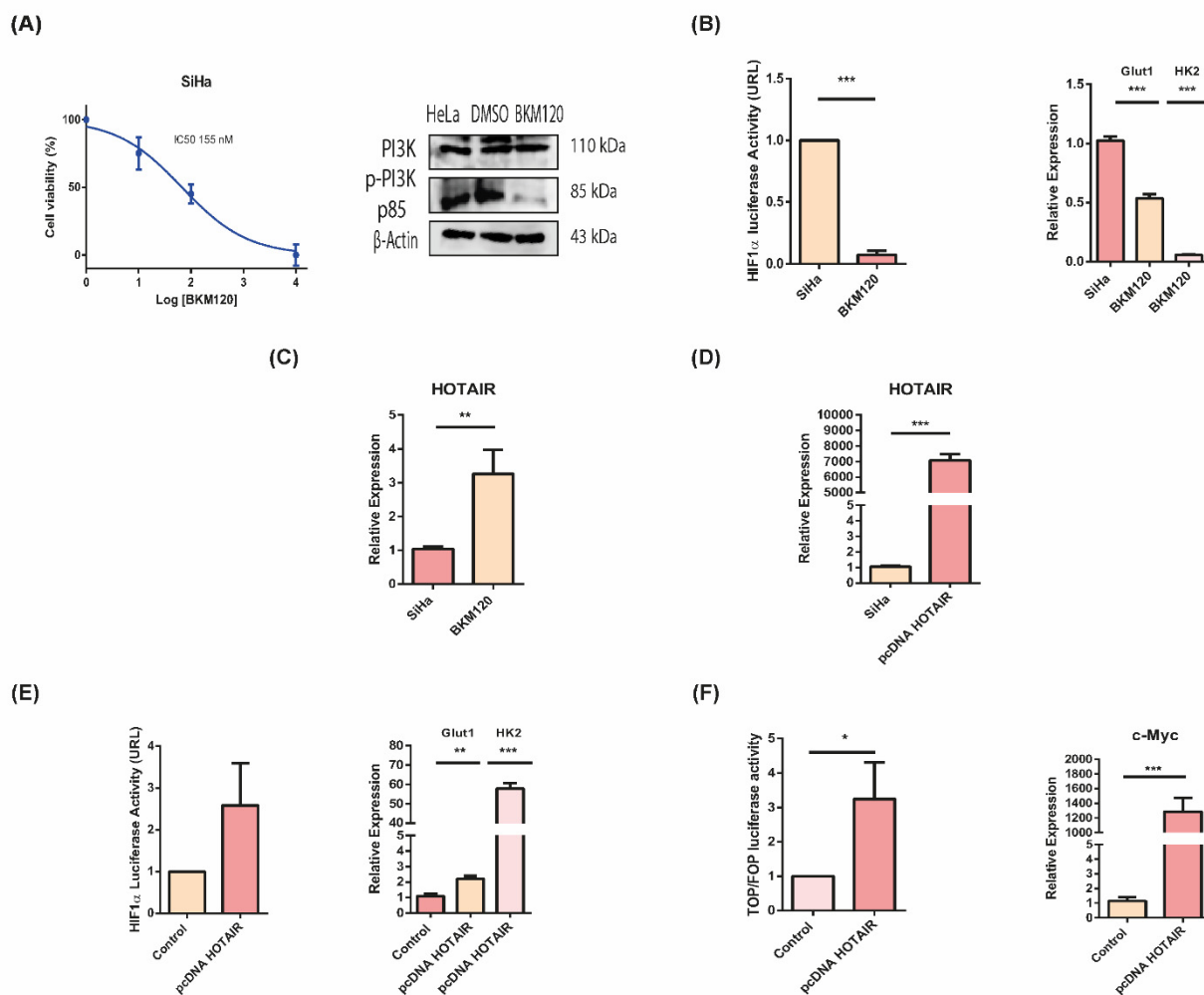


## Supplementary Figures

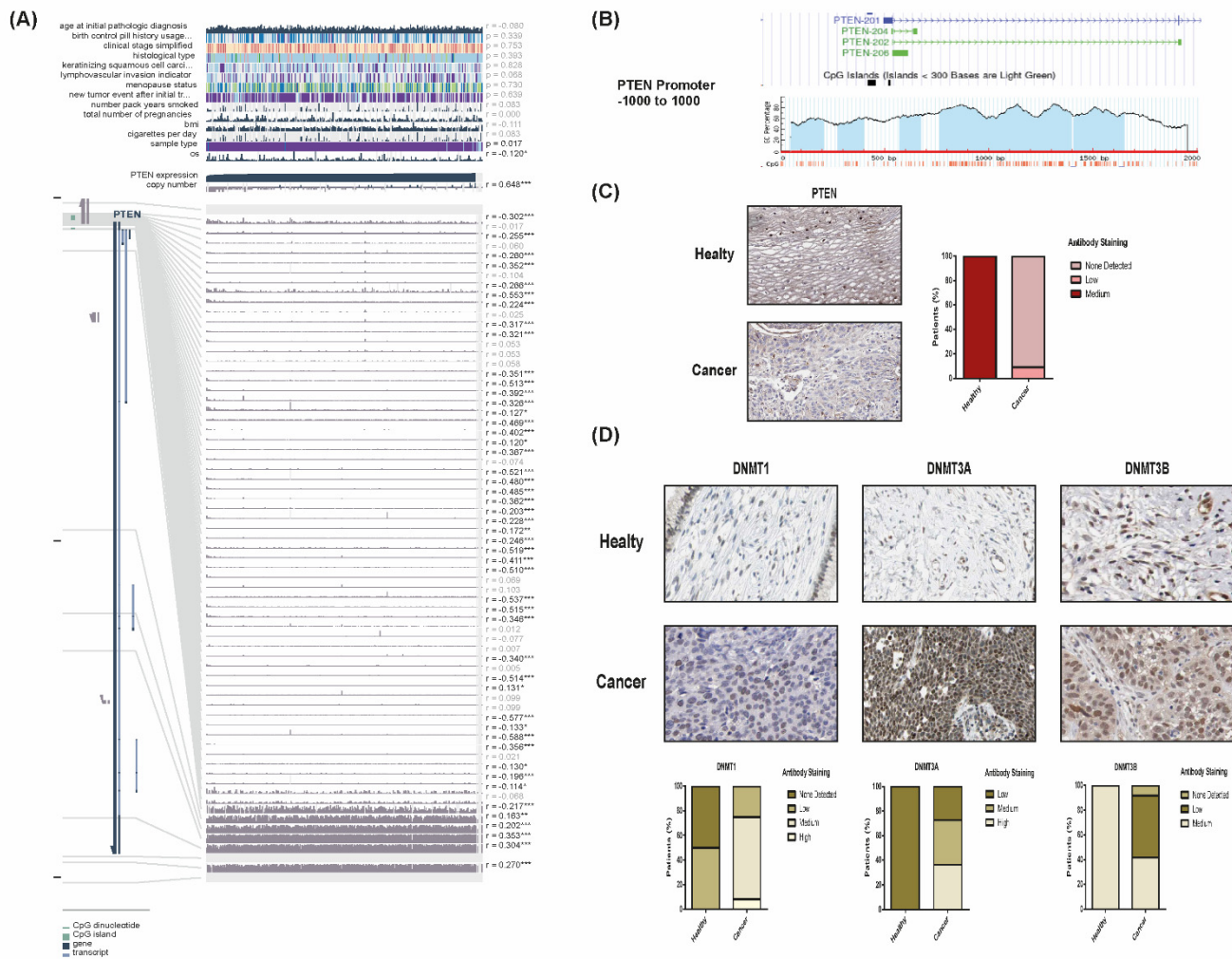


**Supplementary Figure S1. Expression of key components of PI3K/AKT and Wnt/  $\beta$ -catenin in Cervical Cancer and normal tissues. (A-B) Protein atlas *In silico* meta-analysis to PI3K/AKT and Wnt/ $\beta$ -catenin signaling pathways effectors in CC (13) in comparison to healthy samples (3). (C) Western blots to PI3K/AKT pathway treated with C59 and ICRT14 Wnt/ $\beta$ -catenin inhibitors in CC cell lines. (D) TOP Flash assay for C59 and ICRT14 inhibitors in CC cell lines.  $p < 0.05$  (\*).**



**Supplementary Figure S2. PI3K/AKT regulates HOTAIR expression and Wnt/β-catenin activation in SiHa cell line.**

**(A)** IC<sub>50</sub> and Western Blot of PI3K/AKT pathway with BKM120 inhibitor. **(B)** BKM120 inhibits transcriptional activity of HIF1α by measuring luciferase reporter and Glut1 and HK2 expression in SiHa cells. **(C)** HOTAIR expression with BKM120 inhibitor in SiHa cell line. **(D)** HOTAIR overexpression in SiHa cell line. **(E)** HOTAIR overexpression increases HIF1α transcriptional activity by luciferase activity and HIF1α targets expression. **(F)** HOTAIR overexpression increases Wnt/β-catenin transcriptional activity evaluated by TOP Flash activity and c-Myc expression.  $p < 0.05$  (\*).  $p < 0.01$  (\*\*).  $p < 0.001$  (\*\*\*).



**Supplementary Figure S3. PTEN promoter is methylated in Cervical Cancer. (A-B)** In silico analysis to PTEN methylation pattern on 317 CC samples and sequence analysis through MEXPRESS data base and Genome browser-MethPrimer respectively. **(C-D)** Protein atlas In silico meta-analysis to PTEN and DNMT1, 3A and 3B in CC (13) in comparison to healthy samples (3).