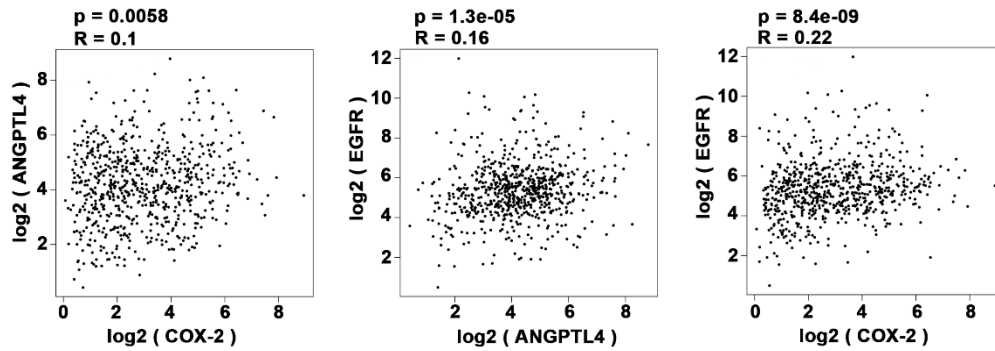


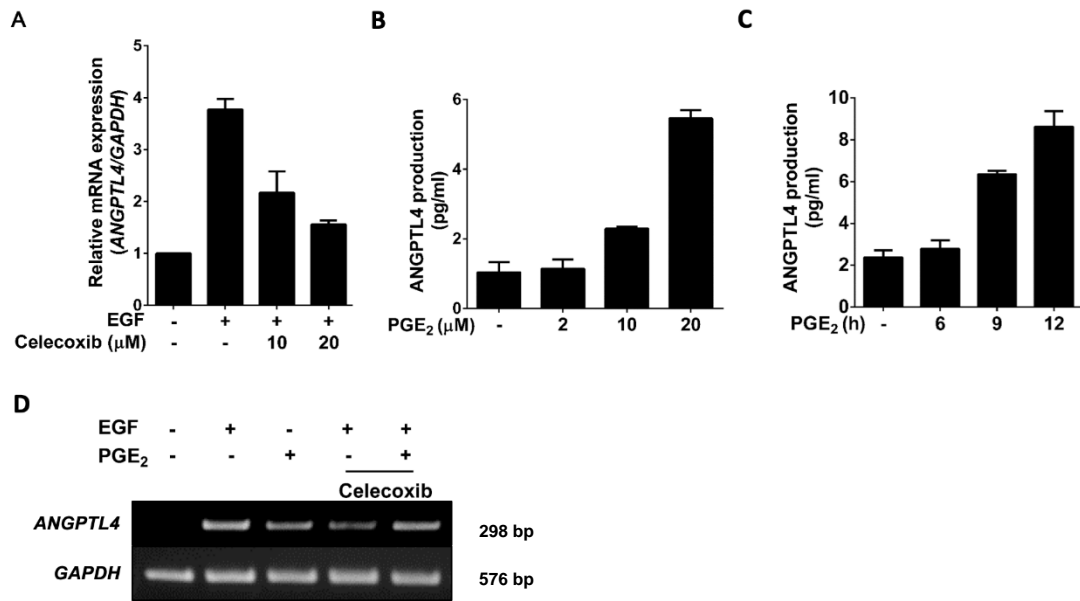
**EGF-induced COX-2 regulates metastasis of head and neck squamous cell carcinoma through upregulation of ANGPTL4**

**Chiang et al.**

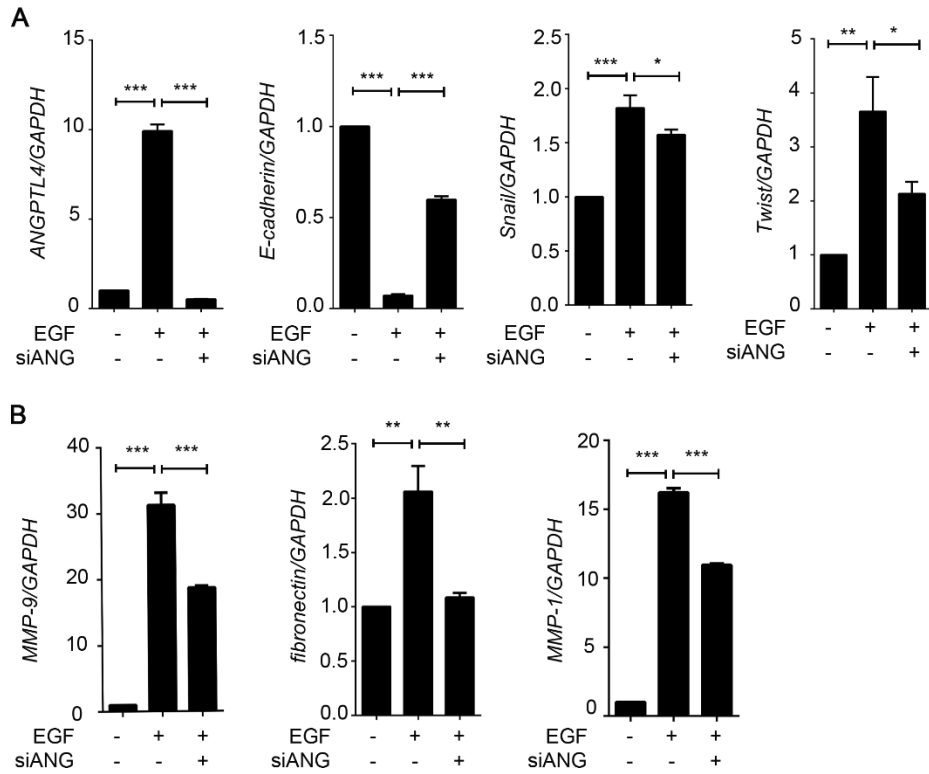
**Supplementary S1-S4**



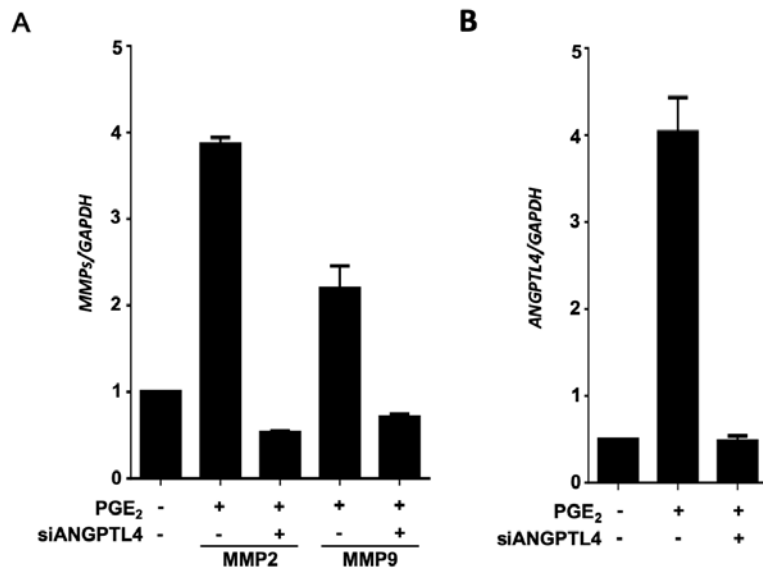
**Supplementary Fig. 1. The expressions of EGFR, COX-2 and ANGPTL4 are correlated with each other in HNSCC patients.** The correlation between the expression of EGFR, COX-2 and ANGPTL4 was evaluated through GEPIA based on TCGA database (Ref: Nucleic Acids Research, 2017, 45:W98-W102).



**Supplementary Fig. 2. The expression of ANGPTL4 is regulated by EGF and COX-2 activation.** TU183 cells were treated with various concentrations of celecoxib, PGE<sub>2</sub>, and 50 ng/ml EGF for 6 h. The expression of ANGPTL4 mRNA and protein was analyzed using RT-PCR and examined by 2% agarose gel electrophoresis or real-time quantitative PCR and ELISA, respectively.



**Supplementary Fig. 3. EGF-induced EMT marker is regulated by ANGPTL4 in HNSCC cancer cells.** (A, B) Cells were transfected with 20 nM ANGPTL4 siRNA oligonucleotides (siANGPTL4) by lipofection and then treated with 50 ng/ml EGF for 18 h. The expression of ANGPTL4, E-cadherin, Snail, Twist, Fibronectin, MMP-1, and MMP-9 mRNA was analyzed by real-time quantitative PCR in FaDu (A) and TU183 (B) cells. \* P<0.05; \*\*P<0.01; \*\*\*P < 0.001



**Supplementary Fig. 4. The expression of ANGPTL4 is essential for PGE<sub>2</sub>-induced expressions of MMP-2 and MMP-9 in TU183 cells:** Cells were transfected with 20 nM ANGPTL4 siRNA oligonucleotides (siANGPTL4) by lipofection and then treated with 20  $\mu$ M PGE<sub>2</sub>. The expression of ANGPTL4, MMP-2, and MMP-9 mRNA was analyzed by real-time quantitative PCR.