



# Corrigendum: Positive Reciprocal Feedback of LncRNA ZEB1-AS1 and HIF-1 $\alpha$ Contributes to Hypoxia-Promoted Tumorigenesis and Metastasis of Pancreatic Cancer

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## A Corrigendum on

### Positive Reciprocal Feedback of lncRNA ZEB1-AS1 and HIF-1 $\alpha$ Contributes to Hypoxia-Promoted Tumorigenesis and Metastasis of Pancreatic Cancer

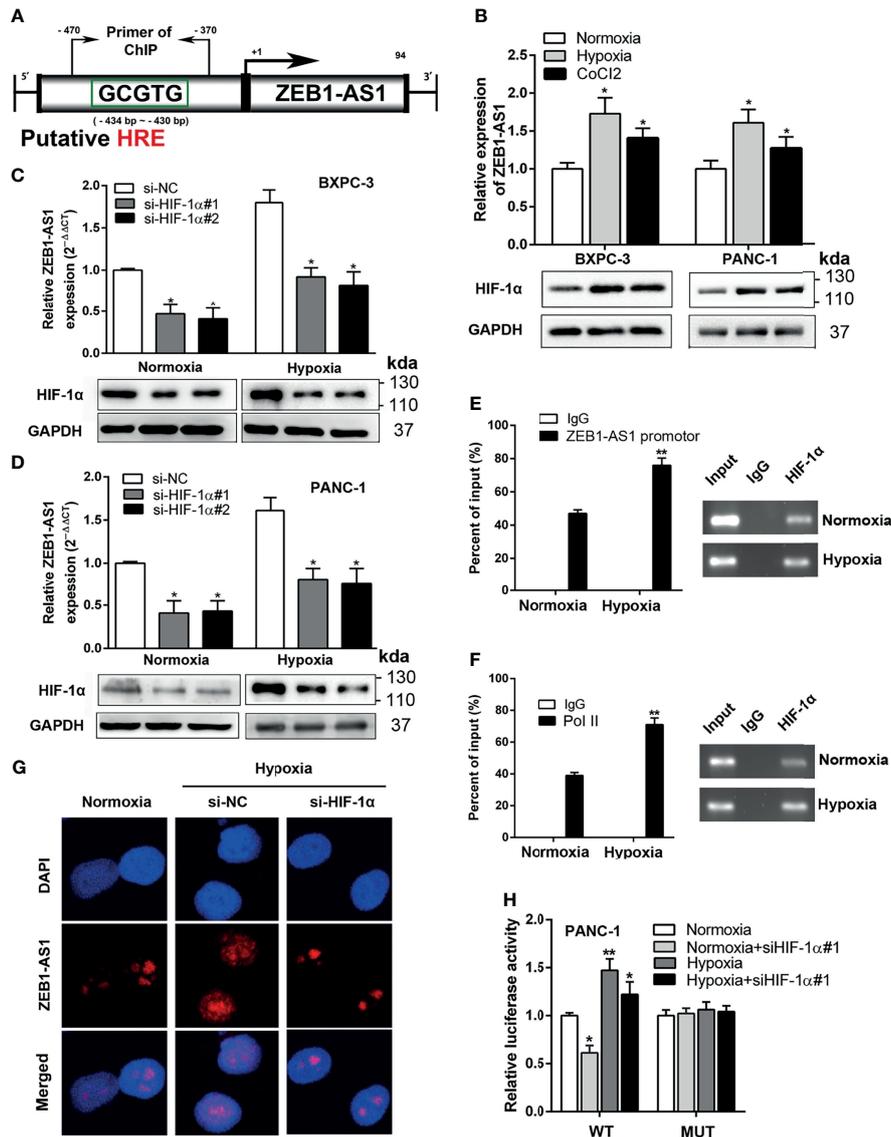
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In the original article, there was a mistake in **Figure 4** as published. The western blot of reference gene (GAPDH) in hypoxia group in **Figure 4D** was incorrectly used and plotted in this figure. However, this mistake doesn't affect the results of experiment and understanding of our research on purpose. The corrected **Figure 4** appears below.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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**FIGURE 4** | ZEB1-AS1 transcription is regulated by HIF-1 $\alpha$  during hypoxia medium. **(A)** A putative hypoxia-responsive element (HRE) was found in the promoter region of ZEB1-AS1. **(B)** The expression levels of ZEB1-AS1 (upper) and HIF-1 $\alpha$  protein (lower) in BXPC-3/PANC-1 cells were measured after being cultured during normoxia, hypoxia (1%O<sub>2</sub>), or CoCl<sub>2</sub> (concentration of 100  $\mu$ M under 48 h) at the mRNA and protein levels by qRT-PCR and Western blot analysis, respectively. **(C, D)** After knockdown of HIF-1 $\alpha$  with siRNA, the expression of ZEB1-AS1 was evaluated by qRT-PCR in BXPC-3 and PANC-1 cells under normoxia or hypoxia (upper). Lower diagrams indicated HIF-1 $\alpha$  protein levels by Western blot analysis. **(E)** ChIP assays with anti-HIF-1 $\alpha$  antibody were performed to affirm the binding between HIF-1 $\alpha$  and HRE of ZEB1-AS1 promoter region in PANC-1 cells under normoxia or hypoxia condition. **(F)** After being cultured in hypoxia or normoxia, ChIP assays with anti-Pol II antibody were performed to ascertain the binding capacity between Pol II and ZEB1-AS1 promoter region in PANC-1 cells. **(G)** After knockdown of HIF-1 $\alpha$ , the expression of ZEB1-AS1 was shown by FISH assays in PANC-1 cells during normoxia and hypoxia condition. **(H)** Wild-type ZEB1-AS1 promoter-containing pGL3 reporter vector (WT) or mutant-type ZEB1-AS1 promoter-containing pGL3 reporter vector (MUT) of ZEB1-AS1 promoter sequence firefly luciferase reporter activity in PANC-1 cells transfected with siNC or si-HIF-1 $\alpha$  and cultured under normoxia or hypoxia conditions were assessed by Renilla luciferase reporter assays after 48 h All data were presented as means  $\pm$  SD of at least three independent experiments. Values are significant at \* $p$   $\leq$  0.05 and \*\* $p$   $\leq$  0.01 as indicated.