

## Correction

## Correction: The combination effect of homoharringtonine and ibrutinib on FLT3-ITD mutant acute myeloid leukemia

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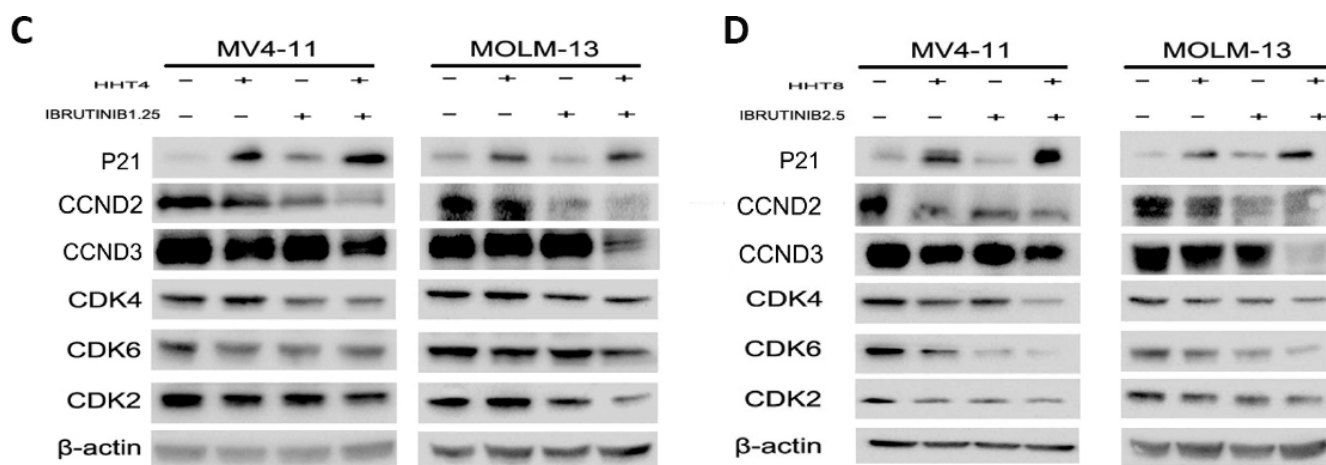
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**This article has been corrected:** Due to errors in image processing, the  $\beta$ -actin bands for MOLM-13 cell line in Figure 5 (C and D) were mistakenly presented. The proper Figure 5 (C and D) is shown below. In addition, the figure legends of Figure 2, 4, 7, and 8 are incorrect. The correction figure legends of Figure 2, 4, 7, and 8 are listed below. The authors declare that these corrections do not change the results or conclusions of this paper.

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**Figure 5: Effects of HHT, ibrutinib, HHT+ibrutinib on cell cycle distribution in AML cells. (A)** MV4-11 and MOLM-13 cells were treated with 4 nM HHT and/or 1.25  $\mu$ M ibrutinib for 24 h. **(B)** MV4-11 and MOLM-13 cells were treated with 8 nM HHT or/and 2.5  $\mu$ M ibrutinib for 24 h. The cells were stained with propidium iodide and subjected to flowcytometry analysis to determine cell cycle distribution. **(C and D)** Soluble proteins P21, CCND2, CCND3, CDK4, CDK6, CDK2 and  $\beta$ -actin were analyzed by Western blotting analyses at the indicated concentrations for 24 h.

## Corrections of figure legends

**Figure 2: HHT and ibrutinib inhibit the growth of primary AML cells.** FLT3-ITD + primary AML cells (A–C) and FLT3-ITD wt primary AML cells (D and E) were treated with HHT, ibrutinib and HHT+ibrutinib for 24 h. The rate of cell viability was measured by an MTT assay. The CI at the ED50, ED75 and ED90 were presented (F).

**Figure 4: HHT combined with ibrutinib inhibits BCL-2 family signaling.** (A) MV4-11 and MOLM-13 cells were treated with 4 nM HHT and/or 1.25 ibrutinib for 6 h. (B) MV4-11, MOLM-13 and primary AML cells were treated with 8 nM HHT and/or 2.5  $\mu$ M ibrutinib for 6 h. Western blot analysis was conducted for p-Bad, Bad, Bax, Bcl-2, Bcl-xL and Mcl-1 protein levels.

**Figure 7: HHT combined with ibrutinib inhibits STAT5, AKT signaling.** (A) MV4-11 and MOLM-13 cells were treated with 4 nM HHT and/or 1.25 ibrutinib for 6 h. (B) MV4-11, MOLM-13 and primary AML cells were treated with 8 nM HHT or/and 2.5  $\mu$ M ibrutinib for 6 h. Western blot analysis was conducted for p-AKT-S473, total AKT, p-STAT5, STAT5, p-ERK, ERK, Pim-1, Pim-2 and C-Myc protein levels.

**Figure 8: The level of main target proteins were analyzed when cells were exposed to drugs for 6h.** MV4-11, MOLM-13 and primary AML cells were treated with 8 nM HHT and/or 2.5  $\mu$ M ibrutinib for 6h. Western blot analysis was conducted for FLT3, p-FLT3, BTK, and p-BTK223 protein levels.