

CORRECTION

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Correction to: Synergistic killing effects of homoharringtonine and arsenic trioxide on acute myeloid leukemia stem cells and the underlying mechanisms

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Correction to: J Exp Clin Cancer Res

<https://doi.org/10.1186/s13046-019-1295-8>

In the publication of this article [1], there are two corrections: 1. The corresponding author Yuanzhong Chen's email should be changed to chenyz@mail.fjmu.edu.cn; 2. Several figures Fig. 5, Fig. 8, and Additional files 5, 6, 9 and 10 need to be corrected, because the formats are wrong, and the revised figures are shown below.

The original article has been corrected.

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Reference

1. Tan, et al. Synergistic killing effects of homoharringtonine and arsenic trioxide on acute myeloid leukemia stem cells and the underlying mechanisms. *J Exp Clin Cancer Res.* 2019;38:308 <https://doi.org/10.1186/s13046-019-1295-8>.

Additional files

Additional file 5: Figure S5. Homoharringtonine (HHT) combined with arsenic trioxide (ATO) decrease the proportion of primary leukemia stem cells (LSCs) in serum free medium with cytokine cocktail (Flt3L, SCF, IL-3 and IL-6). Quantification of frequencies of CD34+cells (A), CD34+/CD38–cells (B) and CD34+/CD38–/CD96+ cells (C) from patient 4. (D) Display of flow cytometric analysis on bone marrow sample after treatment with HHT and ATO alone or combined.

Additional file 6: Figure S6. Homoharringtonine (HHT) combined with arsenic trioxide (ATO) more effectively damaged the primary CD34+CD38– cells than CD34+/CD38+ cells in serum-free medium with a cytokines cocktail (Flt3L, SCF, IL-3 and IL-6). (A–C) Quantification of frequencies of Annexin V-positive cells in CD34+CD38– and CD34+CD38+ cells from patient 1 (A), patient 2 (B), patient 3 (C), patient 4 (D). (E) Representative flow cytometric analysis of patient 2 for apoptosis using Annexin V and stem cells markers (CD34, CD38).

Additional file 9: Table S1. Patients characteristic.

Additional file 10: Table S2. Primer Sequences for PCR.

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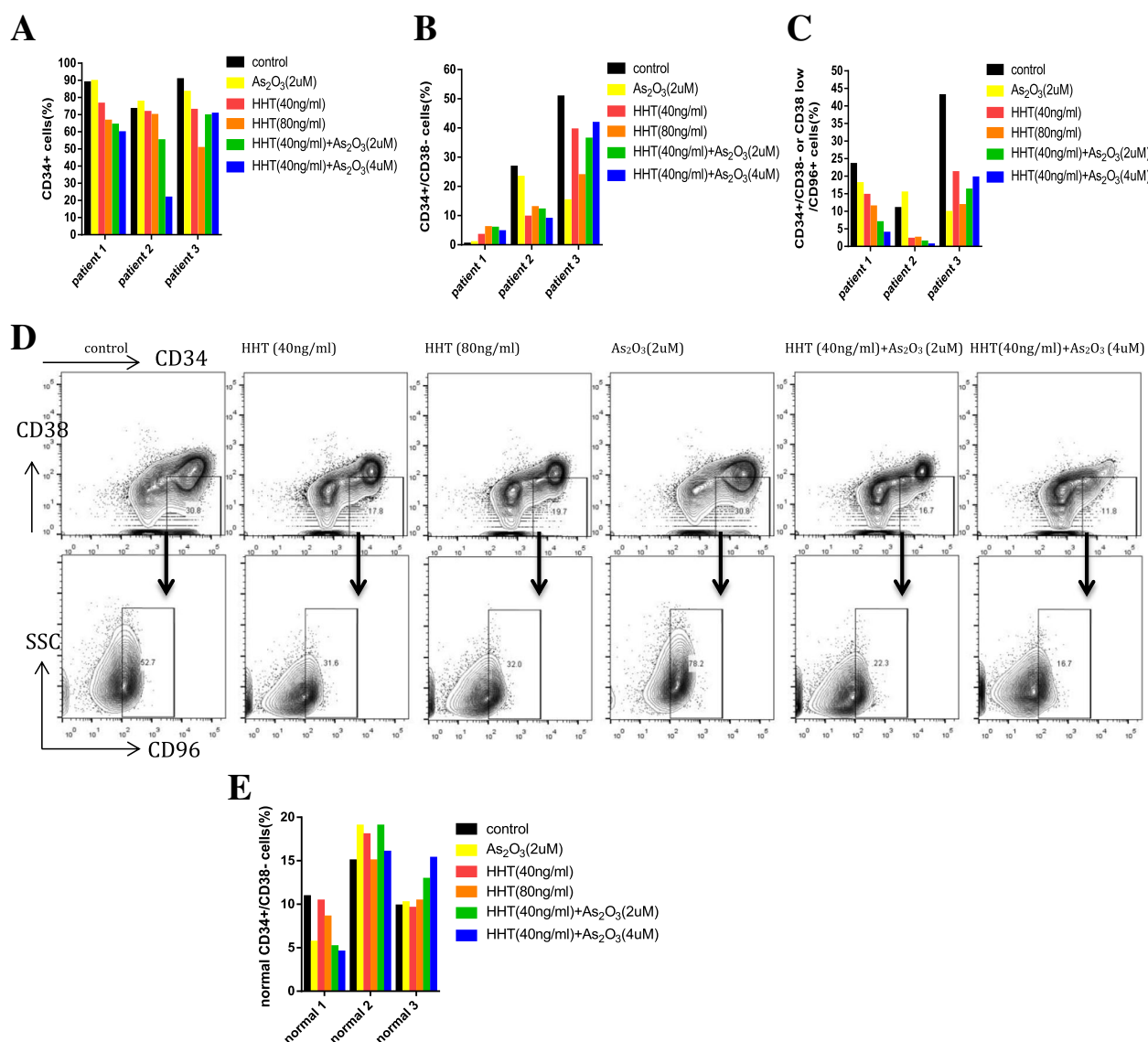


Fig. 5 Homoharringtonine (HHT) combined with arsenic trioxide (ATO) decrease the proportion of primary leukemia stem cells (LSCs) in serum free medium with cytokine cocktail (Flt3L, SCF, IL-3 and IL-6). Quantification of frequencies of CD34⁺ cells (**a**), CD34⁺/CD38⁻ cells (**b**) and CD34⁺/CD38^{low}/CD96⁺ cells (**c**). (**d**) Display of flow cytometric analysis on bone marrow sample of patient no. 2 after treatment with HHT and ATO alone or combined. (**e**) Represents the proportion of normal primary CD34⁺/CD38⁻ ($n = 3$)

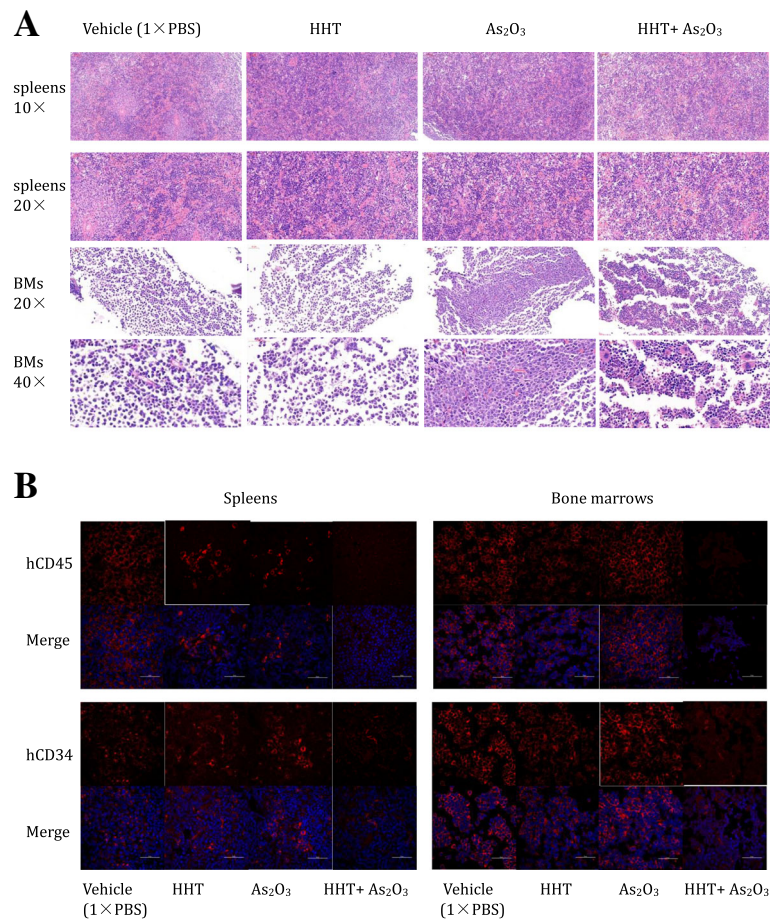


Fig. 8 Homoharringtonine (HHT) combined with arsenic trioxide (ATO) remarkably obliterated the histological infiltration of leukemia stem cells (LSCs). **(a)** H&E-stained sections of representative 4% paraformaldehyde-fixed spleens and bone marrow from NRG mice. **(b)** hCD45 and hCD34 levels were detected in the different groups by confocal laser-scanning microscopy in representative 4% paraformaldehyde-fixed spleens and bone marrow samples from NRG mice. Scale bars: 50 μm

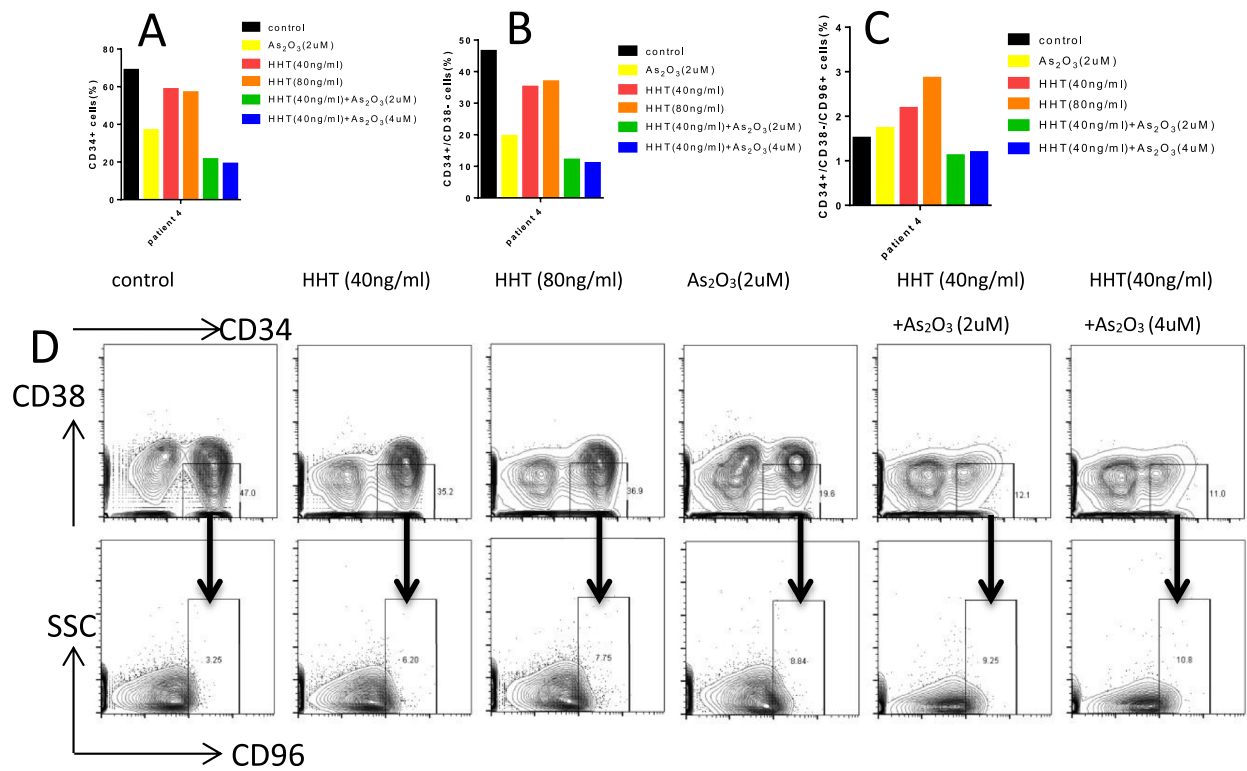


Fig S5.

Fig. S5 Homoharringtonine (HHT) combined with arsenic trioxide (ATO) decrease the proportion of primary leukemia stem cells (LSCs) in serum free medium with cytokine cocktail (Flt3L, SCF, IL-3 and IL-6). Quantification of frequencies of CD34⁺cells (A), CD34⁺/CD38⁻ cells (B) and CD34⁺/CD38⁻/CD96⁺ cells (C) from patient 4. (D) Display of flow cytometric analysis on bone marrow sample after treatment with HHT and ATO alone or combined

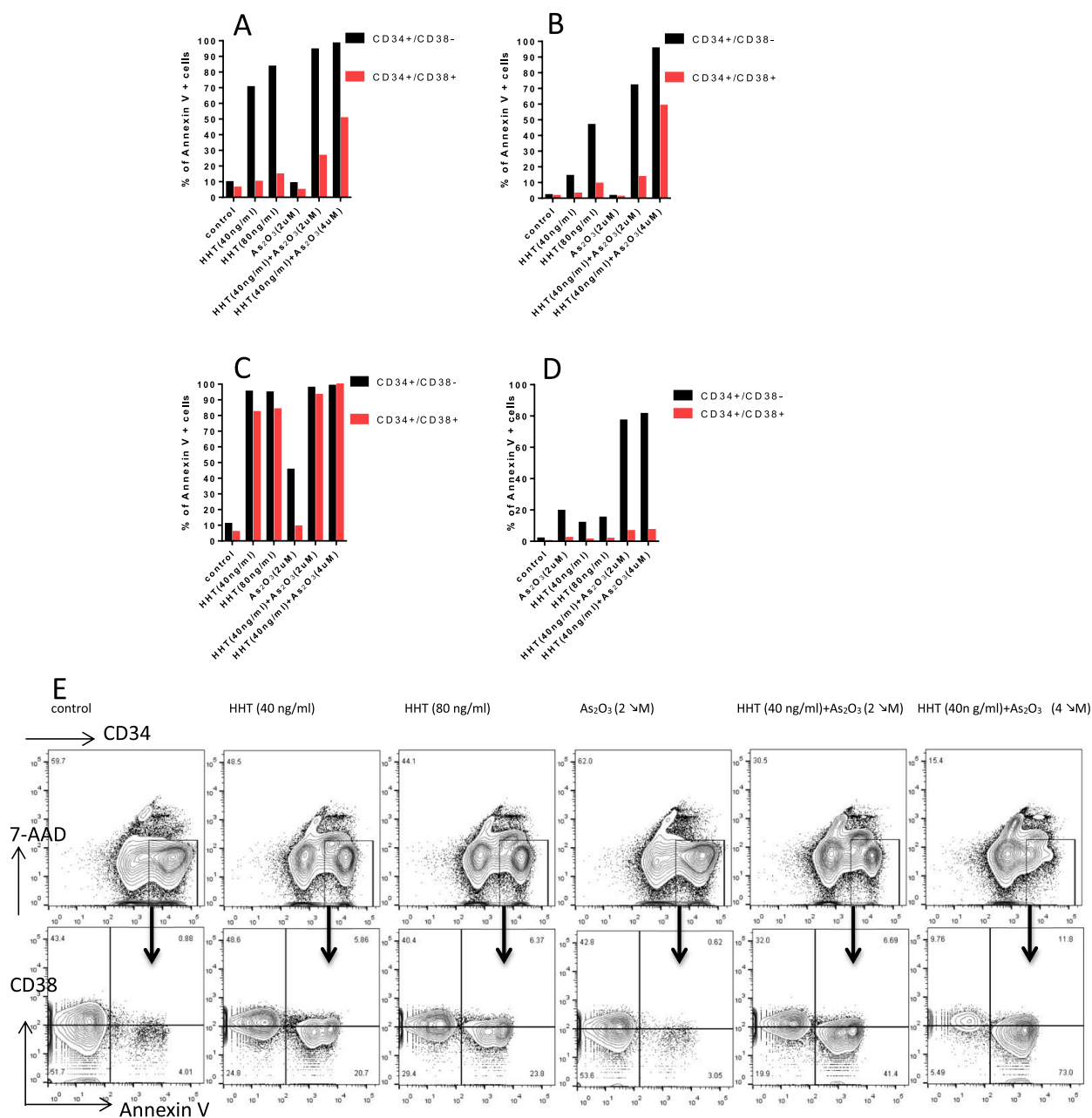


Fig. S6.

Fig. S6 Homoharringtonine (HHT) combined with arsenic trioxide (ATO) more effectively damaged the primary CD34⁺CD38⁻ cells than CD34⁺/CD38⁺ cells in serum-free medium with a cytokines cocktail (Flt3L, SCF, IL-3 and IL-6). (A–C) Quantification of frequencies of Annexin V-positive cells in CD34⁺CD38⁻ and CD34⁺CD38⁺ cells from patient 1 (A), patient 2 (B), patient 3 (C), patient 4 (D). (E) Representative flow cytometric analysis of patient 2 for apoptosis using Annexin V and stem cells markers (CD34, CD38)

Table S1 Patients characteristic

NO.	Gender	Age	WBC(*10 ⁹ /L)	Hb (g/L)	PLT (*10 ⁹ /L)	FAB type	BM Blasts(%)	Immune markers	Karyotype
1	female	23	1.85	124	168	M0	63.2	CD7, CD117, HLA-DR	46 XX
2	male	29	12.72	138	7	M5	60.3	CD7,HLA-DR, CD33	46 XY
3	male	32	1.14	46	4	M2a	80	MPO,CD99,CD117	46 XY t(8;21)
4	female	36	5.57	50	83	M5b	78	CD117, CD33,MPO	46 XX
5	female	43	20.57	45	10	M1	72	CD117, CD33, MPO	46 XX
6	female	25	19.6	34	23	M0	69.3	CD7, CD117, MPO	46 XX
7	male	29	27	23	3	M5	59.6	CD33, HLA-DR CD15	46 XY

NO.1-4 were used to FCM (Flow Cytometry) analysis; NO.5-7 were used to synergistic effect. NO.7 were also used for WB

Table S2 Primer Sequences for PCR

Gene	Primer Sequences
β-actin	Forward 5'-GCCAACC GCGAGAAGATGA-3'
	Reverse 5'-CATCAGGATGCCAGTGGT-3'
CD34	Forward 5'- ACTCGGTGCGTCTCTCTAGG -3'
	Reverse 5'- CCGTGAGACTCTGCTCTGC-3'
CD38	Forward 5'- TTG GGA ACTCAG ACC GTA CCT TG-3'
	Reverse 5'- CCA CAC CAT GTGAGG TCA TC-3'
CD96	Forward 5'- ACCACAGTCAAGGTTTTTG-3'
	Reverse 5'- CCAGGCTGGAGAAGGTTGG-3'