

CORRECTION

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Correction to: Shp2 positively regulates cigarette smoke-induced epithelial mesenchymal transition by mediating MMP-9 production

Ya-nan Liu^{1,2,3,4†}, Yan Guan^{5†}, Jian Shen^{2,6}, Yong-liang Jia^{2,6}, Jian-cang Zhou⁵, Yun Sun^{3,4}, Jun-xia Jiang², Hui-juan Shen², Qiang Shu¹, Qiang-min Xie^{1,2*}  and Yicheng Xie^{1*}

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Following publication of the original article [1], the authors identified an error in Fig. 6B. During the preparation of the figures in the above article, the authors regret that an error occurred during the assembly of Fig. 6B. Erroneous duplication of E-cadherin images were

mistakenly assembled for MMP-9⁺ PPHS-1⁺ and MMP⁺ Shp2(siRNA)⁺ group.

The authors apologize for any inconvenience caused, and have confirmed that the conclusions were not affected.

The correct Fig. 6B is given in this correction article.

The original article can be found online at <https://doi.org/10.1186/s12931-020-01426-9>.

[†]Ya-nan Liu and Yan Guan contributed equally to this work*Correspondence: xieqm@zju.edu.cn; ycxie@zju.edu.cn

¹The Children's Hospital, Zhejiang University School of Medicine, National Clinical Research Center for Child Health, Zhejiang 310052, Hangzhou, China
Full list of author information is available at the end of the article



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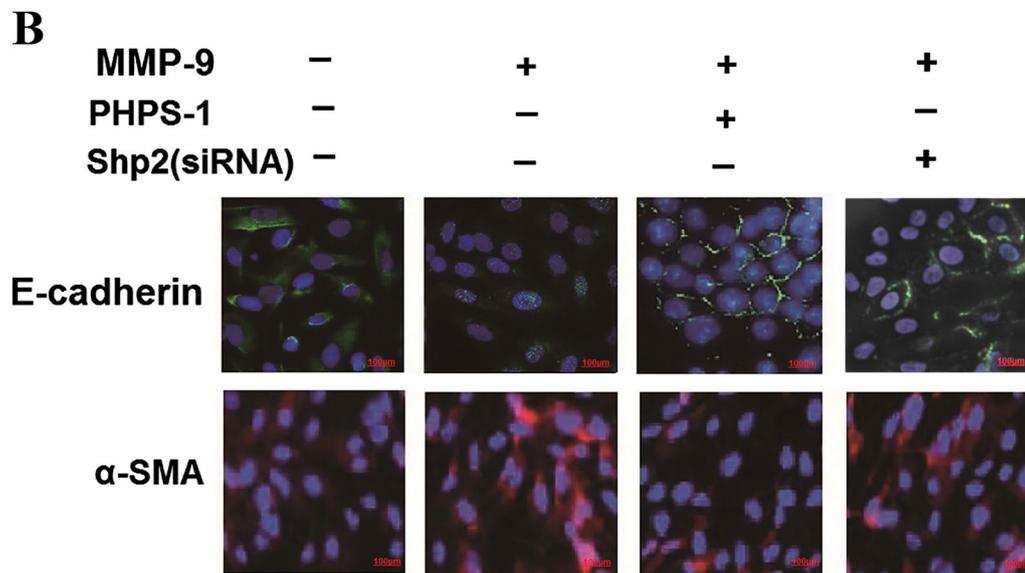


Fig. 6 MMP-9 inhibition, Shp2 inhibition or Shp2 knockdown suppresses the expression of EMT-related factors induced by recombinant MMP-9 in NCI-H292 cells. **a** NCI-H292 cells with no treatment exhibit a pebble-like shape and display cell-cell contacts consistent with an epithelial morphology. The cells treated with human recombinant MMP-9 (2 µg/ml, 48 h) exhibit a fibroblast-like morphology with cellular elongation and reduction of cell-cell contacts. SB-3CT (1 µM) prevents the MMP-9-induced cellular changes and preserves normal epithelial morphology. The cells treated with recombinant MMP-9 for 48 h exhibit weaker expression of E-cadherin and stronger expression of α-SMA, compared with control. MMP-9 inhibition by SB-3CT (1 µM) alleviates the recombinant MMP-9 induced changes of E-cadherin and α-SMA expression. Scale bar = 100 µm. **b** Pharmacological inhibition or Shp2 knock down reverses the recombinant MMP-9 induced changes of E-cadherin and α-SMA expression. Scale bar = 100 µm. **c** MMP-9 inhibition by SB-3CT (1 µM) prevents the recombinant MMP-9 (2 µg/ml) induced decreases in E-cadherin expression and increases in α-SMA mRNA expression assessed by real-time PCR. $n = 3$ per group. $^{\#}p < 0.05$ compared with control (no treatment); $^{*}p < 0.05$ compared with cells treated with recombinant MMP-9. **d** Shp2 inhibition by PHPS1 (10 µM) or knock down by siRNA prevents the recombinant MMP-9 (2 µg/ml) induced decreases in E-cadherin expression and increases in α-SMA protein expression assessed by western blot. Data are expressed as mean \pm SEM of three independent experiments. $n = 3$ per group. $^{\#}p < 0.05$ compared with control (no treatment); $^{*}p < 0.05$ compared with cells treated with recombinant MMP-9. At least three independent experiments were completed for each group assessment. Data are presented as the mean \pm SEM. Statistical significance is determined by one-way ANOVA followed by the Student-Newman-Keuls test

Author details

¹The Children's Hospital, Zhejiang University School of Medicine, National Clinical Research Center for Child Health, Zhejiang 310052, Hangzhou, China. ²Zhejiang Respiratory Drugs Research Laboratory of Food and Drug Administration of China, Zhejiang University School of Medicine, Zhejiang 310058, Hangzhou, China. ³The First People's Hospital of Yancheng, Yancheng 224001, Jiangsu, China. ⁴Medical College of Yangzhou University, 11 Huaihai Road, Yangzhou 225001, Jiangsu, China. ⁵Sir Run Run Shaw Hospital, Zhejiang University School of Medicine, Zhejiang 310000, Hangzhou, China. ⁶Breath Smooth Biotech Hangzhou Co, LTD., Zhejiang 310012, Hangzhou, China.

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