

## Correction

**Correction: Recruited mast cells in the tumor microenvironment enhance bladder cancer metastasis via modulation of ER $\beta$ /CCL2/CCR2 EMT/MMP9 signals****Qun Rao<sup>1,2,3,\*</sup>, Yuan Chen<sup>2,3,\*</sup>, Chiuan-Ren Yeh<sup>3,\*</sup>, Jie Ding<sup>3</sup>, Lei Li<sup>3</sup>, Chawnshang Chang<sup>3</sup> and Shuyuan Yeh<sup>3</sup>**

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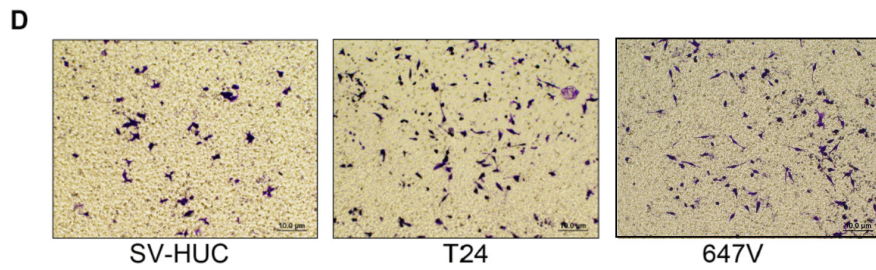
\*These authors have contributed equally to this work

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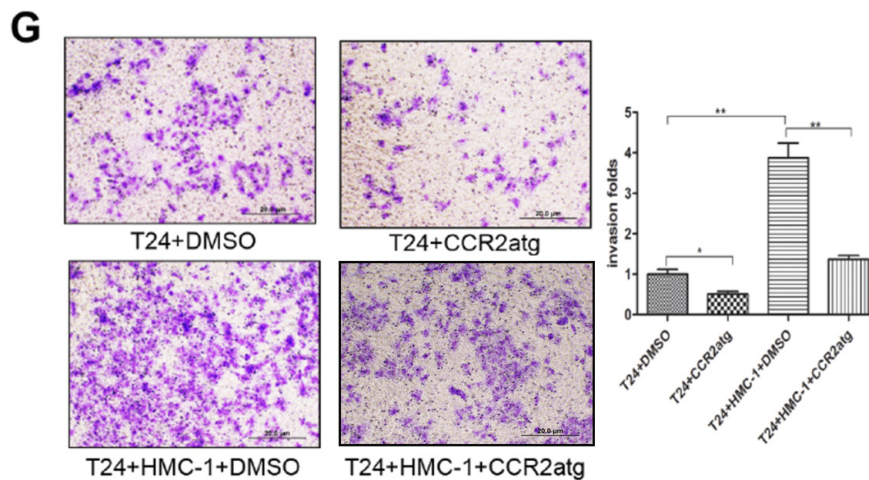
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**This article has been corrected:** Due to errors during data transfer among different devices during preparation of the manuscript, accidental image duplication and overlap occurred in Figures 4G, 1D, and between Figures 3D and 6D. The corrected figures are shown below. The authors declare that these corrections do not change the results or conclusions of this paper.

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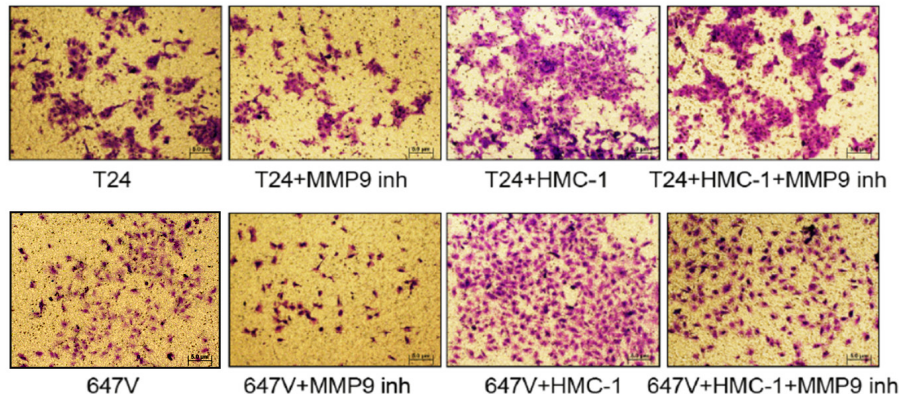


**Figure 1: Bladder cancer tissues recruit more mast cells than non-malignant bladder tissues. (D)** BCa cells promote mast cell migration. Mast cells ( $1 \times 10^5$ ) were added in the upper chambers. We seeded non-malignant bladder SV-HUC cells and 2 different BCa cell lines, T24 and 647V ( $1 \times 10^6$ ) in the bottom wells. After 4 hrs of incubation, the bottom sides of insert wells were fixed and stained to visualize the migrated mast cells.



**Figure 4: Recruited mast cells could increase ER $\beta$  and consequently up-regulate CCL2 signaling. (G)** Blocking CCL2 with CCR2 antagonist could at least partially reverse the mast cell-promoted BCa cell invasion in both T24 and 647v cells. \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

D



**Figure 6: EMT could function via increasing MMP9 to enhance BCa cell invasion. (D)** Blocking MMP9 with MMP9 inhibitor (inh) can partly reverse mast cell-promoted T24 and 647V cells invasion. \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$