CORRIGENDUM

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DJ-1 promotes cell proliferation and tumor metastasis in esophageal squamous cell carcinoma via the Wnt/ β -catenin signaling pathway

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Subsequently to the publication of the above article, an interested reader drew to the authors' attention that a pair of data panels featured between Figs. 4 and 7 contained overlapping data such that the data were derived from the same original source where they were intending to depict the results from experiments performed under different experimental conditions, and a pair of the data panels featured in Fig. 8 for the β -catenin data also appeared to show overlapping data.

The authors were able to re-examine their original data, and have identified the data that were intended to have been shown for these figure parts. The corrected versions of Fig. 4 (showing the correct data for the LV-DJ-1/migration experiment in Fig. 4A), Fig. 7 (showing the correct data for the LV-DJ-1 + XAV939/migration experiment) and Fig. 8 (showing the correct data for the LV-siRNA-DJ-1 experiment) are shown on the subsequent pages. The authors confirm that these inadvertent errors did not have any major impact on the conclusions reported in their paper, are grateful to the Editor of *International Journal of Oncology* for allowing them the opportunity to publish this Corrigendum, and apologize to the readership for any inconvenience caused.



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Figure 4. DJ-1 promotes EMT via the Wnt/ β -catenin signaling pathway in esophageal squamous cell carcinoma. (A) LV-DJ-1 cells had a significantly higher migration and invasion ability compared with the control group (magnification, x200). (B) The adhesion ability was significantly increased in LV-DJ-1 cells. (C) DJ-1 overexpression promoted the EMT process by significantly reducing E-cadherin expression and significantly increasing the vimentin and N-cadherin expression. (D) LRP6, p-LRP6 and β -catenin expression were significantly upregulated, while Axin1 expression was significantly downregulated in LV-DJ-1 cells. The ratio of p-LRP6 to total LRP6 protein exhibited no significant change between the control group and DJ-1 overexpression group. *P<0.05, **P<0.01 vs. LV-con. LV-DJ-1, lentivirus overexpressing DJ-1; LV-con, lentivirus control; LRP-6, lipoprotein receptor-related protein 6; p-. phosphorylated.



Figure 7. Inhibition of Wnt/ β -catenin reduces tumor malignant behaviors caused by DJ-1. (A) The proliferation of LV-DJ-1 cells treated with XAV939 was significantly decreased compared with LV-DJ-1 cells (magnification, x100). (B) In the colony formation assay, cells treated with XAV939 had fewer colonies compared with the control LV-DJ-1 cells (magnification, x100). (C) In the Transwell assay, cells of the LV-DJ-1 + XAV939 group demonstrated a weaker ability to migrate and invade compared with the LV-DJ-1 group (magnification, x200). (D) The adhesion ability was decreased in the LV-DJ-1 + XAV939 group compared with the LV-DJ-1 group. (E) Western blotting results demonstrated XAV939 treatment could increase the E-cadherin expression, while it reduced the vimentin and N-cadherin expression levels. (F) LRP6, p-LRP6 and β -catenin expression were downregulated, while Axin1 expression was upregulated in XAV939-treated compared with control cells. The ratio of p-LRP6 to total LRP6 protein was significantly increased in XAV939-treated cells compared with the control untreated LV-DJ-1 cells. *P<0.05, **P<0.01 vs. LV-DJ-1 group. LV-DJ-1, lentivirus overexpressing DJ-1; LRP-6, lipoprotein receptor-related protein 6; p-. phosphorylated.



Figure 8. Manipulation of DJ-1 expression influences esophageal squamous cell carcinoma xenograft metastasis and EMT via the Wnt/ β -catenin signal pathway. (A) The number of peritoneal dissemination nodules in the LV-DJ-1 group was significantly higher compared with the LV-con group. **P<0.01 vs. LV-con. (B) In LV-siRNA-DJ-1 group, the number of peritoneal dissemination nodules was significantly lower compared with the LV-siRNA-con group. **P<0.01 vs. LV-siRNA-DJ-1. (C) Liver metastases in the LV-DJ-1 group exhibited a larger volume and more nodules. (D) In the LV-siRNA-DJ-1 group, liver metastases exhibited a smaller volume and fewer nodules. (E) Immunohistochemistry results revealed increased DJ-1, vimentin and β -catenin, and decreased E-cadherin levels in the LV-DJ-1 group, and decreased DJ-1, vimentin and β -catenin, and increased E-cadherin levels in the LV-bJ-1 group (magnification, x200). LV-DJ-1, lentivirus overexpressing DJ-1; LV-con, lentivirus control; LV-siRNA-DJ-1, lentivirus encoding DJ-1 small interfering RNA; LV-siRNA-con, lentivirus encoding control small interfering RNA.