CORRECTION Open Access

Correction to: Hsa_circ_0058124 promotes papillary thyroid cancer tumorigenesis and invasiveness through the NOTCH3/GATAD2A axis



Yao Yao^{1,2†}, Xinyuan Chen^{1,2†}, Hong Yang^{2,3†}, Wei Chen¹, Yichun Qian¹, Zhongyi Yan^{2,4,5}, Tian Liao^{6,7}, Weiping Yao¹, Wenlan Wu¹, Tonghua Yu¹, Yun Chen^{2,3*} and Yuan Zhang^{1*}

Correction to: J Exp Clin Cancer Res https://doi.org/10.1186/s13046-019-1321-x

In the original publication of this manuscript [1], the Fig. 6a invasion si-hsa_circ_0058124_2# group (row 2 right and row 3 right) and Fig. 9c TPC-1 clone formation assay control group (row 1 left) were misplaced and need to be revised. The updated figures are shown below.

The authors apologize for the inconvenience that the corrections caused.

The original article can be found online at https://doi.org/10.1186/s13046-019-1321-x.

Author details

¹Department of Head and Neck Surgery, Jiangsu Cancer Hospital & Jiangsu Institute of Cancer Research & The Affiliated Cancer Hospital of Nanjing Medical University, Nanjing 210009, China. ²Department of Immunology, Key Laboratory of Immune Microenvironment and Disease, Nanjing Medical University, Nanjing 211166, China. ³Jiangsu Key Lab of Cancer Biomarkers, Prevention and Treatment, Collaborative Innovation Center for Cancer Personalized Medicine, Nanjing Medical University, Nanjing 211166, China. ⁴Jiangsu Key Laboratory of Oral Disease, Nanjing Medical University, Jiangsu

The original article can be found online at https://doi.org/10.1186/s13046-019-1321-x

Full list of author information is available at the end of the article



210029, China. ⁵Department of Oral and Maxillofacial Surgery, Affiliated Hospital of Stomatology, Nanjing Medical University, Jiangsu 210029, China. ⁶Department of Head and Neck Surgery, Fudan University Shanghai Cancer Center, Shanghai 200032, China. ⁷Department of Oncology, Shangha Medical College, Fudan University, Shanghai 200032, China.

Published online: 01 April 2020

Reference

 Yao, et al. Hsa_circ_0058124 promotes papillary thyroid cancer tumorigenesis and invasiveness through the NOTCH3/GATAD2A axis. J Exp Clin Cancer Res. 2019:38:318.

© The Author(s). 2020 **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated in a credit line to the data.

^{*} Correspondence: chenyun@njmu.edu.cn; yuan_zhang63@163.com

[†]Yao Yao, Xinyuan Chen and Hong Yang contributed equally to this work. ²Department of Immunology, Key Laboratory of Immune Microenvironment and Disease, Nanjing Medical University, Nanjing 211166, China

¹Department of Head and Neck Surgery, Jiangsu Cancer Hospital & Jiangsu Institute of Cancer Research & The Affiliated Cancer Hospital of Nanjing Medical University, Nanjing 210009, China

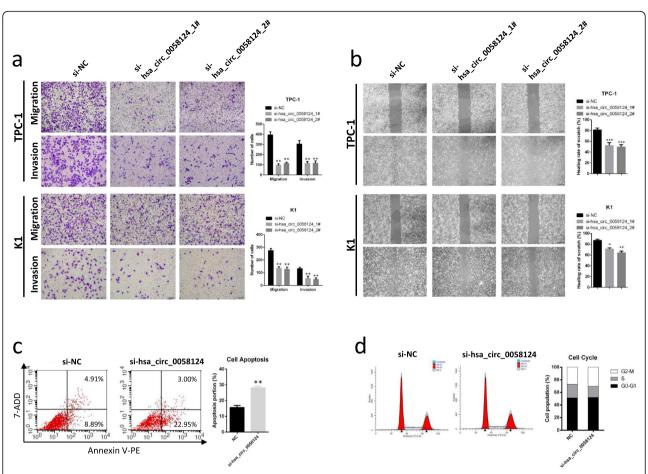
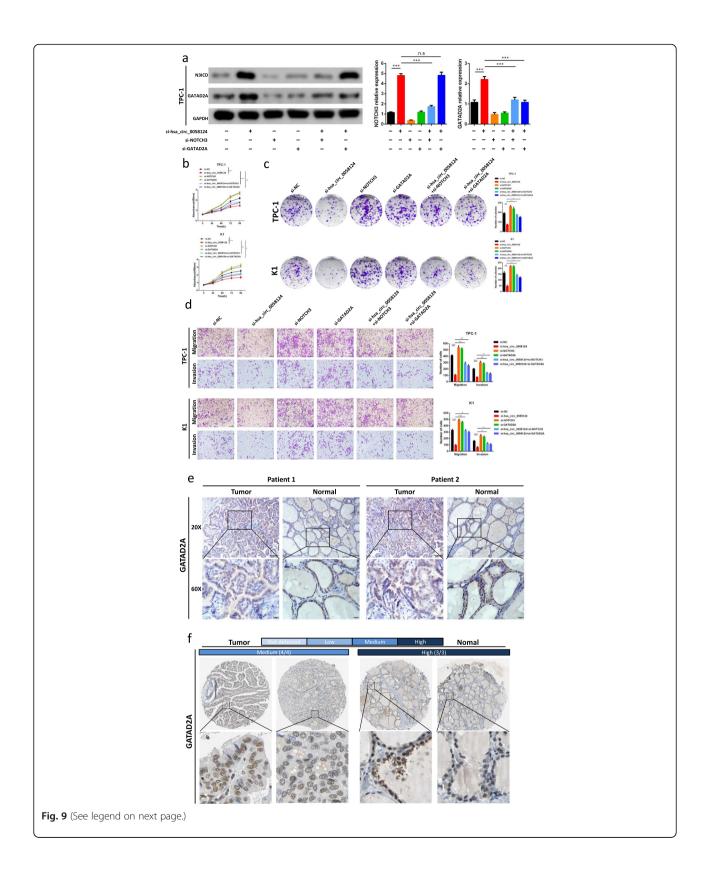


Fig. 6 Hsa_circ_0058124 affects the migration, invasion abilities, and apoptosis of PTC cells in vitro. **a** Representative images and quantification results of cell migration and invasion abilities of TPC-1 and K1 cells harboring control or hsa_circ_0058124 siRNAs. **b** Scratch wound assays in hsa_circ_0058124-deficient PTC cells and corresponding controls. **c**, **d** Flow cytometry assays showed the rate of apoptosis (**c**) and the cell cycle distributions (**d**) in TPC-1 cells transfected with si-NC or si-hsa_circ_0058124. *P < 0.05, **P < 0.01 and ****P < 0.001



(See figure on previous page.)

Fig. 9 The oncogenic hsa_circ_0058124/NOTCH3/GATAD2A axis in PTC cells. **a** Expression of Notch3 and GATAD2A in TPC-1 cells at protein level analyzed by western blot, after transfection with the indicated siRNAs. **b, c** The CCK-8 assays (**b**) and colony formation assays (**c**) were used to evaluate the cell growth after transfection with si-hsa_circ_0058124 or co-transfected with si-hsa_circ_0058124 and si-GATAD2A or si-NC in PTC cells. **d** Transwell assays were applied to evaluate the migration and invasion of PTC cells after transfection with si-hsa_circ_0058124 or co-transfected with si-hsa_circ_0058124 and si-GATAD2A or si-NC. **e** Immunohistochemistry analysis of GATAD2A protein levels in PTC tissues. Representative images were shown. Scale bar, 100 µm. **f** Representative images for the expression of GATAD2A in thyroid tumor tissues and normal thyroid tissues are shown with the fraction of samples with antibody staining/protein expressions evaluated as high, medium, low, or not detected based on the blue-scale color coding. Data are presented as the mean ± S.E.M., analyzed using independent samples student's t-test. *P < 0.001 and ***P < 0.001