# CORRECTION

## **Open Access**



# Correction: *Circ-HuR* suppresses HuR expression and gastric cancer progression by inhibiting CNBP transactivation

Feng Yang<sup>1†</sup>, Anpei Hu<sup>1†</sup>, Dan Li<sup>1†</sup>, Jianqun Wang<sup>1</sup>, Yanhua Guo<sup>1</sup>, Yang Liu<sup>1</sup>, Hongjun Li<sup>2</sup>, Yajun Chen<sup>2</sup>, Xiaojing Wang<sup>3</sup>, Kai Huang<sup>3</sup>, Liduan Zheng<sup>2,3\*</sup> and Qiangsong Tong<sup>1,3\*</sup>

## Correction: Mol Cancer 18, 158 (2019) https://doi.org/10.1186/s12943-019-1094-z

Following publication of the original article [1], the authors identified errors in Fig. 2f and in Fig. 5h. In Fig. 5h, the transwell invasion images for "AGS Mock+circ-Mock", "AGS Mock+circ-HuR", and "MKN-45 Mock+circ-Mock" were misused. After a self-investigation and carefully check of the archived images of this study, the authors found these errors happened inadvertently during the preparation of figures. The correct figures are given below.

<sup>†</sup>Feng Yang, Anpei Hu and Dan Li contributed equally to this work.

The original article can be found online at https://doi.org/10.1186/s12943-019-1094-z.

\*Correspondence: Liduan Zheng Id\_zheng@hotmail.com Qiangsong Tong qs\_tong@hotmail.com

 <sup>1</sup> Department of Pediatric Surgery, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, 1277 Jiefang Avenue, Wuhan, Hubei Province 430022, People's Republic of China
<sup>2</sup> Department of Pathology, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, 1277 Jiefang Avenue,

Wuhan, Hubei Province 430022, People's Republic of China <sup>3</sup> Clinical Center of Human Genomic Research, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, 1277 Jiefang Avenue, Wuhan, Hubei Province 430022, People's Republic of China



© The Author(s) 2023. **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.

Published online: 20 September 2023

### Reference

 Yang F, Hu A, Li D, et al. *Circ-HuR* suppresses HuR expression and gastric cancer progression by inhibiting CNBP transactivation. Mol Cancer. 2019;18:158. https://doi.org/10.1186/s12943-019-1094-z.



**Fig. 2** Over-expression of *circ-HuR* suppresses the growth and aggressiveness of gastric cancer. **a** MTT colorimetric assay showing the viability of AGS and MKN-45 cells stably transfected with empty vector (*circ-Mock*), *circ-HuR*, or *lin-HuR*. **b** and **c** Soft agar (**b**) and matrigel invasion (**c**) assays indicating the in vitro growth and invasion of AGS and MKN-45 cells stably transfected with *circ-Mock*, *circ-HuR*, or *lin-HuR*. **b** and **c** Soft agar (**b**) and matrigel invasion (**c**) assays indicating the in vitro growth and invasion of AGS and MKN-45 cells stably transfected with *circ-Mock*, *circ-HuR*, or *lin-HuR*. **d** Representative (left panel), in vivo growth curve (middle panel), and weight at the end points (right panel) of xenograft tumors formed by subcutaneous injection of AGS cells stably transfected with *circ-Mock* or *circ-HuR* into the dorsal flanks of nude mice (n = 5 for each group). **e** Representative images (left panel) and quantification (right panel) of immunohistochemical staining showing the expression of Ki-67 and CD31 within xenograft tumors formed by hypodermic injection of AGS cells stably transfected with *circ-Mock* or *circ-HuR* (n = 5 for each group). Scale bars: 50 µm. **f-h** Representative images (**f**), H&E staining (**g**, arrowheads), and quantification (**h**, left panel) of lung metastatic colonization and Kaplan–Meier curves (**h**, right panel) of nude mice treated with tail vein injection of AGS cells stably transfected with mock or *circ-HuR* (n = 5 for each group). Scale bars: 100 µm. ANOVA and Student's t-test analyzed the difference in **a-e** and **h**. Log-rank test for survival comparison in (**h**). \*P < 0.01 vs. *circ-Mock*. Data are shown as mean ± SEM (error bars) and representative of three independent experiments in (**a-c**)



**Fig. 5** *Circ-HuR* suppresses *HuR* expression, growth, and invasion of gastric cancer cells via repressing CNBP transactivation. **a** Dual-luciferase assay revealing the transactivation of CNBP in AGS and MKN-45 cells stably transfected with empty vector (mock) or CNBP, and those co-transfected with *circ-Mock* or *circ-HuR*. **b** ChIP and qPCR assays showing the changes in binding of CNBP to *HuR* promoter in AGS and MKN-45 cells stably transfected with *circ-Mock* or *circ-HuR*. **b** ChIP and qPCR assays showing the changes in binding of CNBP to *HuR* promoter in AGS and MKN-45 cells stably transfected with *circ-Mock* or *circ-HuR*. **c** and **d** Dual-luciferase (**c**) and real-time qRT-PCR (**d**) assays indicating the activity of *HuR* promoter with wild type (WT) or mutant (Mut) CNBP binding site and transcript levels (normalized to  $\beta$ -actin, *n*=4) of *HuR* in AGS and MKN-45 cells stably transfected with mock or CNBP, and those co-transfected with *circ-Mock* or *circ-HuR*. **e** Western blot assay showing the expression of CNBP, HuR, CCND2, and CTNNB1 in AGS cells stably transfected with CRISPRi-Scb or CRISPRi-CNBP #1, and those cotransfected with mock, *CNBP*, *circ-Mock*, or *circ-HuR*. **g** and **h** Soft agar (**g**) and matrigel invasion (**h**) assays showing in vitro growth and invasion of AGS and MKN-45 cells stably transfected with mock or *CNBP*, and those co-transfected with *circ-Mock* or *circ-HuR*. **A**NOVA analyzed the difference in (**a-d** and **f-h**). \**P* < 0.01 vs. mock+circ-Mock. Data are shown as mean ± SEM (error bars) and representative of three independent experiments in (**a-h**)