

CORRECTION

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# Correction: Interaction of lncRNA Gm2044 and EEF2 promotes estradiol synthesis in ovarian follicular granulosa cells

Ke Hu<sup>1</sup>, Chen Wang<sup>1</sup>, Yifan Xu<sup>1</sup>, Fan Li<sup>2</sup>, Xuefeng Han<sup>1</sup>, Chuanwang Song<sup>2\*</sup> and Meng Liang<sup>1\*</sup>

**Correction:** *J Ovarian Res* 16:171 (2023)

<https://doi.org/10.1186/s13048-023-01232-z>

Following publication of the original article [1], the authors found two mistakes while reading the article today. In Fig. 6A and E as follow, the names of the first and second column should be Gm2044[+/+] and Gm2044[+/-], respectively.

The correct figure is shown here and the original article has been corrected.

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The online version of the original article can be found at <https://doi.org/10.1186/s13048-023-01232-z>.

\*Correspondence:

Chuanwang Song

bbmcscw@foxmail.com

Meng Liang

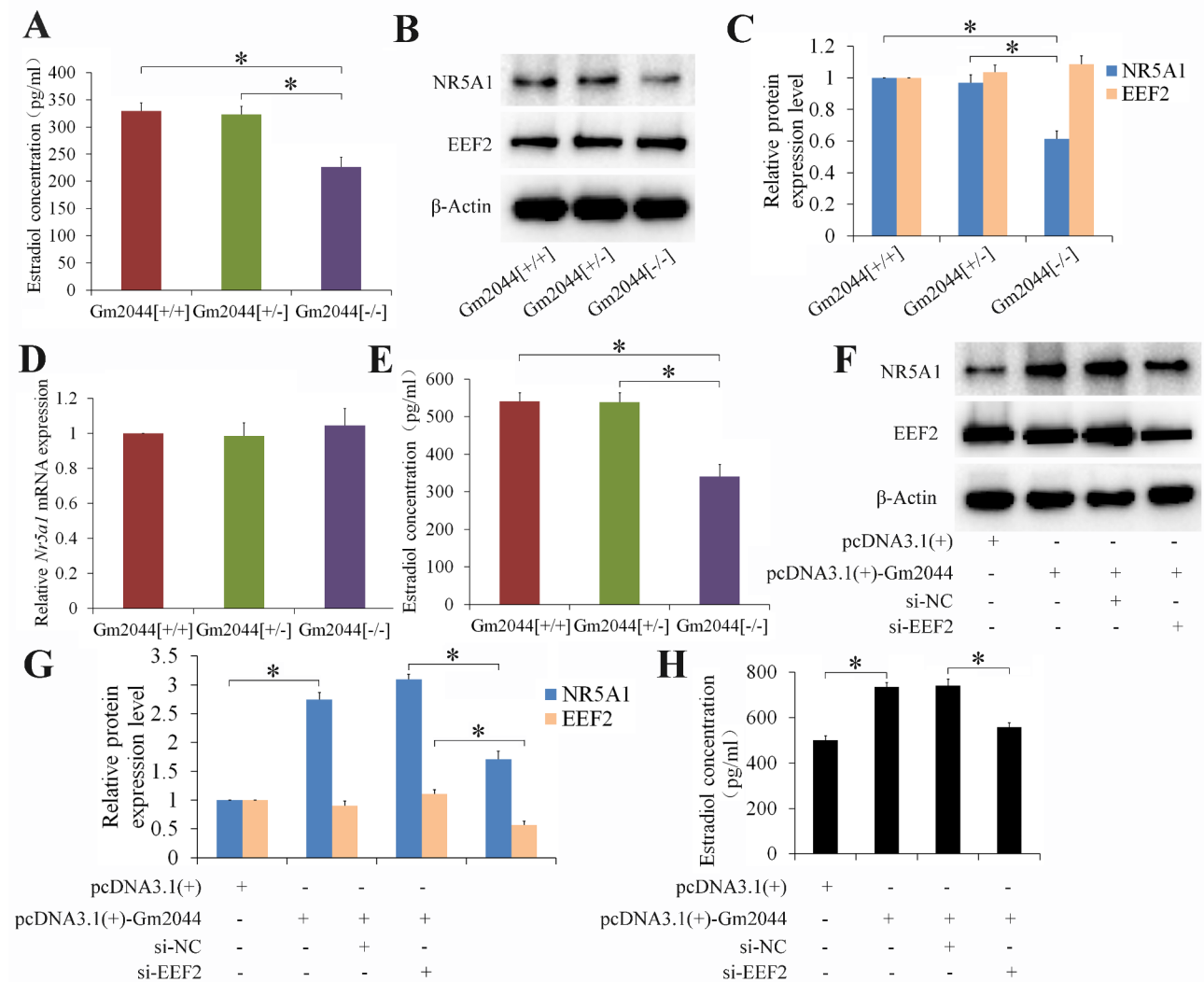
lmhk@mail.ustc.edu.cn

<sup>1</sup>School of Life Science, Bengbu Medical College, Bengbu, China

<sup>2</sup>School of Laboratory Medicine, Bengbu Medical College, Bengbu, China



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**Fig. 6** Estradiol concentration significantly decreased in female Gm2044 [-/-] mice. **(A)** The serum estradiol concentration of female IncRNA Gm2044 knockout mice significantly decreased. Serums were isolated from Gm2044[+/+], Gm2044 [+/-] mice and Gm2044 [-/-] mice and then were used to analyze estradiol concentration by ELISA method. **(B and C)** The NR5A1 protein expression significantly decreased in follicular granulosa cells of Gm2044 [-/-] mice. The protein for follicular granulosa cells of Gm2044[+/+], Gm2044 [+/-] mice and Gm2044 [-/-] mice were isolated and then subjected to western blotting (B) and quantitative analysis (C). **(D)** The Nr5a1 mRNA expression had no change in follicular granulosa cells of Gm2044 [-/-] mice compared with that in Gm2044 [+/+] mice. The RNA for follicular granulosa cells of Gm2044[+/+], Gm2044 [+/-] mice and Gm2044 [-/-] mice were isolated and then subjected to qPCR. **(E)** The estradiol level for follicular granulosa cells of Gm2044 [-/-] mice significantly decreased. Culture medium for follicular granulosa cells of Gm2044[+/+], Gm2044 [+/-] mice and Gm2044 [-/-] mice were used to analyze estradiol concentration by ELISA method. **(F and G)** Knockdown of EEF2 can reverse the elevated effects of Gm2044 on NR5A1 protein level in follicular granulosa cells of Gm2044 [-/-] mice. The protein was isolated from Gm2044 [-/-] mouse follicular granulosa cells transfected with indicated plasmid and siRNA, and then subjected to western blotting (F) and quantitative analysis (G). **(H)** Knockdown of EEF2 can reverse the elevated effects of Gm2044 on estradiol concentration in follicular granulosa cells of Gm2044 [-/-] mice. Culture medium for Gm2044 [-/-] mouse follicular granulosa cells transfected with indicated plasmid and siRNA were used to analyze estradiol concentration by ELISA method. si-EEF2, siRNA for EEF2 () and siRNA for negative control (si-NC) \*,  $p < 0.05$

Published online: 06 October 2023

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### **References**

1. Hu K, Wang C, Xu Y, et al. Interaction of lncRNA Gm2044 and EEF2 promotes estradiol synthesis in ovarian follicular granulosa cells. *J Ovarian Res.* 2023;16:171. <https://doi.org/10.1186/s13048-023-01232-z>.