

RETRACTION NOTE

Open Access



# Retraction Note: Indirubin exerts anticancer effects on human glioma cells by inducing apoptosis and autophagy

Zhaohui Li<sup>1</sup>, Han Wang<sup>2</sup>, Jun Wei<sup>3</sup>, Liang Han<sup>4</sup> and Zhigang Guo<sup>1\*</sup>

**Retraction note to: *AMB Express* (2020) 10:171**

<https://doi.org/10.1186/s13568-020-01107-2>.

The Editor-in-Chief has retracted this Article.

Following publication, concerns were raised about similarities between the published figures and those in previously published articles. Specifically:

Figure 2 A appears to overlap with Fig. 3A from [1];

Figure 2B appears to overlap with Fig. 3B from [2], Fig. 6 from [3] and Figs. 1E and 3H from [4];

Figure 4 A appears to overlap with Fig. 1G F from [5];

Figure 4B appears to overlap with Fig. 6 from [6].

The Editor-in-Chief no longer has confidence in the reliability of the data underlying the findings presented.

None of the authors have responded to any correspondence from the publisher/editor about this retraction.

Published online: 02 May 2024

## References

1. Li W, Tang N, Tao J, Zhu Z, Liu L, Fang Q, Chang J (2019) MicroRNA-374 targets JAM-2 regulates the growth and metastasis of human pancreatic cancer cells. *Am J Translational Res* 11(10):6454
2. Xu CH, Xiao LM, Zeng EM, Chen LK, Zheng SY, Li DH, Liu Y (2019) MicroRNA-181 inhibits the proliferation, drug sensitivity and invasion of human glioma cells by targeting Selenoprotein K (SELK). *Am J Translational Res* 11(10):6632
3. Liu [RETRACTEDARTICLE, Li X, Ma Y, Wang Q, Y., Song AL (2019) Withaferin-A inhibits growth of drug-resistant breast carcinoma by inducing apoptosis and autophagy, endogenous reactive oxygen species (ROS) production, and inhibition of cell migration and nuclear factor kappa B (NF-κB)/mammalian target of rapamycin (m-TOR) signalling pathway. *Med Sci Monitor: Int Med J Experimental Clin Res* 25:6855. <https://doi.org/10.12659/MSM.916931>
4. Zhihong [RETRACTEDARTICLE, Rubin Z, Liping C, Anpeng L, Hui M, Yanting G, W., Zhenxiu S (2020) MicroRNA-1179 regulates proliferation and chemosensitivity of human ovarian cancer cells by targeting the PTEN-mediated PI3K/AKT signaling pathway. *Archives Med Science: AMS* 16(4):907
5. Jia [RETRACTEDARTICLE, Lin Y, Jin R, Si H, Jian L, Yu W, Q., Yang S (2019) MicroRNA-34 suppresses proliferation of human ovarian cancer cells by triggering autophagy and apoptosis and inhibits cell invasion by targeting notch 1. *Biochimie* 160:193–199. <https://doi.org/10.1016/j.biochi.2019.03.011>
6. Xiong [RETRACTEDARTICLE, Xiong Y, Liu YJ, D. Y., Shen RR (2019) Pancreatistatin inhibits the growth of Colorectal Cancer cells by inducing apoptosis, Autophagy, and G2/M cell cycle arrest. *Med Sci Monitor: Int Med J Experimental Clin Res* 25:6015. <https://doi.org/10.12659/MSM.916116>

## Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

The online version of the original article can be found at <https://doi.org/10.1186/s13568-020-01107-2>.

\*Correspondence:

Zhigang Guo  
ms003@jlu.edu.cn

<sup>1</sup>Department of Neurosurgery, China-Japan Union Hospital of Jilin University, 130033 Changchun, China

<sup>2</sup>Clinical Laboratory, The Affiliated Hospital of Changchun University of Traditional Chinese Medicine, 130021 Changchun, China

<sup>3</sup>Surgery Department, China-Japan Union Hospital of Jilin University, 130033 Changchun, China

<sup>4</sup>Department of Pathology, China-Japan Union Hospital of Jilin University, 130033 Changchun, China



© The Author(s) 2024. **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/>.