

Retraction

Retraction for: Multiwalled carbon nanotubes co-delivering sorafenib and epidermal growth factor receptor siRNA enhanced tumor-suppressing effect on liver cancer

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This article has been retracted: Aging has completed its investigation of this paper. Multiple concerns were raised about this paper, including internal duplications and overlap with unrelated papers from different institutions. We found that **Figure 1D**, “Gel retardation assay of naked siRNA and MWNT/Sor/siRNA complexes with the different N/P ratio,” is a duplication of the previously published Figure 2A, “Gel retardation assay of naked pDNA and SLNs/pDNA complexes with the different mass ratio” [1]. In addition, external duplications include images of immunohistochemical staining of Ki67 in **Figure 5D**, which duplicates Ki67 images in [2], and tumor images in **Figure 5C**, which are identical to some of the tumor images in [3, 4]. This figure also contains internal duplications produced by the repeated use of tumor specimens. Additionally, this figure has the same distinctively scratched ruler that was used to measure xenograft tumors in a number of other papers from unrelated teams of authors [5, 6]. Aging Scientific Integrity office contacted the authors but did not receive any response. It also notified authors’ Institutions about this retraction and added their names to the Editorial Warning list.

REFERENCES

1. Zhao Y, Chen H, Wang L, Guo Z, Liu S, Luo S. Cationic solid lipid nanoparticles loaded by integrin β 1 plasmid DNA attenuates IL-1 β -induced apoptosis of chondrocyte. *Aging (Albany NY)*. 2020; 12:22527–37. <https://doi.org/10.18632/aging.103656>
PMID:[33289706](https://pubmed.ncbi.nlm.nih.gov/33289706/).
Retraction in: *Aging (Albany NY)*. 2023; 15:12698. <https://doi.org/10.18632/aging.205326>
PMID:[37964500](https://pubmed.ncbi.nlm.nih.gov/37964500/)
2. Ji H, Zhang X. RPL38 Regulates the Proliferation and Apoptosis of Gastric Cancer via miR-374b-5p/VEGF Signal Pathway. *Onco Targets Ther*. 2020; 13:6131–41. <https://doi.org/10.2147/OTT.S386398>
PMID:[32617008](https://pubmed.ncbi.nlm.nih.gov/32617008/).

Retraction in: *Onco Targets Ther.* 2022; 15:867–8. <https://doi.org/10.2147/OTT.S386398>
PMID:[36003326](https://pubmed.ncbi.nlm.nih.gov/36003326/)

3. Liu L, Wang L, Li X, Tian P, Xu H, Li Z, Liu E. Effect of miR-21 on apoptosis in hepatoblastoma cell through activating ASP2/p38 signaling pathway *in vitro* and *in vivo*. *Artif Cells Nanomed Biotechnol.* 2019; 47:3729–36.
<https://doi.org/10.1080/21691401.2019.1664561>
PMID:[31535570](https://pubmed.ncbi.nlm.nih.gov/31535570/)
4. Shi L, Wang Z, Geng X, Zhang Y, Xue Z. Exosomal miRNA-34 from cancer-associated fibroblasts inhibits growth and invasion of gastric cancer cells *in vitro* and *in vivo*. *Aging (Albany NY).* 2020; 12:8549–64.
<https://doi.org/10.18632/aging.103157>
PMID:[32391804](https://pubmed.ncbi.nlm.nih.gov/32391804/).
Retraction in: *Aging (Albany NY).* 2023; 15:8530. <https://doi.org/10.18632/aging.205020>
PMID:[37635421](https://pubmed.ncbi.nlm.nih.gov/37635421/)
5. Liu Y, Zhang Q, Wu J, Zhang H, Li X, Zheng Z, Luo M, Li L, Xiang Y, Yang F, Wu L. Long Non-Coding RNA A2M-AS1 Promotes Breast Cancer Progression by Sponging microRNA-146b to Upregulate MUC19. *Int J Gen Med.* 2020; 13:1305–16.
<https://doi.org/10.2147/IJGM.S278564>
PMID:[33273850](https://pubmed.ncbi.nlm.nih.gov/33273850/)
6. Lin Y, Jin H, Wu X, Jian Z, Zou X, Huang J, Guan R, Wei X. The cross-talk between DDR1 and STAT3 promotes the development of hepatocellular carcinoma. *Aging (Albany NY).* 2020; 12:14391–405.
<https://doi.org/10.18632/aging.103482>
PMID:[32716315](https://pubmed.ncbi.nlm.nih.gov/32716315/)