Retraction notice regarding several articles published in *Tumor Biology*

**Abstract.** The publisher and the Editor-in-Chief of *Tumor Biology* retract a total of 15 articles from the journals’ online catalog. The articles were published in different issues of the journal during the period 2014–2016. All articles affected by this retraction notice have problems related to image manipulation or misuse. A detailed explanation is given for each retracted article. The investigations were carried out in accordance with the recommendations of the Committee on Publication Ethics (COPE).

This retraction notice is applicable to the following articles, and the detailed explanations about the investigations are given below:


The authors contacted the editorial office to request a retraction. According to them, they are not able to reproduce the results of this paper. They apologize to the readership of the journal for any inconvenience caused.


The authors contacted the editorial office to request a retraction. They have informed us of image manipulation allegations in Figures 5B, 6B and 7B by a reader on PubPeer (https://pubpeer.com/publications/A33D1FC9CB601204841FD284BF215A), and declared that some original data of the paper were missed. They apologize to the readership of the Journal for any inconvenience caused.


The authors contacted the editorial office to request a retraction. They provided information about image manipulation allegations in Figures 2D and 6B by a reader on PubPeer (https://pubpeer.com/publications/42CB0330D02A3C2D8559EBC3A59A), and declared that they could not find the original data due to computer damage. They apologize to the readership of the journal for any inconvenience caused.

The authors contacted the editorial office to request a retraction and provided information that the MG63 cells used in this paper were contaminated by HeLa cells, thus their results might be wrong. In addition, Figures 5B and 4D include mistakes due to protein band misuse. Moreover, some original data were missed. They sincerely apologize for any inconvenience that might result from the retraction of this article.

After receiving the retraction request, investigation by the editorial office found on PubPeer (https://pubpeer.com/publications/429A33A96BE23F0ACF73833E839730) concerns related to image manipulation in Figures 2D, 4D, 5B, 6B, 7B and 7D, not refuted by the authors.


The authors contacted the editorial office to request a retraction. They allege that, since multiple sets of experiments were carried out simultaneously, errors occurred in the processing of data and the selection of representative images, which caused some confusion between the results of other experiments and the data in another article by the same group of authors (doi: 10.1007/s10495-016-1297-3). They claim to have carefully and repeatedly checked the relevant experimental source data, but due to several years have passed, some of the data could not be completely found and matched. The authors sincerely apologize to the readers.

Detailed evidence of image misuse in Figures 2D, 3A, 4A, 4C and 5D can be found on PubPeer (https://pubpeer.com/publications/0D9663B50C6A8F8A62AADD9AFD569F2).


The editorial office was contacted by PubPeer about possible image manipulation in Figures 2C, 3B, 4B and 6B (https://pubpeer.com/publications/5F29CFBB7430898B4F9DBC0FC1A4A7). Once confronted about this allegation, the author confirmed that the article should be retracted.


The editorial office was contacted by a reader about possible image manipulation in this article. The authors did not respond to this allegation. Investigation by the editorial office found on PubPeer (https://pubpeer.com/publications/A8537EF134DFD0BB1B8E0A15FC0E16) further evidence of image manipulation in Figure 3A, not refuted by the authors.


The authors contacted the editorial office to request a correction in Figure 6E; however, after investigation, evidence of image manipulation in Figures 3C, 5C, 6A and 6E were found on PubPeer (https://pubpeer.com/publications/0E155314DB9C07C79AE9AA98B423A). Once confronted about this allegation, the authors confirmed that the article should be retracted.

The editorial office was contacted by PubPeer about image manipulation in Figure 2D and 2E (https://pubpeer.com/publications/8F9020233EC5C33DE7255F49E1474C#5). The authors did not refute this allegation.


The editorial office was contacted by PubPeer about image manipulation in Figures 5B, 6A, 8B and 8E (https://pubpeer.com/publications/9F7D73288827661CF5922587E9D6BC#4). The authors did not refute this allegation.


The editorial office was contacted by PubPeer about image manipulation in Figure 6B (https://pubpeer.com/publications/6A2122CB4A9ACDE2C5B2DF8537749C#6). The authors did not refute this allegation.


The editorial office was contacted by PubPeer about image manipulation in Figures 1E and 3E (https://pubpeer.com/publications/1710709728F705D84A69D26F5827C6). The authors did not refute this allegation.


The authors contacted the editorial office to request a retraction. They declared that, “As for the limited experimental conditions at that time, I did not carry out cell line screening, and only used a single human lung adenocarcinoma cell line A549 for experiment. However, when I continued my research in the later stage, I purchased other human lung adenocarcinoma cell lines (NCI-H446) for experiments, and could not obtain the RNAi precipitation with A549 cell line Mutusc3 gene inhibits the growth and proliferation of hypoxic lung adenocarcinoma cell line A549, promotes its apoptosis, and enhances the radiosensitivity of hypoxic lung adenocarcinoma cell line A549. Our team verified the sub-cultured frozen A549 cell line and found that this cell line has been contaminated. Therefore, the original conclusion is not strict.”

After receiving the retraction request, investigation by the editorial office found on PubPeer (https://pubpeer.com/publications/277773908BF9B43EECA7BE47E6B69) evidence of image manipulation in Figures 2, 4 and 7, not refuted by the authors.

The editorial office was contacted by a reader about image manipulation in Figures 2B, 2D, 4E, 5A and Suppl. 1A, also reported on PubPeer (https://pubpeer.com/publications/C3083F44BC093638DA8C614374F1B4). The authors did not refute this allegation.


The editorial office was contacted by a reader about image manipulation in Figures 3 C, 4B and 5, also reported on PubPeer (https://pubpeer.com/publications/BB20BCFD9C45435DCE6902C2D18896). The authors did not refute this allegation.