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Corrigendum to 'Silencing KIF18B enhances radiosensitivity: Identification of a promising therapeutic target in sarcoma' [EBioMedicine 61 (2020) 103,056]

Wensi Liu[a,b,1], Zhaojin Yu[a,b,1], Haichao Tang[a,b], Xiangyi Wang[a,b], Bing Zhang[a,b], Jianhang Zhao[a,b], Xinli Liu[c], Jingdong Zhang[c,*], Minjie Wei[a,b,*,2]

[a] *Department of Pharmacology, School of Pharmacy, China Medical University, Shenyang 110122, PR China*
[b] *Liaoning Key Laboratory of molecular targeted anti-tumor drug development and evaluation, Liaoning Cancer immune peptide drug Engineering Technology Research Center, Key Laboratory of Precision Diagnosis and Treatment of Gastrointestinal Tumors, Ministry of Education, China Medical University, Shenyang 110122, PR China*
[c] *Medical Oncology Department of Gastrointestinal Cancer, Liaoning Cancer Hospital & Institute, Cancer Hospital of China Medical University, Shenyang 110000, PR China*

Duplications were found in the images of 8 Gy sh-KIF18B 4 HT1080 group (Fig. 4e), 8 Gy sh-NC (T09$^+$) HT1080 group (Fig. 6e), and 8 Gy sh-NC (T09$^+$) MNNG/HOS group (Fig. 6e). The authors immediately re-checked the raw data and found this was likely a mistake originating from similar naming of the files, such that images were misused accidentally during image processing. The authors regret these errors. The corrected figures are shown below.

Because RD cells grow slowly, the authors used the same control for the silencing KIF18B group (Fig. 4c) and the silencing KIF18B combined T09 group (Fig. 6c) in the RD cell line in order to perform operations simultaneously. The authors wish to add the following sentence in the figure legend of Fig 6c:

The data for 0 Gy *sh-NC (T09-) RD cells in Fig. 6c was the same data as presented for* 0 Gy *sh-NC RD cells in Fig. 4c.*

In order to make the Fig. 4c concise, we showed two representative colonies for each group in Fig. 4c; images of colonies for all doses of radiation were presented in Fig. S1. The authors also wish to add the following sentences in the figure legend of Fig. S1:

The data presented in 0 Gy and 4 Gy group were the same with data in 0 Gy and 4 Gy group in Fig. 4c. The data presented in 0 Gy *sh-NC RD cells was the same with the data in 0 Gy sh-NC (T09-) RD cells in Fig. 6c.*

We sincerely apologize for any inconvenience to the readers of *EBioMedicine*. None of the amendments mentioned above affect the conclusions of this article.

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* Corresponding author.
E-mail addresses: jdzhang@cancerhosp-ln-cmu.com (J. Zhang), mjwei@cmu.edu.cn (M. Wei).
[1] These authors contributed equally to this work.
[2] Lead Contact: Prof. Minjie Wei, Department of Pharmacology, School of Pharmacy, China Medical University, No.77, Puhe Road, Shenyang North New Area, Shenyang, Liaoning 110122, PR China.

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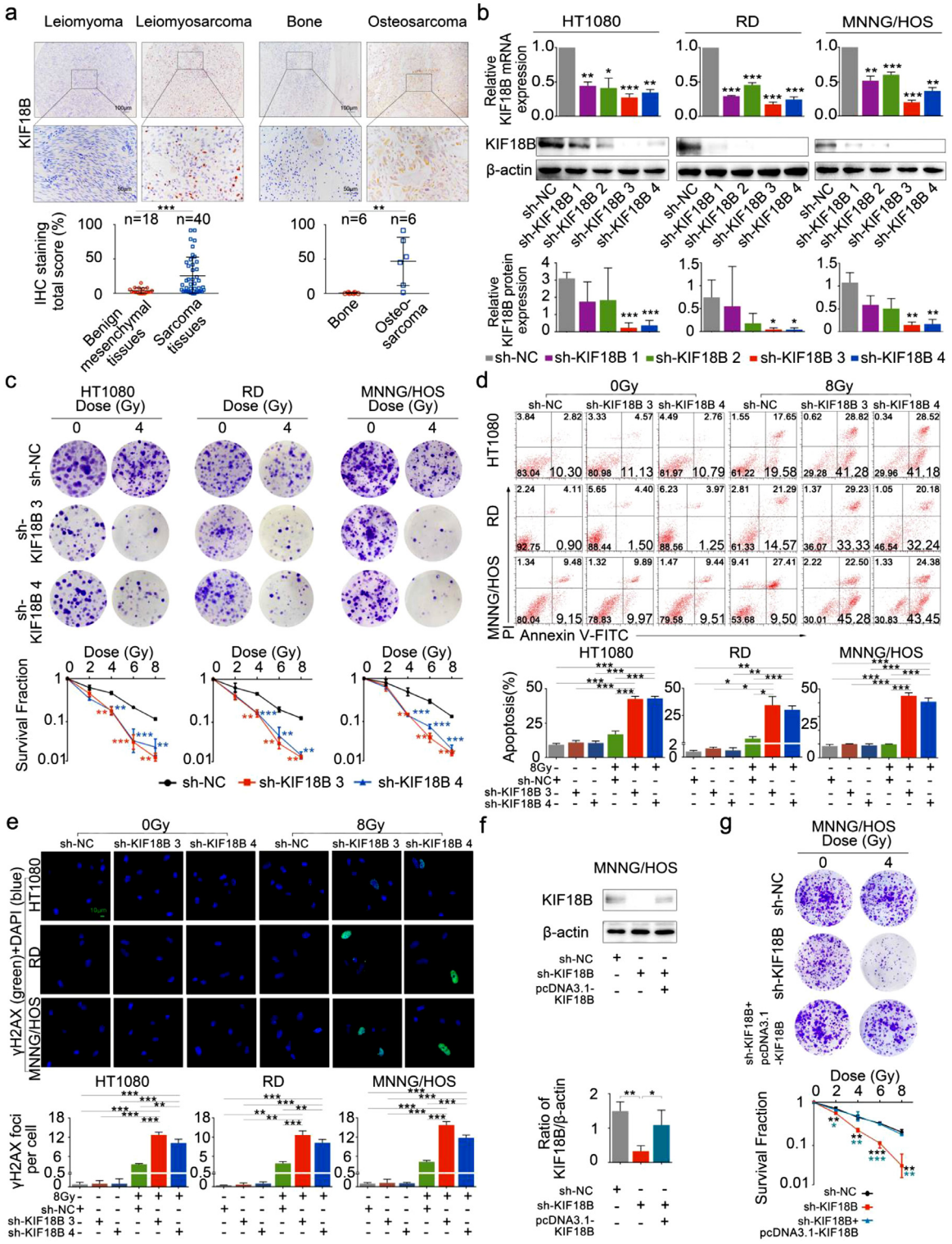

Fig. 4. Inhibition of KIF18B enhances the radiotherapeutic effect on sarcoma cells. (a) Representative micrographs presenting immunohistochemical staining of KIF18B in human sarcoma tissues and benign mesenchymal tissues. Human sarcoma tissue samples were collected from 34 cases of soft tissue sarcoma and six cases of osteosarcoma. The six cases of osteosarcoma were shown independently. (b) The transfection efficiency of shRNA demonstrated that sh-KIF18B 3 and sh-KIF18B 4 could down-regulate mRNA and protein expression of KIF18B in HT1080, RD and MNNG/HOS cells. (c) 48 h after transfection with sh-NC or sh-KIF18B 3, sh-KIF18B 4, the clone formation assay was performed on the cells irradiated with different doses, ranging from 0 Gy, 2 Gy, 4 Gy, 6 Gy, and 8 Gy, every three days for a total of two weeks. Representative images and the surviving fraction (SF) were shown. (d) The early apoptosis increased in sh-KIF18B 3, sh-KIF18B 4 group compared with sh-NC group at 8 Gy by flow cytometer analysis. There was no significant change in each group at 0 Gy. (e) The expression of γH2AX was detected by immunofluorescence; γH2AX was stained with secondary antibody (green) and its nuclear counter stain was DAPI (blue). (f) Relative protein expression of KIF18B was rescued with overexpression of shKIF18B-resistant KIF18B cDNA. (g) The clone formation assay was performed in sh-KIF18B cells with re-expression of shKIF18B-resistant KIF18B cDNA. Cells were irradiated with different doses, ranging from 0 Gy, 2 Gy, 4 Gy, 6 Gy, and 8 Gy every three days for a total of two weeks. (a) *P* values were obtained with Wilcoxon signed ranks test; Error bars denote medians and interquartile ranges; $^{**}P < 0{\cdot}01$, $^{***}P < 0{\cdot}001$. (b–g) *P* values were obtained from independent-samples *t* test; Error bars denote SD ($n = 3$). (b, c) Compared to sh-NC group, $^{*}P < 0{\cdot}05$, $^{**}P < 0{\cdot}01$, $^{***}P < 0{\cdot}001$. (d–g) $^{*}P < 0{\cdot}05$, $^{**}P < 0{\cdot}01$, $^{***}P < 0{\cdot}001$.

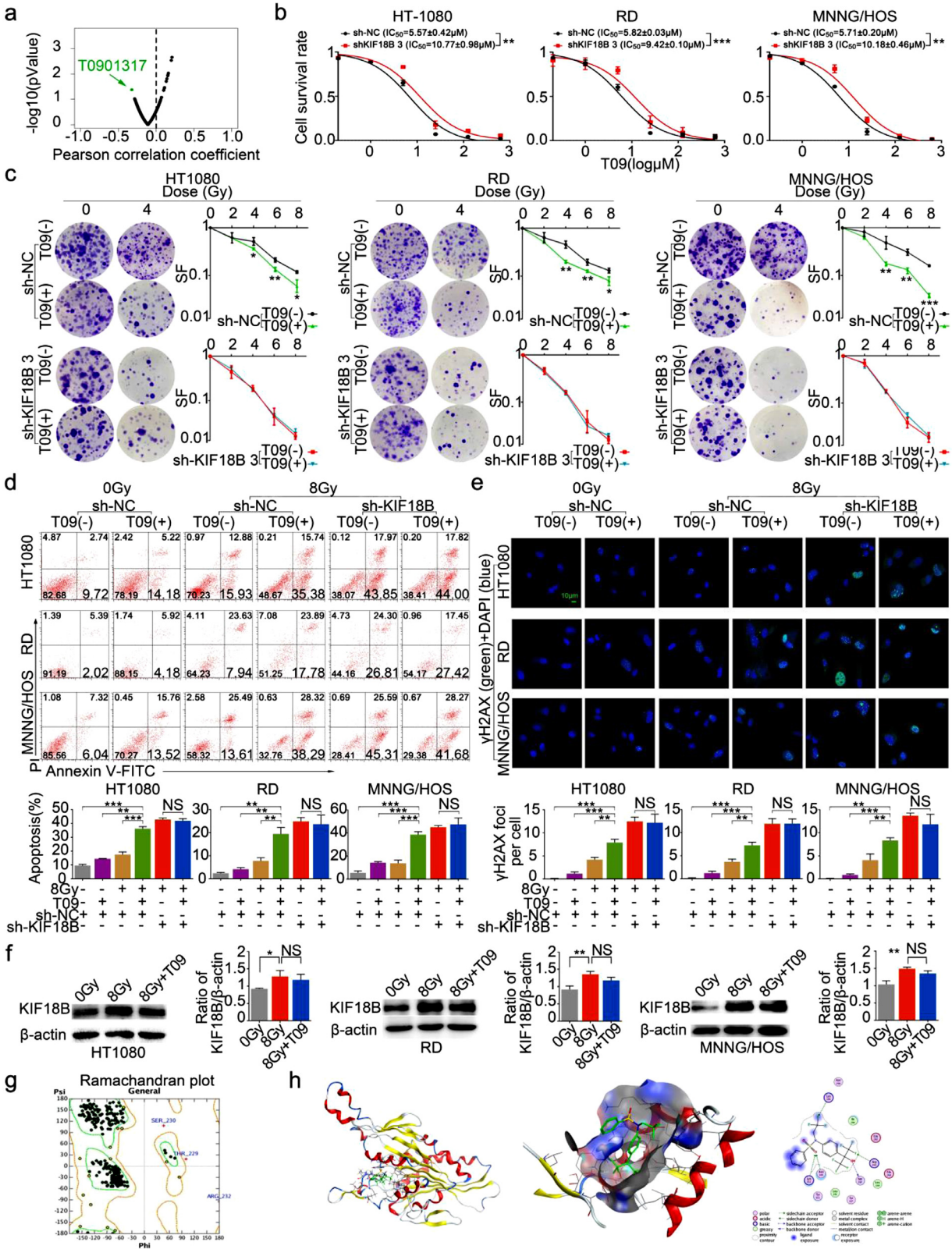

Fig. 6. T09 increases the radiosensitivity of cells with KIF18B high expression. (a) The green-labeled compound in volcano plot was sensitive to cells with KIF18B high expression based on GDSC database ($P < 0{\cdot}05$). (b) 48 h after transfection with sh-NC or sh-KIF18B 3, the sarcoma cells were treated with different concentrations of T09 for another 48 h, and then cell survival rate was analysed using CCK8 assay. (c) The clone formation assay was performed with a specified dose of X-radiation. Representative images and the surviving fraction were shown. (d) Treated cells were stained with Annexin V-FITC/PI to detect the early apoptosis, and then analysed using flow cytometry. (e) Treated cells were stained for secondary antibody (green) and DAPI (blue), then analysed by confocal microscopy. (f) WB assay confirmed that KIF18B expression increased in sarcoma cells at 8 Gy compared with 0 Gy. T09 could not inhibit KIF18B expression in sarcoma cells at 8 Gy. (g) The crystal structure of KIF18B was constructed using the homology model by MOE. The ramachandran plot was used to evaluate the homology modeling of KIF18B. (h) Docking T09 onto KIF18B. KIF18B homology model with minimizing energy combined with T09. SF, survival fraction. NS, not significant. (b–f) *P* values were obtained from independent-samples *t* test; Error bars denote SD ($n = 3$). (c) Compared to sh-NC group, $^{*}P < 0{\cdot}05$, $^{**}P < 0{\cdot}01$, $^{***}P < 0{\cdot}001$. (b, d–f) $^{**}P < 0{\cdot}01$, $^{***}P < 0{\cdot}001$.