

Correction: Prevention of irradiation-induced salivary hypofunction by rapamycin in swine parotid glands

Zhao Zhu¹, Baoxing Pang¹, Ramiro Iglesias-Bartolome², Xiaoshan Wu¹, Lei Hu¹, Chunmei Zhang¹, Jinsong Wang¹, J. Silvio Gutkind³, Songlin Wang¹

¹Molecular Laboratory for Gene Therapy and Tooth Regeneration, Beijing Key Laboratory of Tooth Regeneration and Function Reconstruction, Capital Medical University School of Stomatology, Beijing 100050, China

²Oral and Pharyngeal Cancer Branch, National Institute of Dental and Craniofacial Research, National Institutes of Health, Bethesda, MD 20852, USA

³Department of Pharmacology and Moores Cancer Center, UC San Diego, La Jolla, CA 92093, USA

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This article has been corrected: Due to errors during image assembly, Figures 5A and 5E incorrectly show a single shared β -Actin panel for the western blot experiments. The corrected Figure 5 is shown below. The authors declare that these corrections do not change the results or conclusions of this paper.

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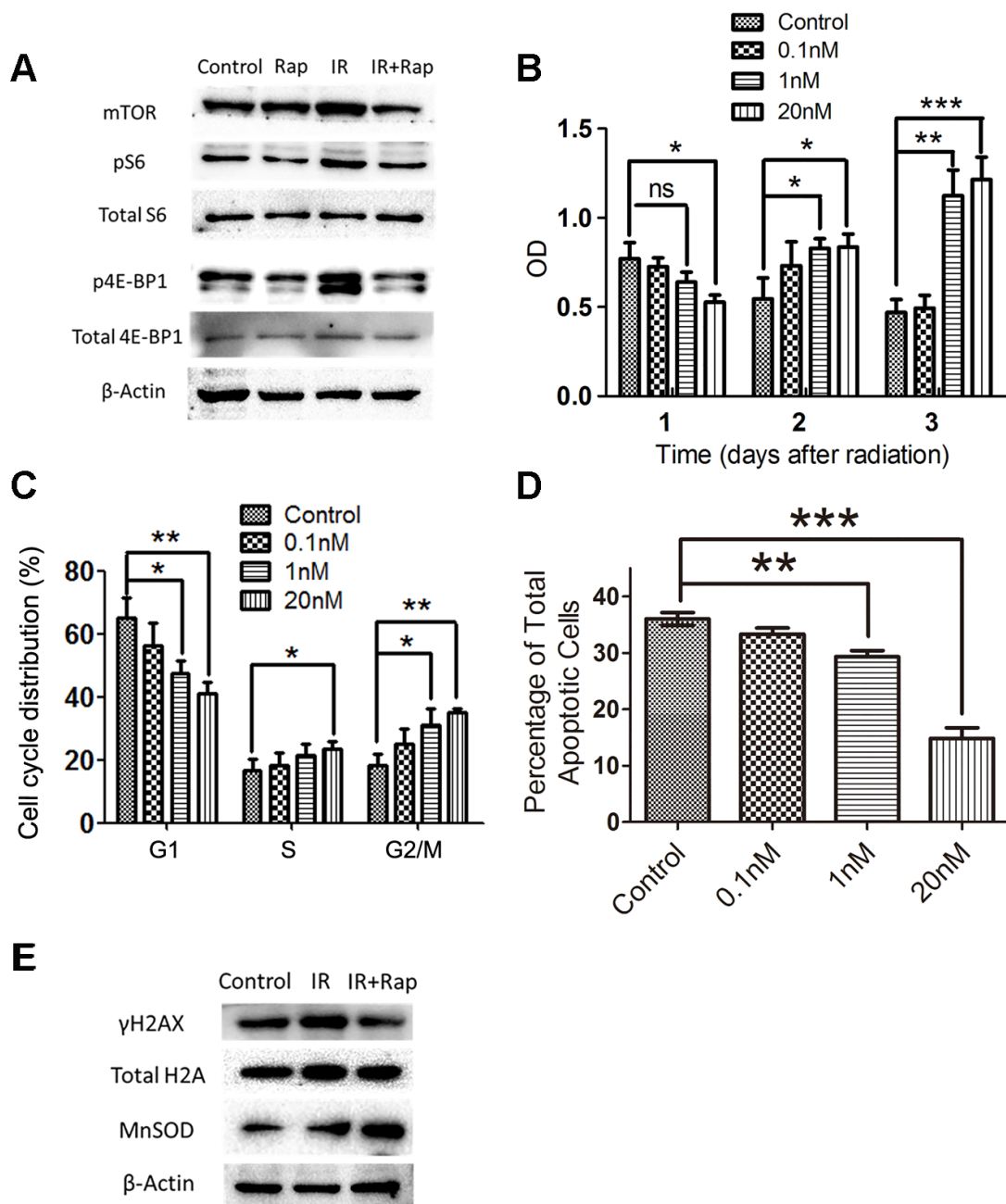


Figure 5: Rapamycin protected the proliferation capacity and decreased ROS-induced DNA damage response in irradiated HSG cells following irradiation. Cells were plated in 6 wells plates and treated with different concentration or without of rapamycin for 72 h, then irradiated with 8 Grays (Gy), and maintained in vehicle or rapamycin medium for 24 h, afterwards all cells were changed into normal medium. (A) western blot analysis of mTOR pathway expressions in control (non-irradiated and no rapamycin treatment, Control), rapamycin treated (non-irradiated, Rap), irradiation (IR) and irradiation + rapamycin (IR + Rap) HSG cells 24 h after irradiation. Rapamycin incompletely inhibited mTOR pathway activation of HSG cells following irradiation. (B) labeling of cell proliferation by CCK-8 after irradiation. After 8 Gy irradiation, when cells changed into normal medium, treatment with rapamycin significant increased cell proliferation compared with control group (irradiated HSG cells without rapamycin treatment) ($*P < 0.05$; $**P < 0.01$; $***P < 0.001$). (C) analysis of cell cycle 24 h after irradiation by flow cytometry. The percentage of rapamycin treated irradiated HSGs in G2 stage was higher than control (irradiated HSG cells without rapamycin treatment) ($*P < 0.05$; $**P < 0.01$). (D) apoptosis assay of HSG cells 24 h after irradiation by AnnexinV. Rapamycin treated irradiated HSGs significantly decreased cell apoptosis. (E) western blot analysis of γ H2AX and MnSOD expression in HSG cells after irradiation. Rapamycin treatment cells (IR + Rap) decreased the expression of DNA damage marker γ H2AX compared with irradiated HSG cells (IR), meanwhile, increased the expression of ROS scavenger MnSOD (Control represents non-irradiated and no rapamycin treated HSG cells).