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# Author Correction: Chlorin e6-associated photodynamic therapy enhances abscopal antitumor effects via inhibition of PD-1/PD-L1 immune checkpoint

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Correction to: *Scientific Reports* <https://doi.org/10.1038/s41598-023-30256-0>, published online 21 March 2023

The original version of this Article contained errors in Figures 3 and 4, where the control groups were incorrectly incorporated into the graphs of each panel (A–E), respectively. The original Figures 3 and 4 and their accompanying legend appear below.

As a result, the Figure legends of Figure 3 and Figure 4 contained errors, where for Figure 3

“\* $P < 0.05$  compared to right control tumor. # $P < 0.05$  compared to right tumor of the abscopal effective group,  $^{\$}P < 0.05$  compared to left control tumor, and  $^{\&}P < 0.05$  compared to left tumor of the abscopal effective group (by one-way ANOVA with Tukey’s post hoc test for multiple comparisons).”

now reads:

“\* $p < 0.05$  compared to irradiated right tumors in abscopal effective group. # $p < 0.05$  compared to irradiated right tumors in abscopal ineffective group (by one-way ANOVA with Tukey’s post hoc test for multiple comparisons).”

And for Figure 4,

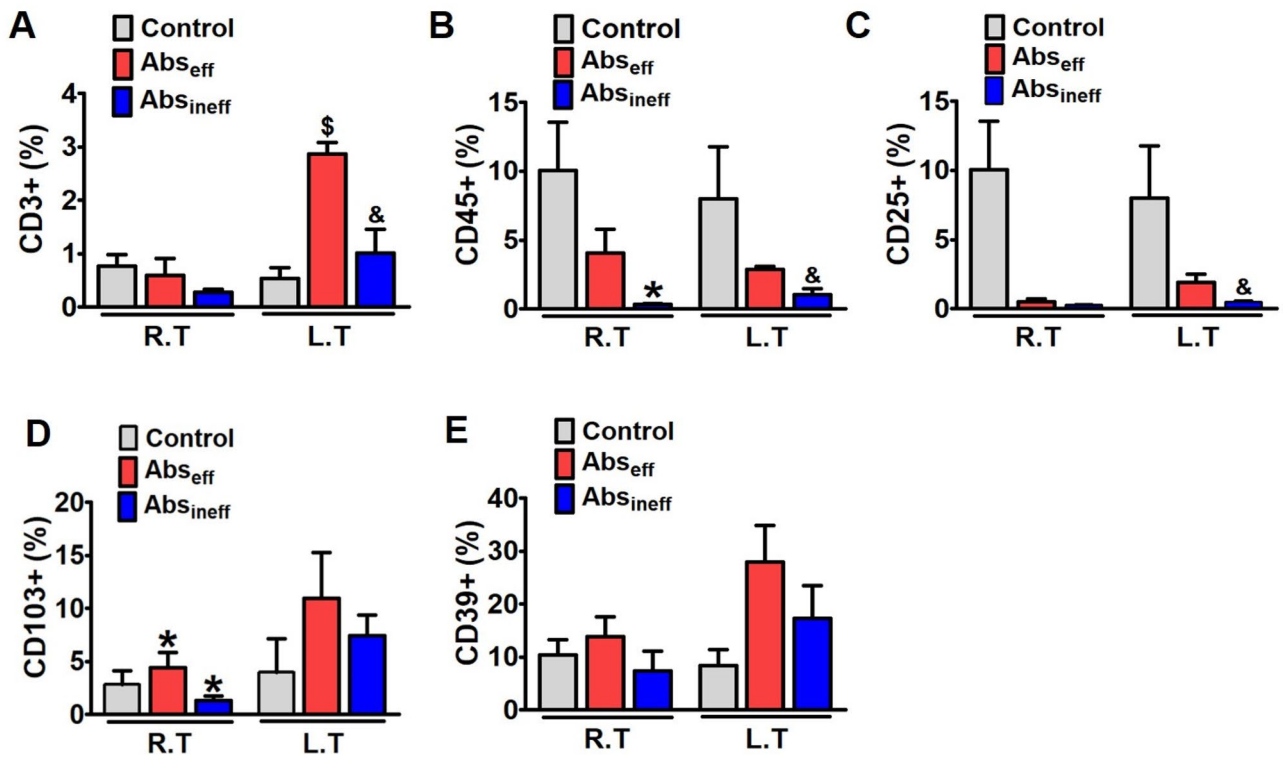
“\* $P < 0.05$  compared to right control tumor. # $P < 0.05$  compared to right tumor of the abscopal effective group,  $^{\$}P < 0.05$  compared to left control tumor, and  $^{\&}P < 0.05$  compared to left tumor of the abscopal effective group (by one-way ANOVA with Tukey’s post hoc test for multiple comparisons).”

now reads:

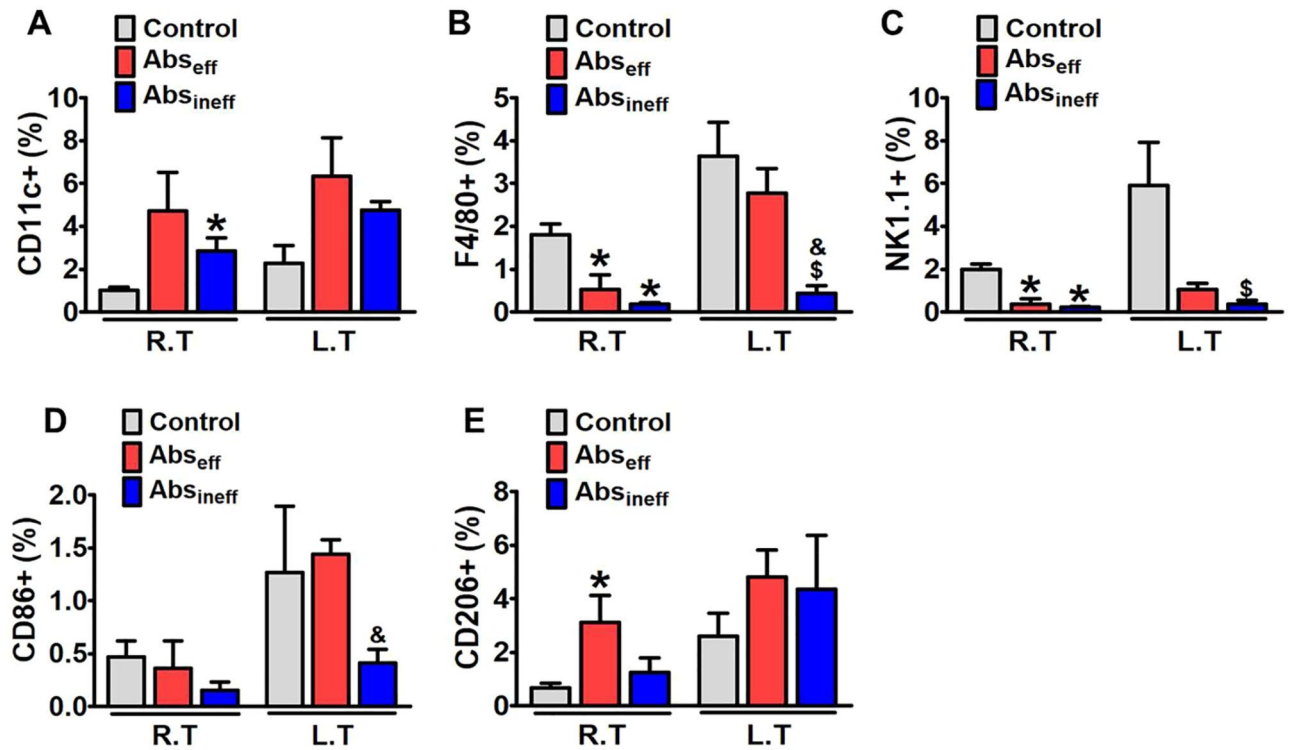
“\* $p < 0.05$  compared to irradiated right tumors in abscopal effective group. # $p < 0.05$  compared to irradiated right tumors in abscopal ineffective group (by one-way ANOVA with Tukey’s post hoc test for multiple comparisons).”

The original Article has been corrected.


Published online: 01 June 2023



**Figure 3.** Enhanced accumulation and activation of T cells by Ce6-PDT in the melanoma mouse tumors. (A–E) Flow cytometry analysis to count and estimate the intratumoral fraction of (A) CD3<sup>+</sup>, (B) CD45<sup>+</sup>, (C) CD25<sup>+</sup>, (D) CD103<sup>+</sup>, and (E) CD39<sup>+</sup> T cells, isolated from the irradiated right and non-irradiated left tumors in control, Abs<sub>eff</sub> and Abs<sub>ineff</sub> group. After 28 days of tumor cell injection, T cells in tumor tissues were isolated from B16F10 tumor-bearing mice. Data are from an experiment representative with n = 3 in the control, n = 3 in the abscopal effective, and n = 4 in the abscopal ineffective group. \**P* < 0.05 compared to right control tumor. #*P* < 0.05 compared to right tumor of the abscopal effective group, \$*P* < 0.05 compared to left control tumor, and &*P* < 0.05 compared to left tumor of the abscopal effective group (by one-way ANOVA with Tukey's post hoc test for multiple comparisons).



**Figure 4.** Flow cytometric analysis of the immune cell in the irradiated and non-irradiated tumor of melanoma mouse tumors. Percentages of (A) CD11c<sup>+</sup>, (B) F4/80<sup>+</sup>, (C) NK1.1<sup>+</sup> (D) CD86<sup>+</sup>, and (E) CD 206<sup>+</sup> in irradiated and non-irradiated tumor in control, Abs<sub>eff</sub> group, and Abs<sub>ineff</sub> group. Data are from an experiment representative with n = 3 in the control, n = 3 in the effective, and n = 4 in the ineffective group. \**P* < 0.05 compared to right control tumor. #*P* < 0.05 compared to right tumor of the abscopal effective group, \$*P* < 0.05 compared to left control tumor, and &*P* < 0.05 compared to left tumor of the abscopal effective group (by one-way ANOVA with Tukey's post hoc test for multiple comparisons).

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