

Comments on “Emodin-Conjugated PEGylation of Fe₃O₄ Nanoparticles for FI/MRI Dual-Modal Imaging and Therapy in Pancreatic Cancer” [Letter]

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Dear editor

I have read a study entitled “Emodin-Conjugated PEGylation of Fe₃O₄ Nanoparticles for FI/MRI Dual-Modal Imaging and Therapy in Pancreatic Cancer” in *International Journal of Nanomedicine*.¹ This study showed Emodin-Conjugated Fe₃O₄ Nanoparticles can be applied for pancreatic cancer imaging and therapy. There may be several issues requiring attention. First, it was surprising that the inhibition rates of Fe₃O₄-PEG-Cy7-EMO on hTERT-HPNE cells (normal pancreatic cells) were so high in Figure 5A, 60% at 80 µg/mL and 70% at 100 µg/mL. However, the apoptosis or necrosis rate was lower than 10% as shown in Figure 5B. If Fe₃O₄-PEG-Cy7-EMO has such high toxicity to normal cells, the applicable potential is low. There may be an error in one of the data. For cell viability assay, 6 µg/mL was not shown in “Methods (0, 12.5, 25, 50, 80, 100 µg/mL)”, but it was shown in Figure 5A. The authors should recheck their original data. Another issue is the fluorescence imaging of liver in Figure 6E and 6F at 6 h. Figure 6E shows a very low signal in liver at 6 h. However, moderate fluorescent signal in liver was observed in Figure 6F. In flow cytometer (FCS) analysis, the data shown in Figure 5B was equal to the data in Table 1 except for apoptosis rate of BxPc3 treated with Fe₃O₄-PEG-Cy7-EMO at 80 µg/mL. What was the sample size? The authors did not show information about sample size. Did they perform the FCS experiment only once? If they performed two or more experiments, the data in Figure 5B and Table 1 should not be the same. Moreover, there are overlapped images in Figure 7A. The last two images for spleen were from same image.

Disclosure

The author reports no conflicts of interest in this communication.

Reference

1. Ren S, Song L, Tian Y, et al. Emodin-conjugated PEGylation of Fe(3)O(4) nanoparticles for FI/MRI dual-modal imaging and therapy in pancreatic cancer. *Int J Nanomed*. 2021;16:7463–7478. doi:10.2147/IJN.S335588

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