

# Supplementary Material

## **In vivo distribution of zoledronic acid in a bisphosphonate-metal complex-based nanoparticle formulation synthesized by a reverse microemulsion method**

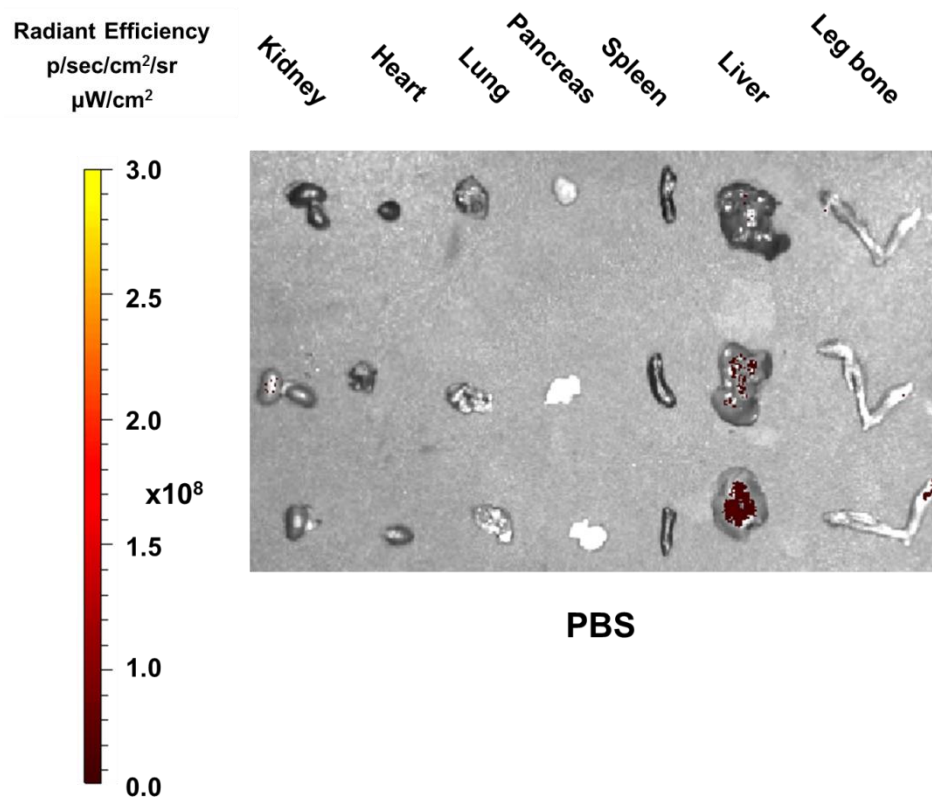
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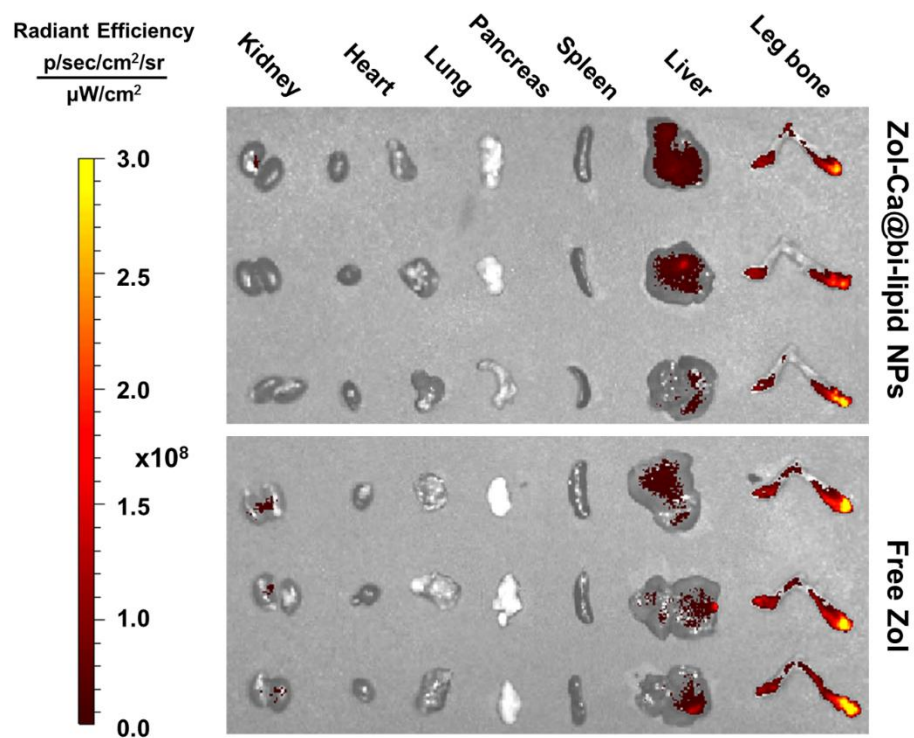
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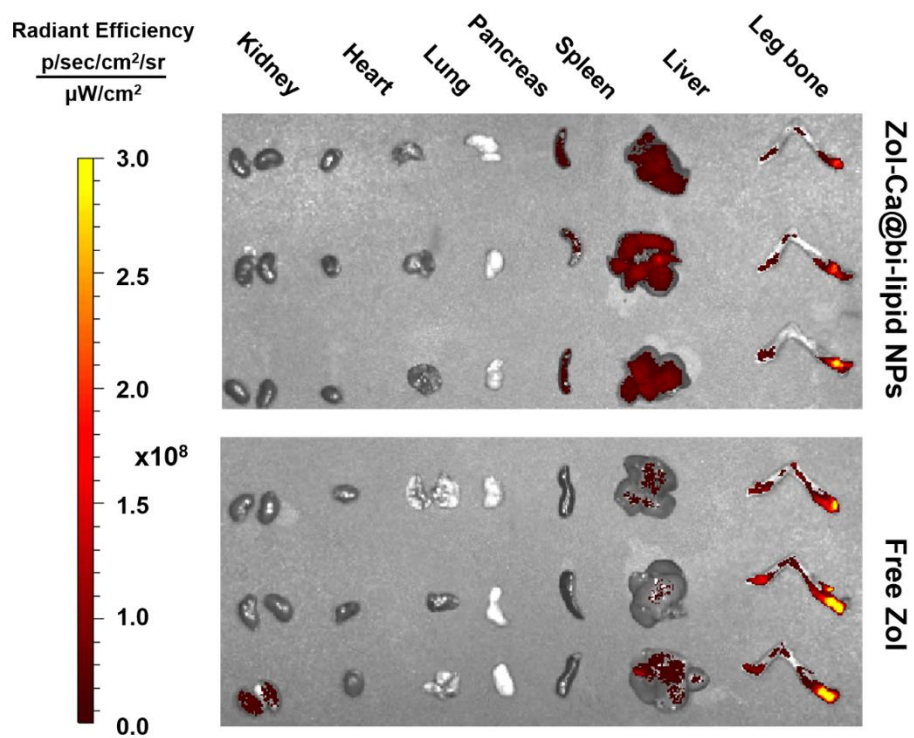
Email: [Zhengrong.cui@austin.utexas.edu](mailto:Zhengrong.cui@austin.utexas.edu)



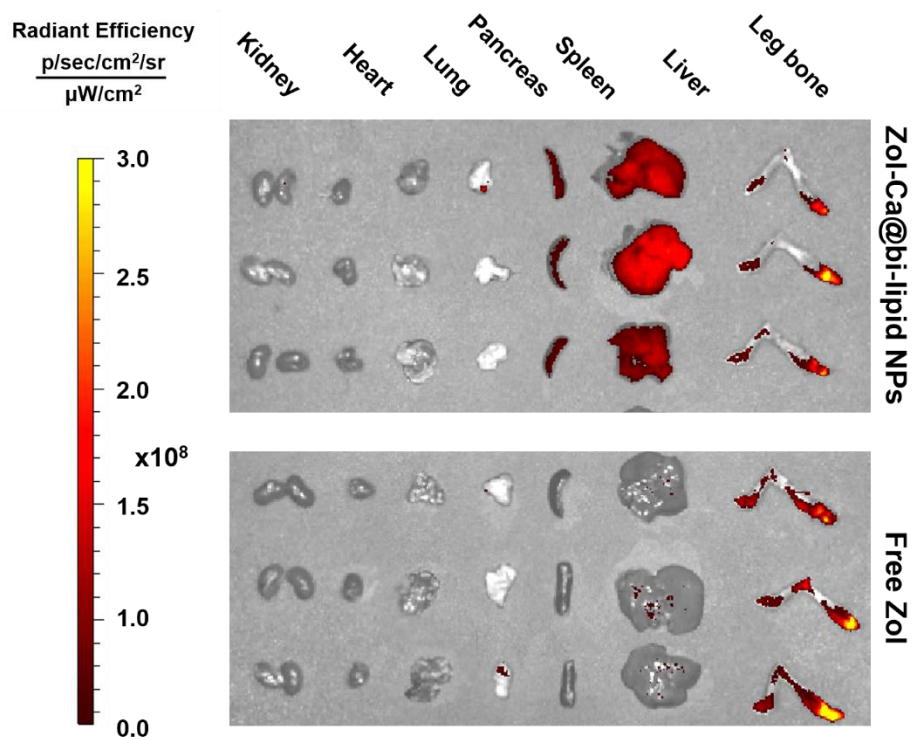
**Figure S1.** A representative fluorescent image of the right rear leg bone and major organs of mice euthanized 6 h after i.v. injection of sterile PBS.



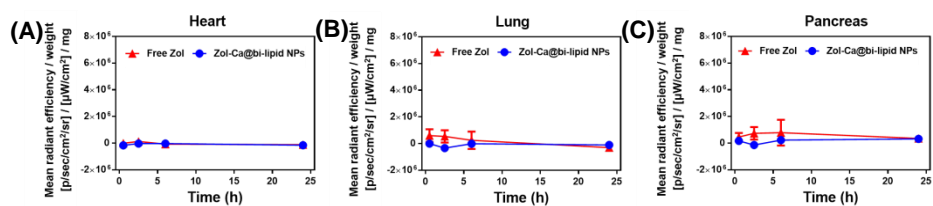
**Figure S2.** Fluorescent image of the right rear leg bone and major organs of mice euthanized 0.5 h after i.v. injection of free Zol or Zol-Ca@bi-lipid NPs with an equivalent amount of Zol (2% of the Zol were labeled with AF647).



**Figure S3.** Fluorescent image of the right rear leg bone and major organs of mice euthanized 2.5 h after i.v. injection of free Zol or Zol-Ca@bi-lipid NPs with an equivalent amount of Zol (2% of the Zol were labeled with AF647).



**Figure S4.** Fluorescent image of the right rear leg bone and major organs of mice euthanized 6 h after i.v. injection of free Zol or Zol-Ca@bi-lipid NPs with an equivalent amount of Zol (2% of the Zol were labeled with AF647).



**Figure S5.** In vivo tissue kinetics of Zol-Ca@bi-lipid NPs. Mice were i.v. injected with free Zol or Zol-Ca@bi-lipid NPs with an equivalent amount of Zol (2% of the Zol were labeled with AF647) and euthanized at 0.5, 2.5, 6 or 24 h after the injection. Fluorescent intensities in heart (**A**), lung (**B**) and pancreas (**C**) were measured. The results are expressed as the value after the subtraction of mean values from the PBS group: Data are mean  $\pm$  S.D. (n = 3). Student's t-test did not reveal any significant difference in the values between free Zol and Zol-Ca@bi-lipid NPs.