

Electronic Supplementary Information

A brand-new generation of fluorescent nano-neural tracers: biotinylated dextran amine conjugated carbonized polymer dots†

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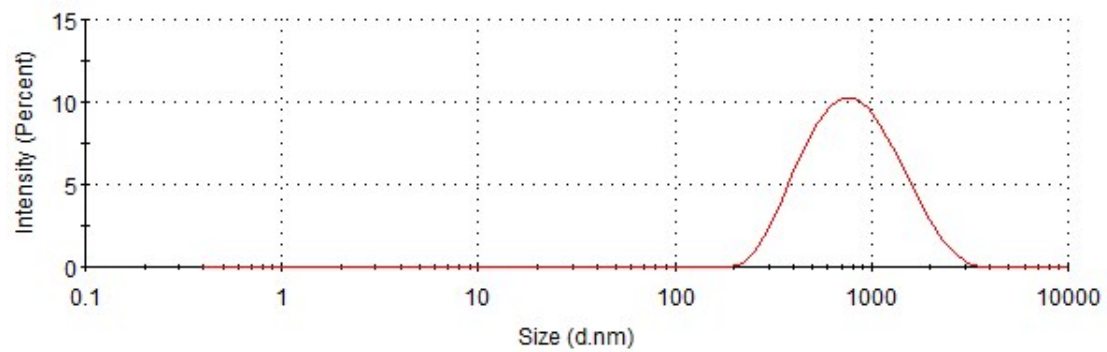


Figure S1. The DLS image of CPDs.

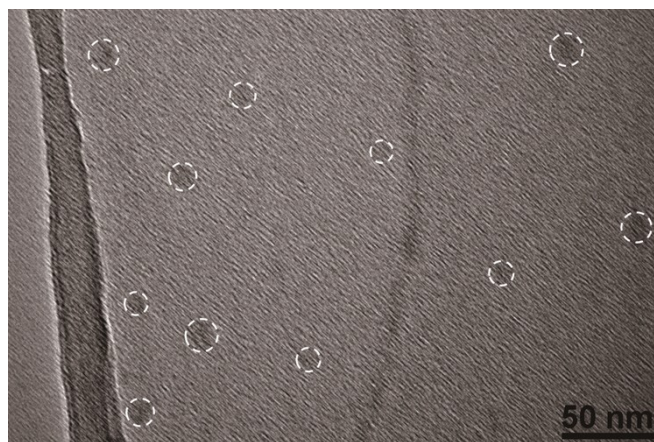


Figure S2. TEM image of BDA-CPDs.

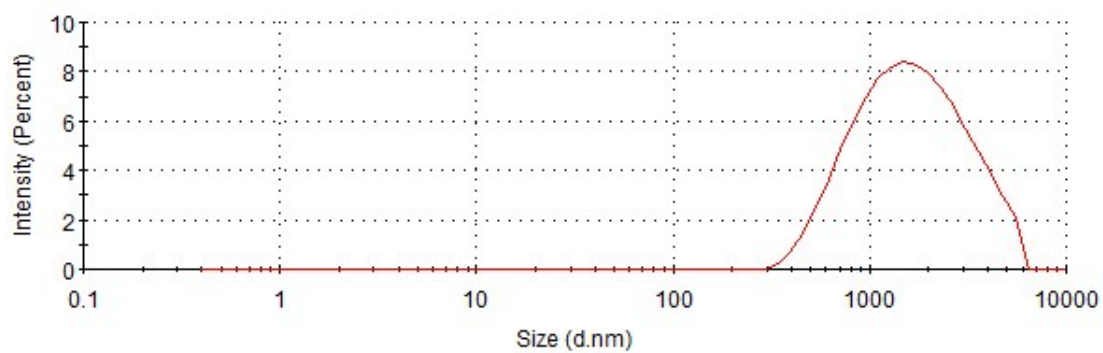


Figure S3. The DLS image of BDA-CPDs.

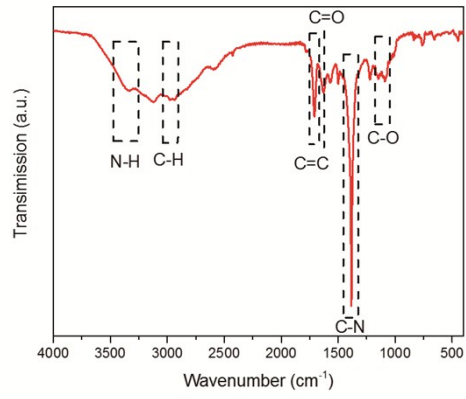


Figure S4. FTIR spectrum of BDA-CPDs.

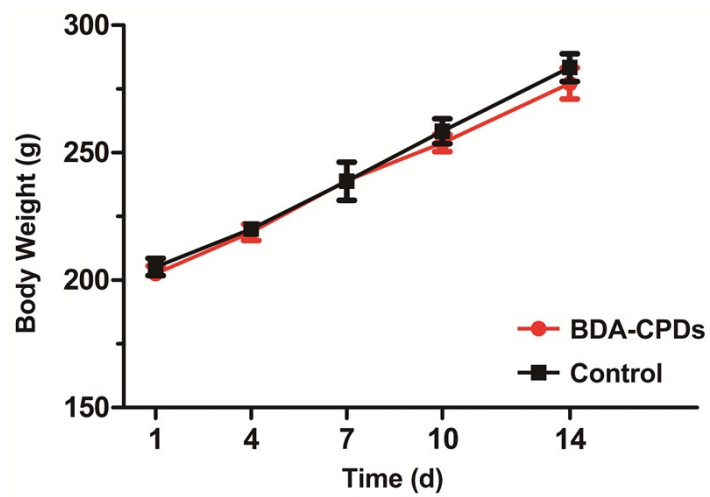


Figure S5. Body weight of BDA-CPDs-treated rats at 1, 4, 7, 10, and 14 days.

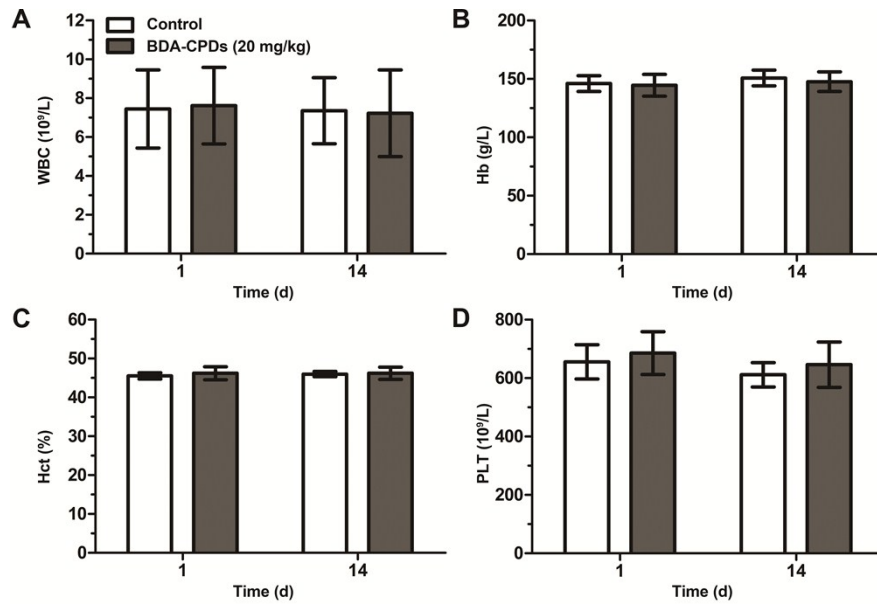


Figure S6. Hematology analysis of BDA-CPDs-treated rats at 1 and 14 days. (A) White blood cells (WBC), (B) hemoglobin (Hb), (C) hematocrit (Hct), and (D) platelets (PLT).

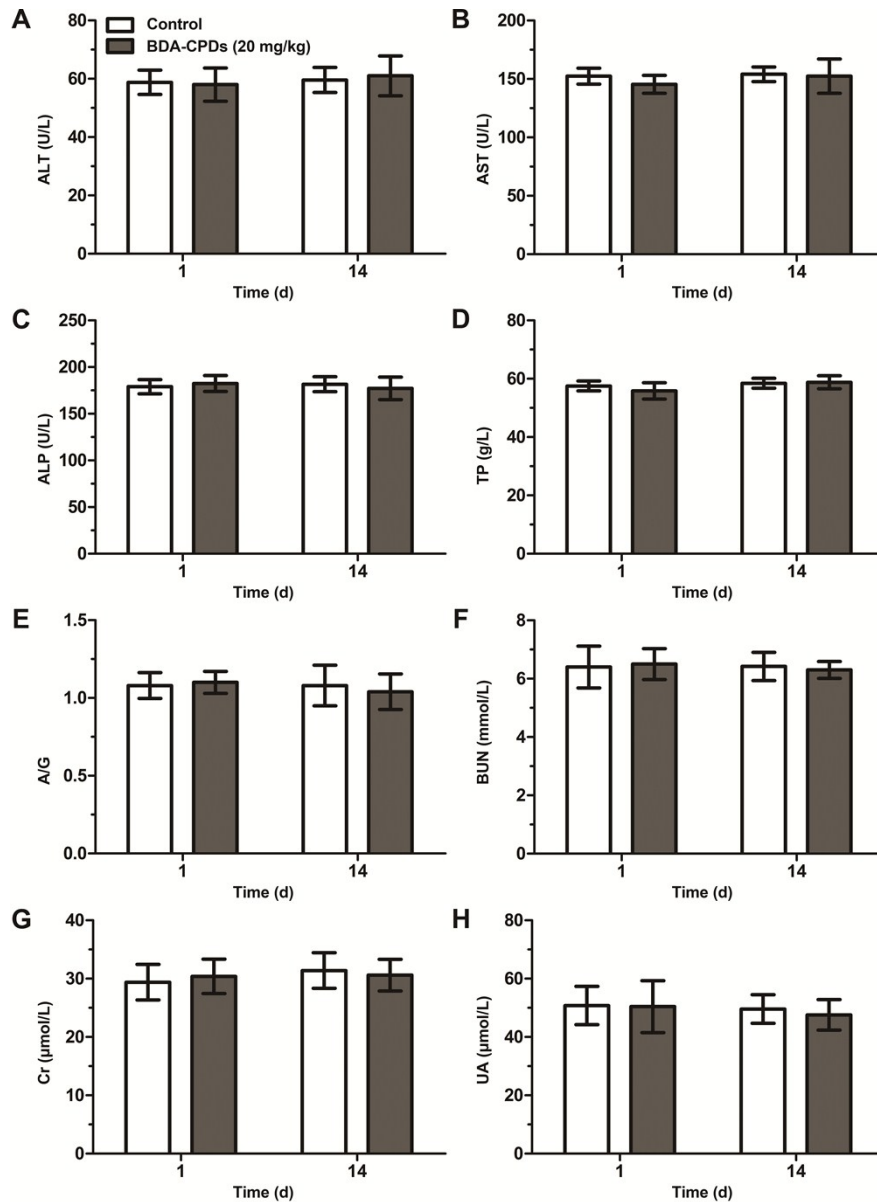


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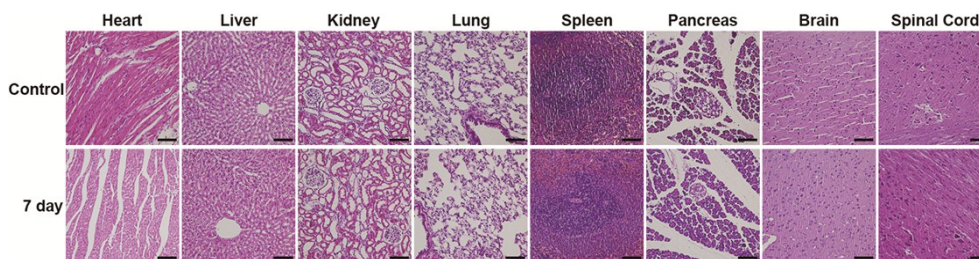


Figure S8. Histological evaluation of BDA-CPDs *in vivo* at the dose of 30 mg kg⁻¹. The major organs were collected from the control and BDA-CPDs-treated rats (30 mg kg⁻¹) at 7 days postinjection; neither histopathological abnormality nor lesion was observed in the images. The scale bar is 50 μm.

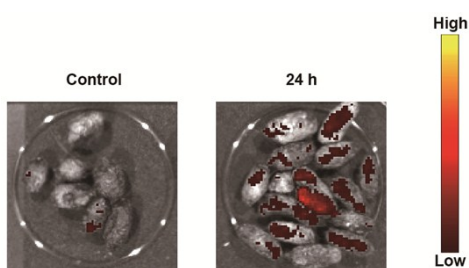


Figure S9. Fluorescent images of feces of the rats treated with BDA-CPDs (right) and that of the control rats (left), respectively.

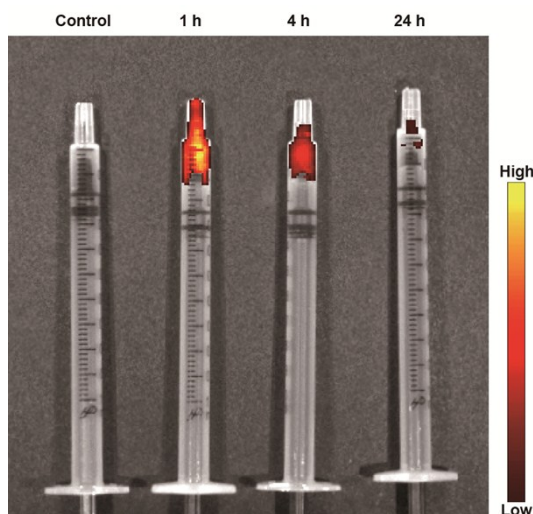


Figure S10. At 1 h, 4 h and 24 h postinjection, urine of the rats treated with BDA-CPDs and that of the control rats were collected with syringes, respectively.

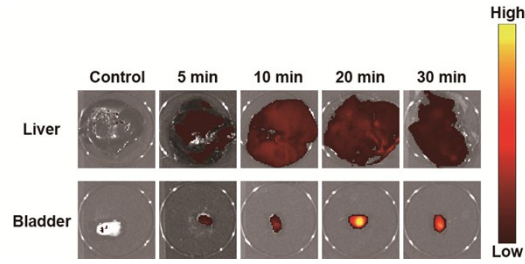


Figure S11. Excretion analysis of BDA-CPDs. *Ex vivo* images of liver and bladder of rats were acquired at 5 min, 10 min, 20 min, and 30 min after injection of BDA-CPDs; the rats injected with saline served as the control.

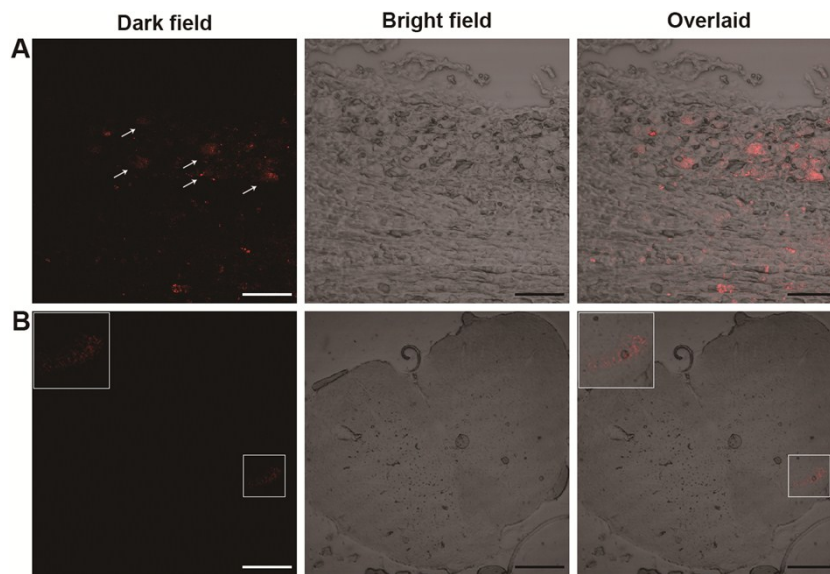


Figure S12. Anterograde tracing with AF594-Dextran in the peripheral nervous system. L5 DRG neurons were labelled with AF594-Dextran (A); transverse section showed the AF594-Dextran labelled primary afferents in the dorsal horn of the L5 spinal segment (B); (A and B) from left to right: dark field images, bright field images, and their overlaid images. Some representative neurons were indicated by white arrows. Scale bars are 100 μm in A and 500 μm in B. The representative areas are magnified optically in B.