## **Supporting Information**

## Non-invasive brain tumor imaging by using red emissive carbonized polymer dots across the blood-brain barrier

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**Figure S1.** Intracellular distribution of CPDs was observed by TEM in C6 cells. Plasma membrane (PM), cytoplasm (C), nuclear membrane (NM) and nucleus (N) of untreated C6 cells were observed (A). Cells were incubated with CPDs for 2 h (B and C). (B) The white line box showed that CPDs existed in an endocytic vesicle and were magnified in a high-resolution image (C). Some representative CPDs were indicated by black arrows.



Figure S2. CLSM images of HUVEC incubated with CPDs for different times (5, 30, and 60 min). The scale bar represents  $20 \,\mu$ m.



**Figure S3.** The real-time *in vivo* imaging of brain glioma after the injection of CPDs. The dotted circle indicated the brain glioma.



**Figure S4.** Distribution of CPDs in glioma, the cerebral cortex and hippocampus at 60 min after CPDs injection. Red represents CPDs and blue represents nuclei. The scale bar represents 100 μm.