Supporting Information

An Intrinsic Biotaxi Solution Based on Blood Cell Membrane Cloaking Enable Fullerenol Thrombolysis *in vivo*

Kui Chen^{a,b}, Yujiao Wang^a, Haojun Liang^a, Shibo Xia^a, Wei Liang^a, Jianglong Kong^a, Yuelan Liang^a, Xia Chen^a, Meiru Mao^a, Ziteng Chen^{a,b}, Xue Bai^a, Jiaxin Zhang^{a,b}, Jiacheng Li^{a,b}, Ya-nan Chang^a, Juan Li^a, and Gengmei Xing^a*

^aCAS Key Laboratory for Biomedical Effects of Nanomaterial & Nanosafety,

Institute of High Energy Physics, Chinese Academy of Sciences, 19B YuquanLu,

Shijingshan District, Beijing 100049, China.

^b University of Chinese Academy of Sciences, 19A YuquanLu, Shijingshan

District, Beijing 100049, China.

*Corresponding author.

Gengmei Xing, xinggm@ihep.ac.cn

Figure S1. The Zeta potential of the three Fols.



Figure S2. The fibrin diameter with different treatments was calculated on SEM images.



Figure S3. Correlation between hydroxylation degree of Fols and fibrinolysis efficacy.



Figure S4. Fol drug-loading rate and entrapment efficiency of cloaking nanoparticles.

	Drug-loading rate(DL%)	Entrapment efficiency (EE%)
RFNP	26.40 ± 1.20	4.06 ± 0.36
PFNP	26.80 ± 0.80	3.99 ± 0.18

Figure S5. Representative images of RFNP (left) and PFNP (right) examined with TEM. Scale bar, 100nm.



Figure S6. The fluorescence quench with Fol loading.



Figure S7. Fol release profiles of RFNP and PFNP in PBS.



Figure S8. The fibrinolysis effect with UK, Fol 3, RFNP, and PFNP treatment for 1 h, and their realtive fibrinolysis rate.





Figure S9. Cytotoxicity of RFNP on HUVEC cells and HepG-2 cells for 48 h and 72 h.



Figure S10. Cytotoxicity of PFNP on HUVEC cells and HepG-2 cells for 48 h and 72 h.





Figure S11. Live-Dead staining of HepG-2 cells with indicated treatments. Scale bar, 200 µm.

Figure S12. Effect of apoptosis on HepG-2 with indicated treatments for 24 h. Cells were stained with Annexin V-FITC and PI.



Annexin V-FITC

Figure S13. Hemolysis test on PBS, UK, platelet ghost and RBC ghost.







Figure S15. The Mean fluorescence intensity of the binding ability of NPs to boood clot *ex vivo*.



Figure S16. Representative images of H&E staining of carotid artery with MSN and FNP treatments, scale bar, 50 µm.



Figure S17. D-dimer elisa kit was used to detect the content of D-dimer in serum with PBS, RFNP, and PFNP injection.



Figure S18. Representative H&E staining images of heart, liver, spleen, lung, kidney with various treatments, scale bar, $50 \mu m$.



Figure S19. ALT level and AST level with different treatments suggested the liver function was not changed by cloaking nanoparticles.

