

Supporting Information

Targeted delivery of liver X receptor agonist to inhibit neointimal hyperplasia by differentially regulating cell behaviors

Jian Li^{a#}, Fan Jia^{b#}, Zhebin Chen^a, Jun Lin^c, Qingbo Lv^a, Yue Huang^b, Qiao Jin^b, Youxiang Wang^b, Guosheng Fu^{a} and Jian Ji^{a,b*}*

^aKey Laboratory of Cardiovascular Intervention and Regenerative Medicine of Zhejiang Province, Department of Cardiology, Sir Run Run Shaw Hospital, Zhejiang University, Hangzhou, 310016, China

^bMOE Key Laboratory of Macromolecule Synthesis and Functionalization of Ministry of Education, Department of Polymer Science and Engineering, Zhejiang University, Hangzhou, 310027, China

^cDepartment of Cardiovascular Surgery, Sun Yat-sen Memorial Hospital, Sun Yat-sen University, Guangzhou, 510120, China

These authors contributed equally to this work.

* Corresponding to:

fugs@zju.edu.cn (G.-S., Fu)

jjjian@zju.edu.cn (J., Ji)

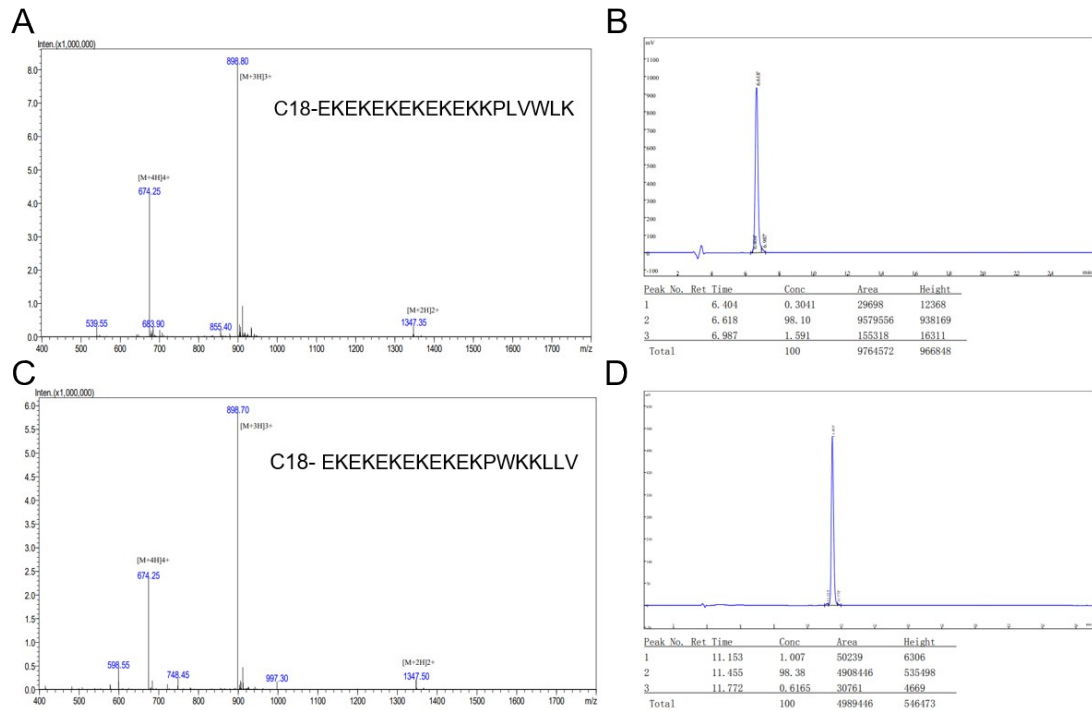


Figure S1. The mass spectrum (A) and HPLC (B) results of targeting peptide, C18-EKEKEKEKEKEKKPLVWLK. The mass spectrum (C) and HPLC (D) results of non-targeting peptide, C18-EKEKEKEKEKEKPWKLLV.

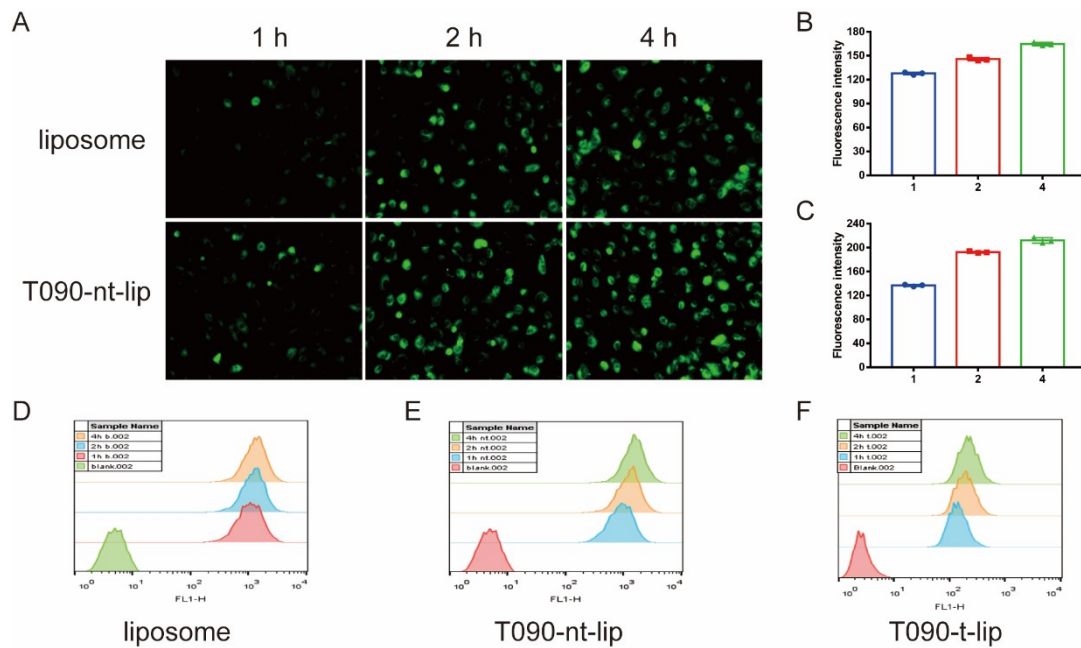


Figure S2. The HUVECs uptake of liposome and T0901317-nt-lip labeled by coumarin-6 is examined by fluorescent images (A, scale bars, 100 μ m) and flow cytometry (B-F) after different incubation times. Data in (B and C) are presented as mean \pm SD (n=3).

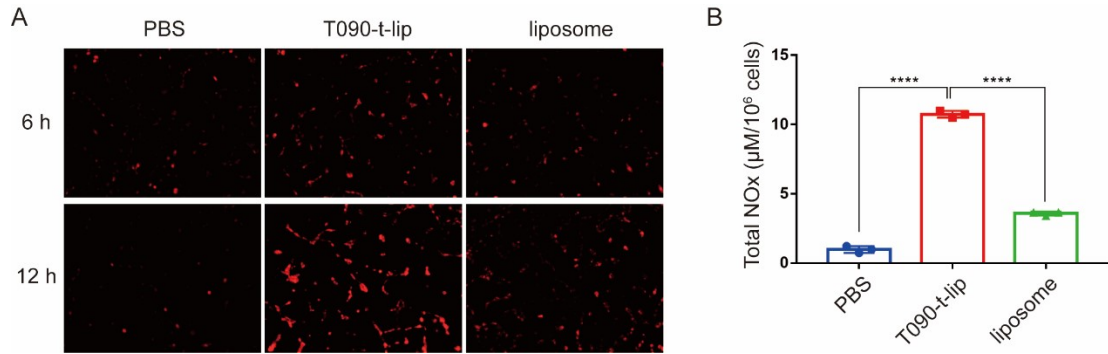


Figure S3. (A) Fluorescence images of NO stained by red NO probe after indicated time incubation. Scale bars, 100μm. (B) Quantitative analysis of total NOx content in the cytoplasm by the Griess assay. Data in (B) are presented as mean ± SD (n=3). *****p* < 0.0001.

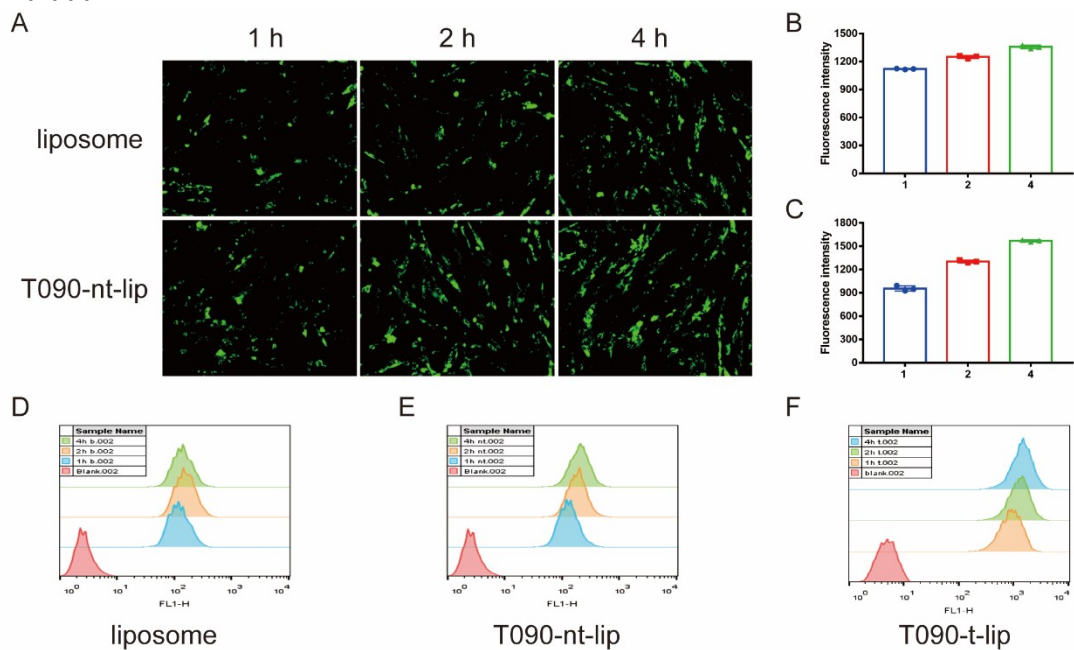


Figure S4. The HASMCs uptake of liposome and T0901317-nt-lip labeled by coumarin-6 is examined by fluorescent images (A, scale bars, 100μm) and flow cytometry (B-F) after different incubation times. Data in (B and C) are presented as mean ± SD (n=3).

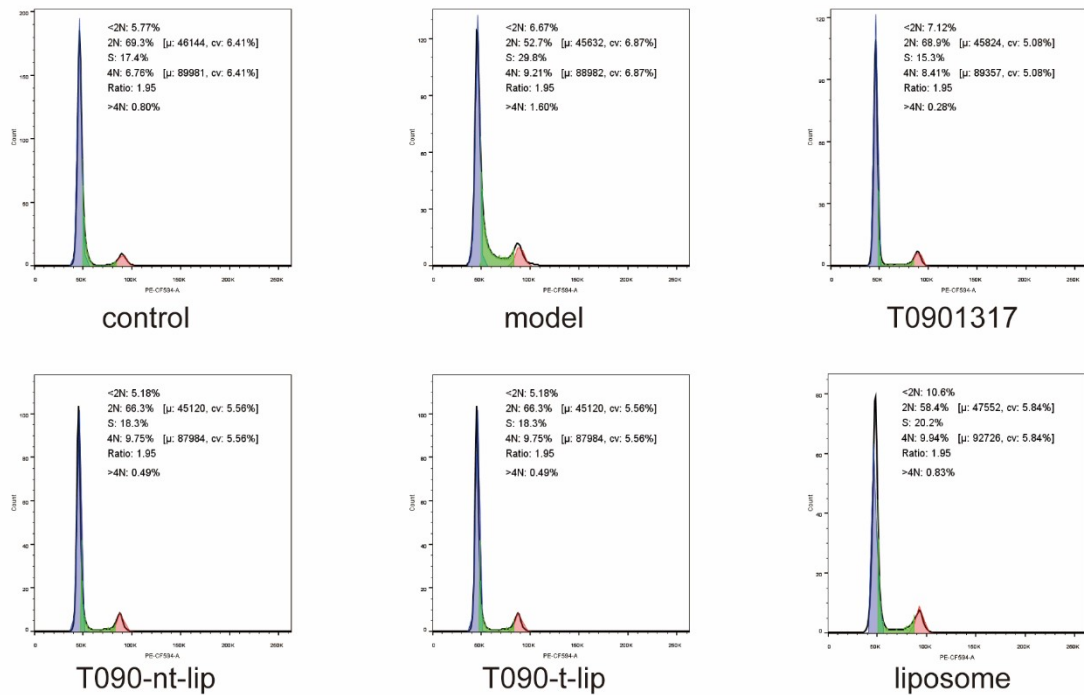


Figure S5. The flow cytometric analysis results about HASMCs cell cycle process after different treatments.

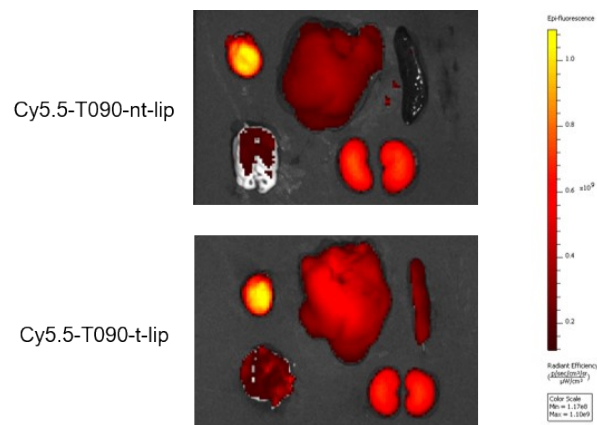


Figure S6. Fluorescent images demonstrated the biodistribution of different liposomes labeled by Cy5.5 in the major organs.

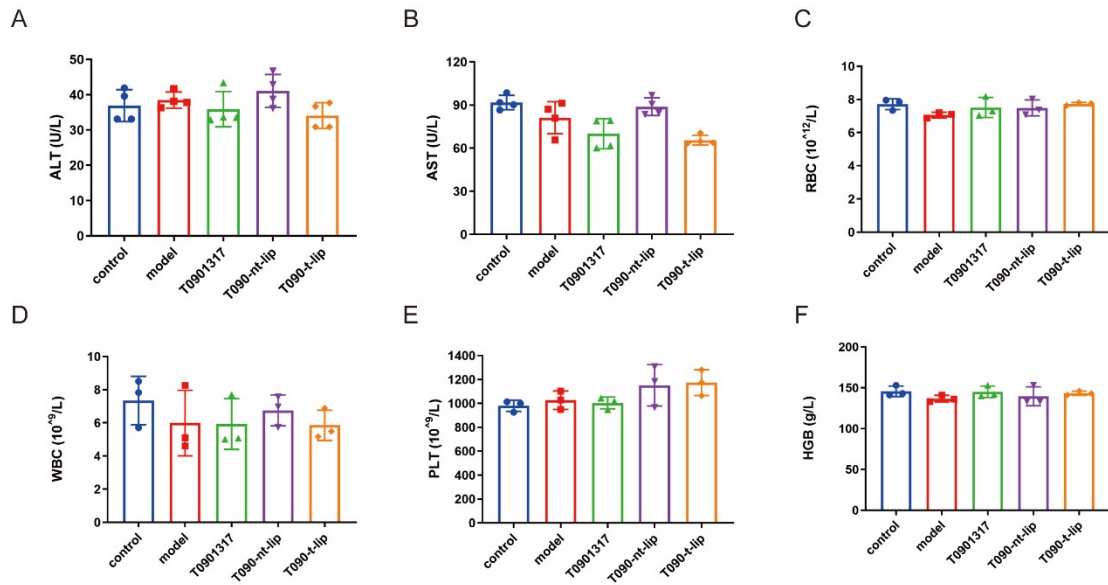


Figure S7. Biosafety evaluation of different treatments. (A-B) Biochemical markers of hepatic functions. (C-F) Typical hematological parameters including RBC (C), WBC (D), PLT (E), and HGB (F).

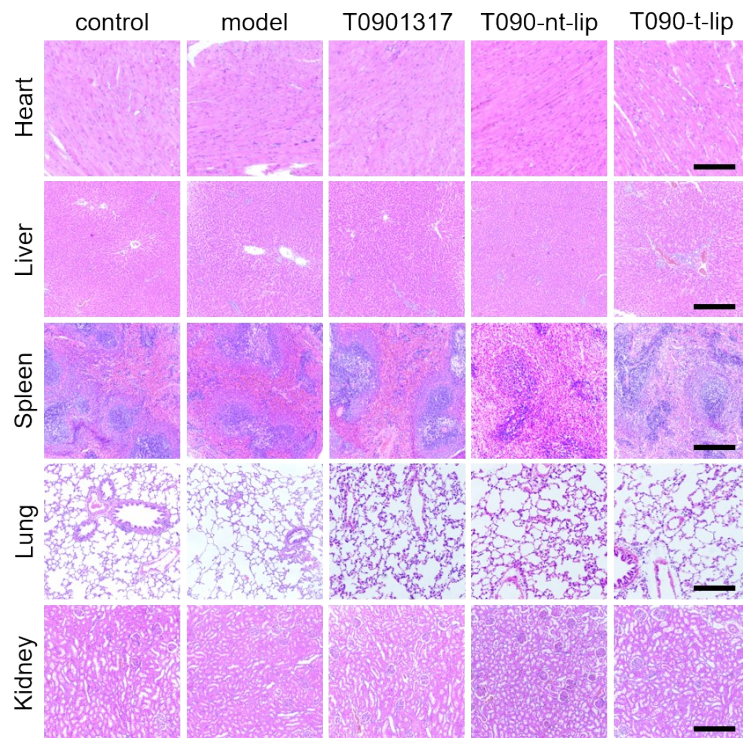


Figure S8. Biosafety evaluation of different treatments. H&E-stained analysis of main organs after different treatments for 14 days. Scale bars, 100 μm, except the heart slices, scale bars, 50 μm.