Supporting Information for

Targeted delivery of atorvastatin via asialoglycoprotein receptor (ASGPR)

Youxi Zhang^{a,b#}, Xinfu Zhang^{a,c#}, Chunxi Zeng^a, Bin Li^a, Chengxiang Zhang^a, Wenqing Li^a, Xucheng Hou^a and Yizhou Dong^{a,d,e,f,g,h} *.

*E-mail: dong.525@osu.edu.

a: Division of Pharmaceutics & Pharmaceutical Chemistry, College of Pharmacy, *d*:Department of Biomedical Engineering, *e*:The Center for Clinical and Translational Science, *f*: The Comprehensive Cancer Center, *g*: Dorothy M. Davis Heart & Lung Research Institute, and *h*: Department of Radiation Oncology, The Ohio State University, Columbus, Ohio 43210, United States.

b: Department of Pharmacy, The Fourth Affiliated Hospital of China Medical University, No. 4, Chongshan Eastern Road, Shenyang 110032, China.

c: State Key Laboratory of Fine Chemicals, Dalian University of Technology, Dalian 116024, China.



Figure S1. Mass spectra of hydrolysis products of G2-AT in PBS (pH 7.40) with esterase. (A) Before hydrolysis (B) 24h after hydrolysis.



Figure S2. Mass spectra of hydrolysis products of G2-K-AT in PBS. (A) Before hydrolysis (B) 24h after hydrolysis in PBS (pH 4.50) (C) following 24h in PBS (pH 7.40) with esterase.



Figure S3. Mass spectra of hydrolysis products of G2-K-AT in PBS (pH 7.40) without esterase for 24 h. (A) Before hydrolysis (B) 24h after hydrolysis



Figure S4. Inhibition of HMG-CoA reductase activity by atorvastatin and the hydrolysis product of G2-K-AT (Firstly, G2-K-AT was incubated in PBS (pH 4.50) for 72h, then mixture was incubated in PBS (pH 7.40, containing 1.0 mg/mL esterase) continuously for 24h.). (Triplicate; ***, P < 0.001; t test, double-tailed.)



Figure S5. ¹H NMR spectra of G2-AT.



Figure S6. Mass spectra of G2-AT.



Figure S7. ¹H NMR spectra of G2-K-AT.



Figure S8. Mass spectra of G2-K-AT.