

Supporting Information

A Novel Lanreotide-Encoded Micelle System Targets Paclitaxel to the Tumors with Overexpression of Somatostatin Receptors

Nan Zheng¹, Wenbing Dai¹, Wenwen Du¹, Haoran Zhang¹, Liandi Lei¹, Hua Zhang¹, Xueqing Wang¹, Jiancheng Wang¹, Xuan Zhang¹, Jinming Gao² and Qiang Zhang^{1*}

¹ State Key Laboratory of Natural and Biomimetic Drugs, School of Pharmaceutical Sciences, Peking University, Beijing, People's Republic of China

² Harold C. Simmons Comprehensive Cancer Center, Department of Pharmacology, UT Southwestern Medical Center, Dallas, TX 75390, USA

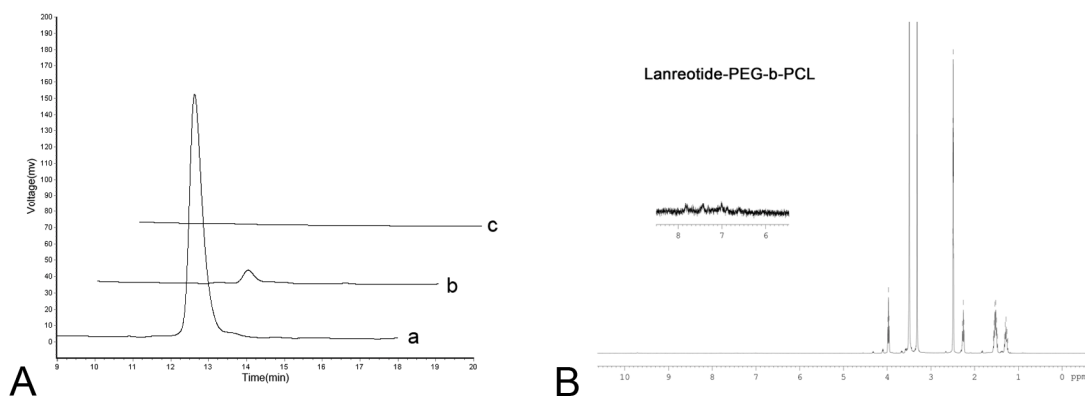


Figure S1. Conjugation of lanreotide to NHS-PEG-b-PCL. (A) RP-HPLC assessment of unconjugated lanreotide: (a) free lanreotide in reaction mixture at the initial time, (b) NHS-PEG-b-PCL and lanreotide in a molar ratio of 1.5:1 in the reaction mixture after reaction for 48h at room temperature, and (c) lyophilized Lanreotide-PEG-b-PCL after reaction. (B) ¹H-NMR spectrum of Lanreotide-PEG-b-PCL. NMR showed a multiplet at δ 7.1-7.9 ppm from phenyl protons, which is characteristic of lanreotide, appeared in the reaction product.

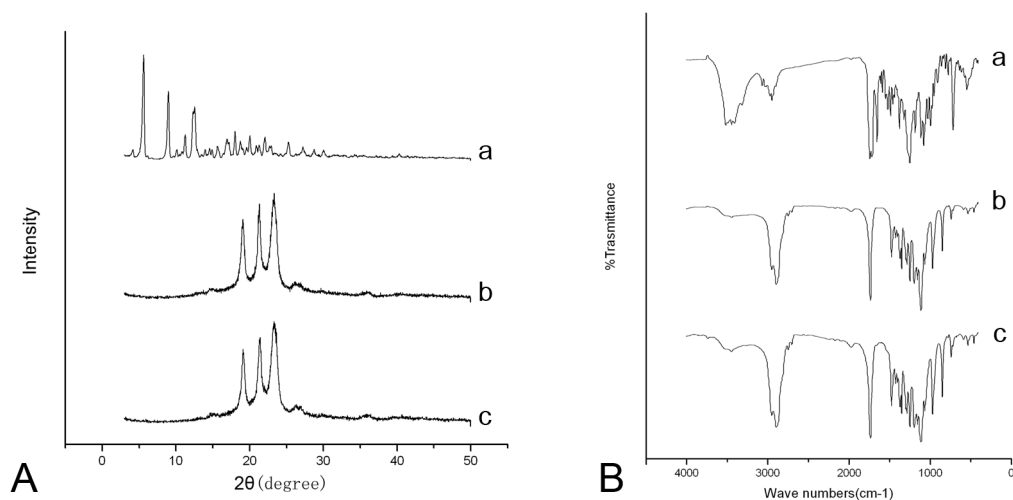


Figure S2. (A) XRD curves of (a) PTX, (b) lyophilized blank PEG-b-PCL micelles, (c) lyophilized PTX-loaded PEG-b-PCL micelles; (B) FTIR spectra of (a) PTX, (b) lyophilized blank PEG-b-PCL micelles, (c) lyophilized PTX-loaded PEG-b-PCL micelles.

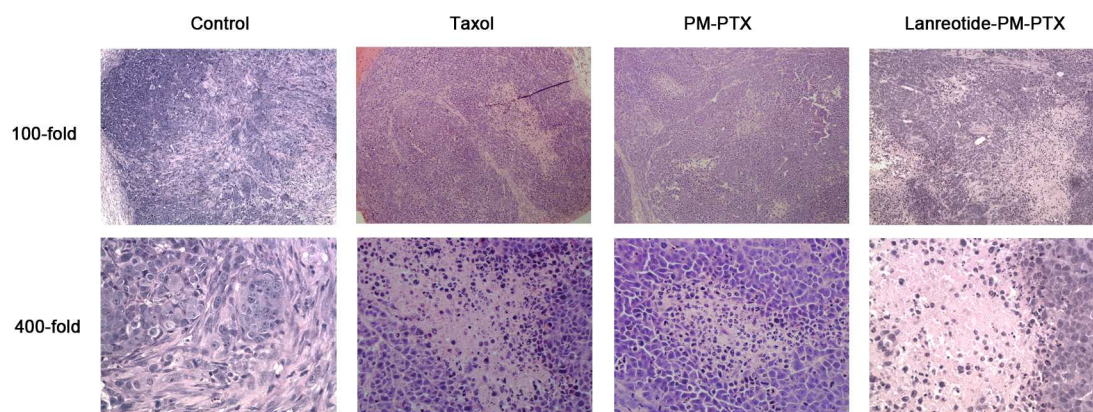


Figure S3. Histological (H&E) analysis of tumor samples from different treatment groups. 17 days after H446 cell inoculation, animals were sacrificed, and tumors were removed, fixed, paraffin embedded, sectioned at 5 μ m, and stained with H&E. Magnification, $\times 100$ or $\times 400$.