Overcoming the blood-brain barrier for glioma-targeted therapy based on an interleukin-6 receptor-mediated micelle system

Wei Shi,[b] Xuexue Cui[a], Jinlong Shi,[b] Jian Chen[b] and Yi Wang*[a,c]

[a] Center for Advanced Low-dimension Materials, Donghua University, Shanghai 201620, China

[b] Department of Neurosurgery, Affiliated Hospital of Nantong University, Nantong 226001, China

[c] Center of Analysis and Measurement, Fudan University, Shanghai 200433, China.

Correspondence:

Prof. Yi Wang,

Center for Advanced Low-dimension Materials, Donghua University, Shanghai 201620, China.
Email: ywang@dhu.edu.cn

Drug release

The *in vitro* DOX release was studied in PBS (pH 7.4). DOX-loaded micelles were dialyzed (MWCO = 5000) for 24 h at 37 ℃. During the dialysis process, 10 ml release medium was removed at determined time points and equal volume of fresh PBS (prewarmed at 37 ℃) was supplemented immediately. The amount of DOX was detected using a fluorescence spectrophotometer to calculate the cumulative DOX release from different micelles. All experiments were repeated four times.

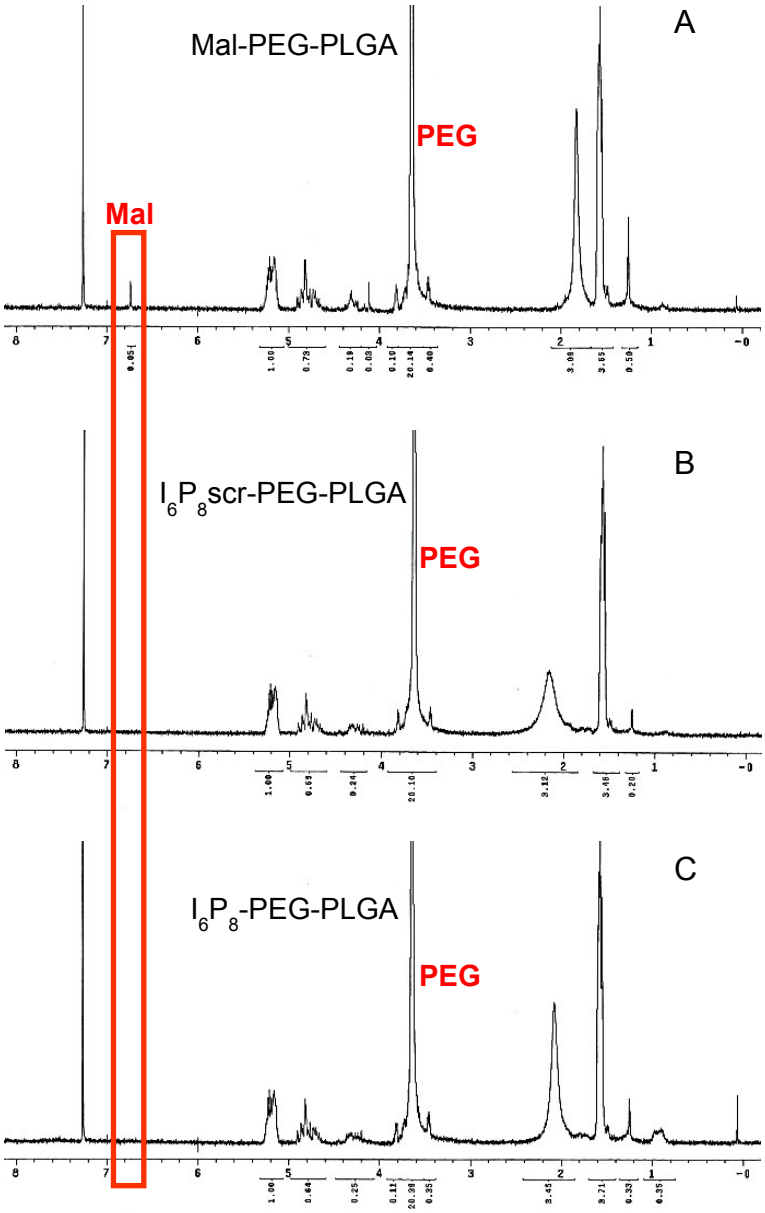

Fig. S1. NMR spectra of different polymers.

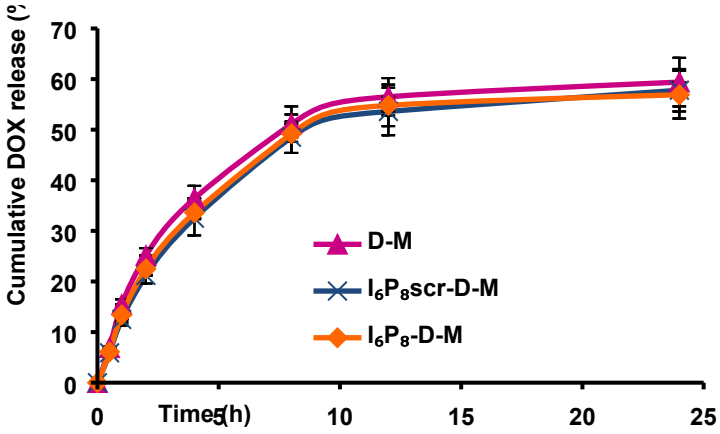

Fig. S2. The cumulative DOX release from different micelles for 24 h. Data were represented as Mean ± S.D. (n = 4).