SUPPORTING INFORMATION

Long Circulating Anionic Liposome for Hepatic Targeted Delivery of Cisplatin

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Characterization of GA derivatives

Fig. 1 shows the FTIR spectra of GA, AGA-PEG and AGA-PEG-ST. In the spectra of GA, the absorption peaks at 3450 cm-1, 2947 cm-1 and 1650 cm-1 are associated with hydroxyl bonds and alkene bonds of GA, respectively. The broad peak appearing between 3400 and 2500 cm-1 and the peak at 1720 cm-1 are respectively contributed to O-H bonds and carbonyl bonds in carboxylic acid. In the spectra of AGA-PEG and AGA-PEG-ST, the absorption peaks appearing at 1113 cm-1 are contributed to C-O-C in PEG, the peaks at 1735 cm-1 indicates generation of ester bond.

The 1H NMR spectra of MPEG-STA is shown in Fig. 2. In the spectra, δ in ppm 3.243 (t, 2H, CH2), 0.896 (s, 3H, CH3) and 1.269 (s, 30H, 15CH2) are contributed to STA segment b, c, d respectively. δ in ppm 3.441 (m, 2H, CH2), 3.441-3.762 (m, PEG), 1.832 (s, 3H, OCH3) belong to MPEG. The signals at δ (ppm) = 4.239 (t, 2H,CH2, a) suggested the formation of ester bond between MPEG and STA.

The ^{1}H NMR spectra of GA derivatives are shown in Fig. 3. δ in ppm 5.710 (s, 1H, C=CH), 3.243 (t, 1H, CH), 2.350 (s, 2H,CH_2), 2.072 (t, 1H, CH), 1.832 (t, 1H,CH) belong respectively to GA segment **f**, **a**, **b**, **e, c**, **d**. δ in ppm 3.441-3.765 (m, PEG). δ in ppm 1.253 (s, 30H, 15CH_2) belong to ST. The signals at 4.209-4.240 (t, 2H, $COCH_2$) suggested the formation of ester bond. To sum up, AGA-PEG-ST was successfully synthesized.

All these results indicated that the co-polymers were successfully fabricated.

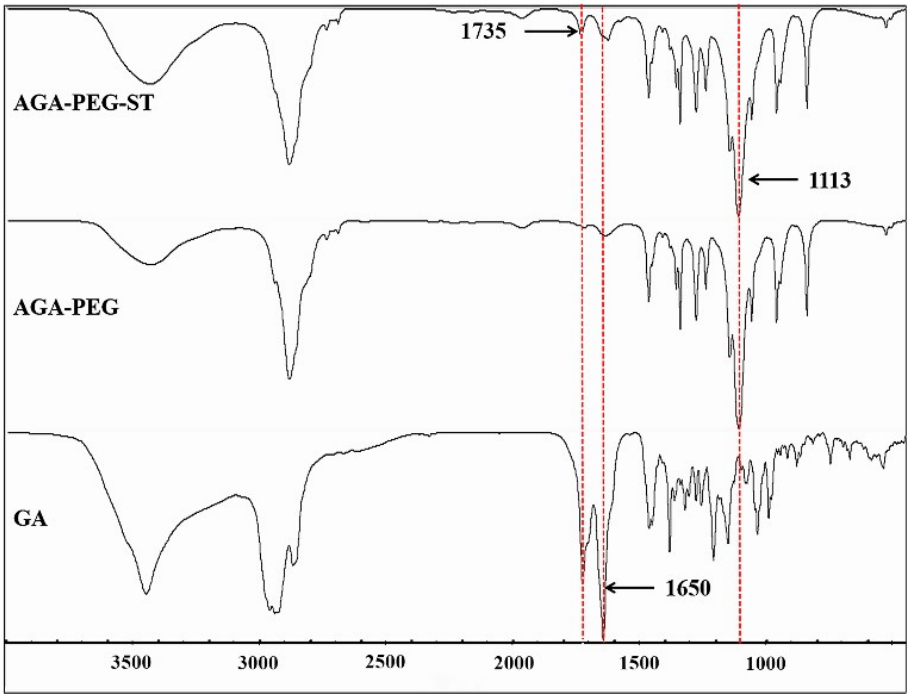

Fig. 1 FTIR spectra. (A) GA; (B) AGA-PEG; (C) AGA-PEG-ST.

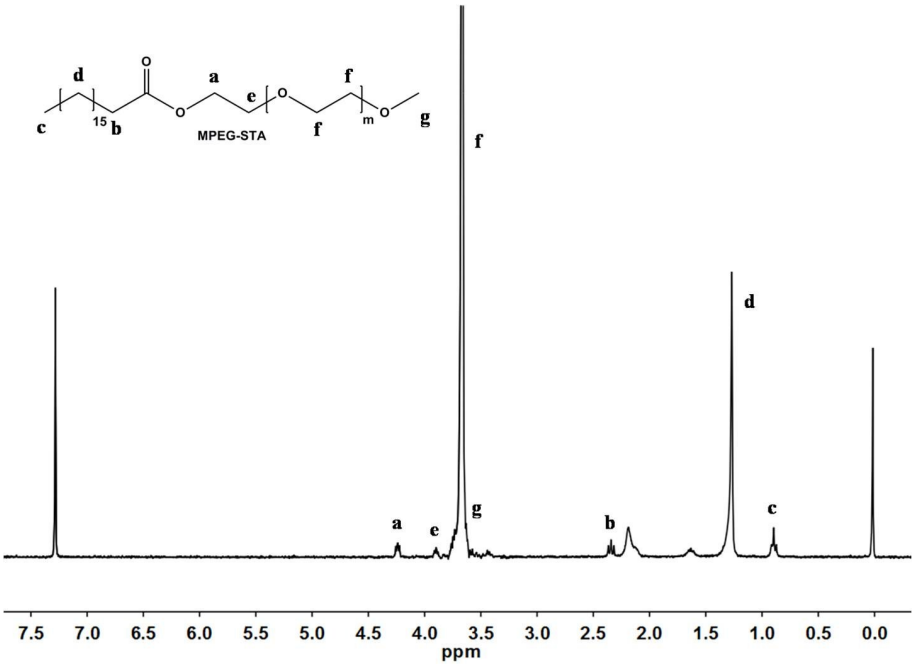

Fig. 2 ^{1}H NMR spectra of MPEG-STA.

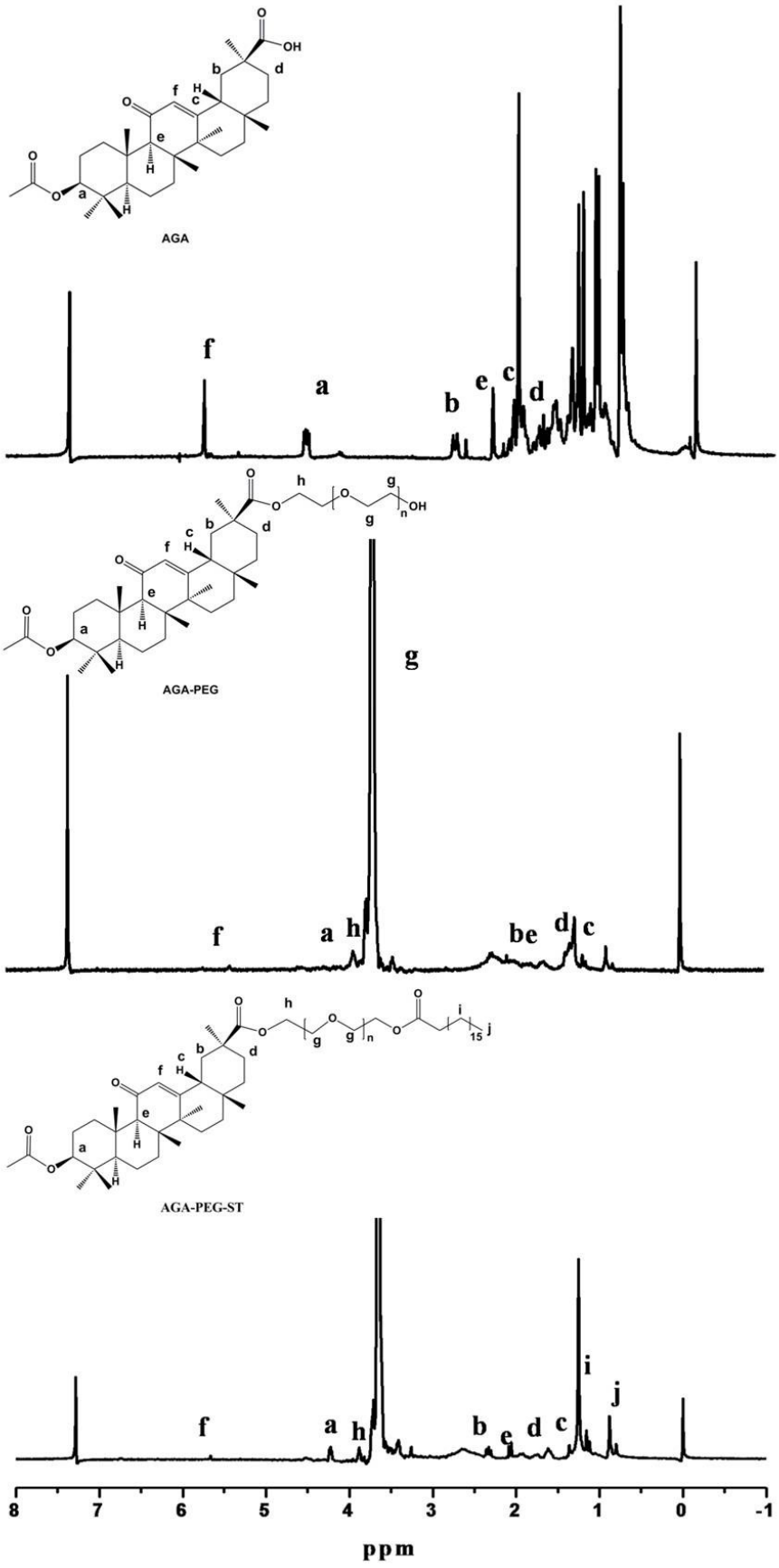

Fig. 3 ^{1}H NMR spectra. GA , AGA-PEG and AGA-PEG-ST in $CDCl_3$.