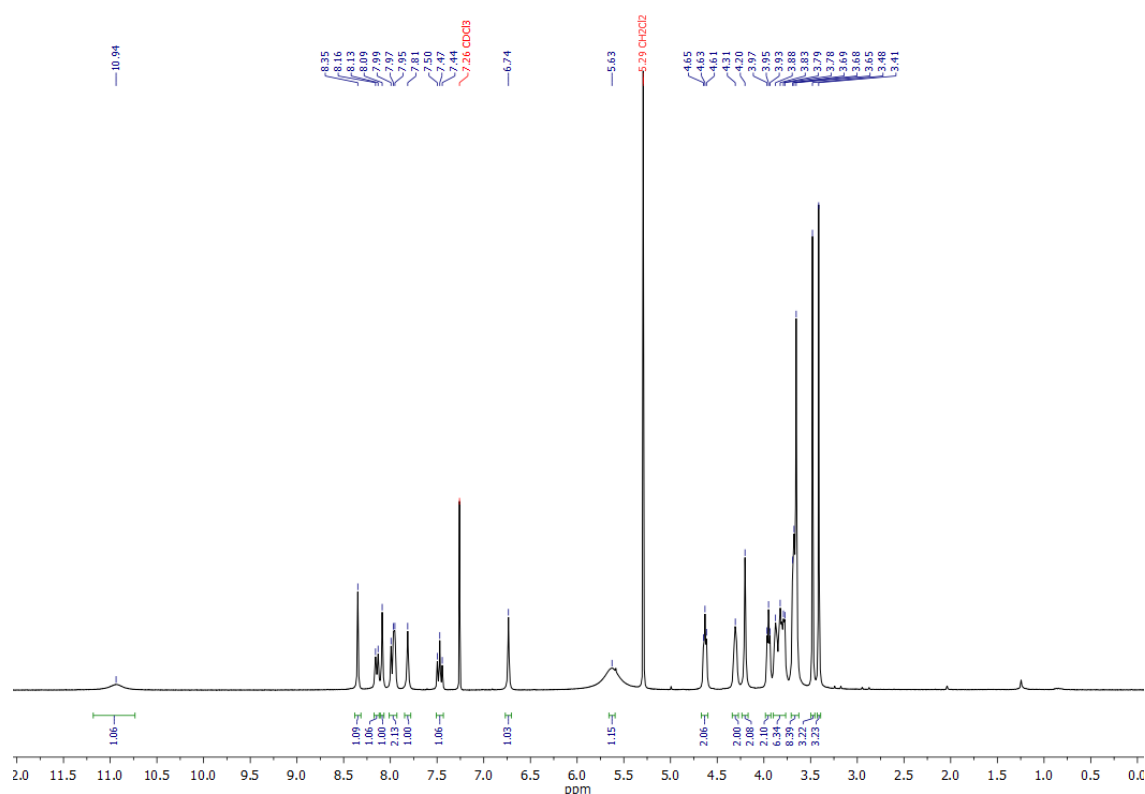


Supplementary information

Carrier-free nano-assembly of curcumin-erlotinib conjugate for cancer targeted therapy

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**Figure S1.** ^1H NMR spectrum of ELT-PEG.**ELT-PEG ($\text{C}_{30}\text{H}_{38}\text{N}_6\text{O}_9$)**

^1H NMR (300 MHz, CDCl_3) δ 10.94 (s, 1H), 8.35 (s, 1H), 8.15 (d, $J = 8.3$, 1H), 8.09 (s, 1H), 8.01-7.93 (m, 2H), 7.81 (s, 1H), 7.47 (t, $J = 7.9$, 1H), 6.74 (s, 1H), 5.63 (s, 1H), 4.63 (t, $J = 4.8$, 2H), 4.31 (s, 2H), 4.20 (s, 2H), 3.95 (t, $J = 4.8$, 2H), 3.90-3.77 (m, 6H), 3.72-3.60 (m, 8H), 3.48 (s, 3H), 3.41 (s, 3H).

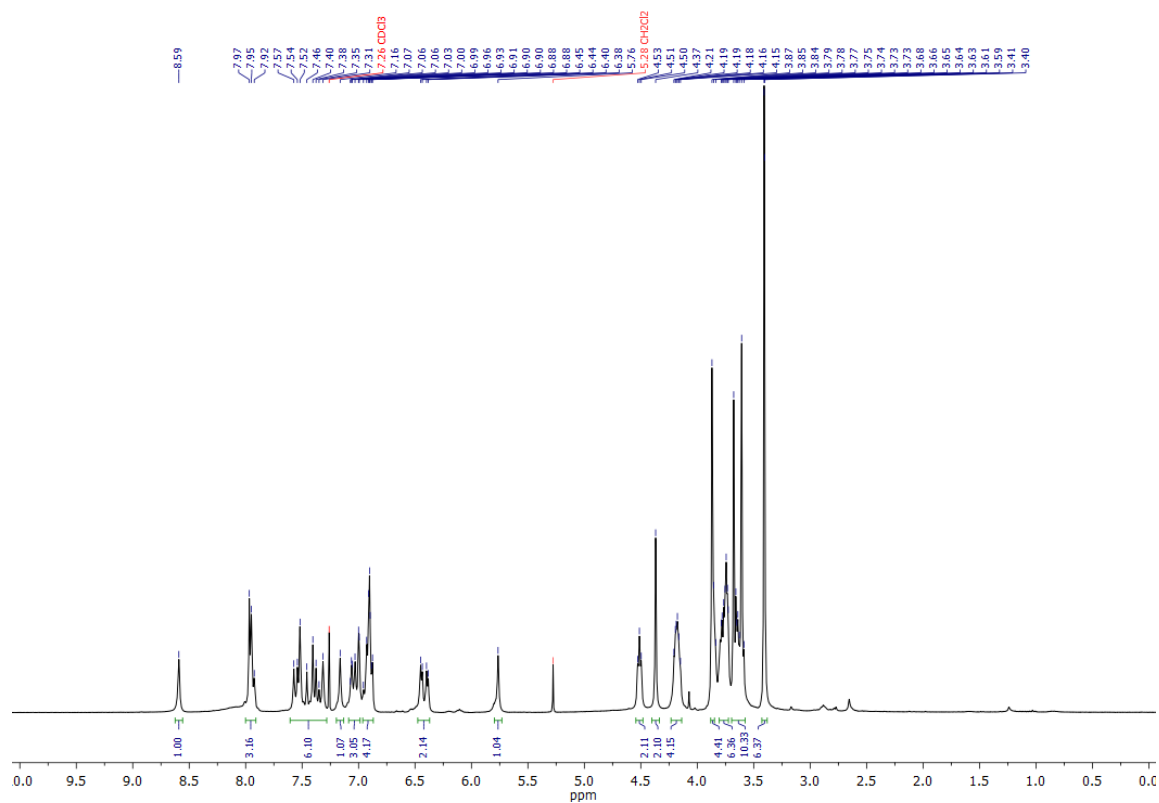


Figure S2. ^1H NMR spectrum of EPC.

EPC ($\text{C}_{51}\text{H}_{56}\text{N}_6\text{O}_{14}$)

^1H NMR (300 MHz, CDCl_3) δ 8.59 (s, 1H), 8.01-7.88 (m, 3H), 7.61-7.28 (m, 6H), 7.16 (s, 1H), 7.09-6.99 (m, 3H), 6.97-6.85 (m, 4H), 6.42 (dd, $J = 15.7, 4.7$, 2H), 4.51 (t, $J = 4.8$, 2H), 4.37 (s, 2H), 4.23-4.14 (m, 4H), 3.91-3.82 (m, 4H), 3.80-3.72 (m, 6H), 3.70-3.58 (m, 10H), 3.41 (d, $J = 1.4$, 6H).

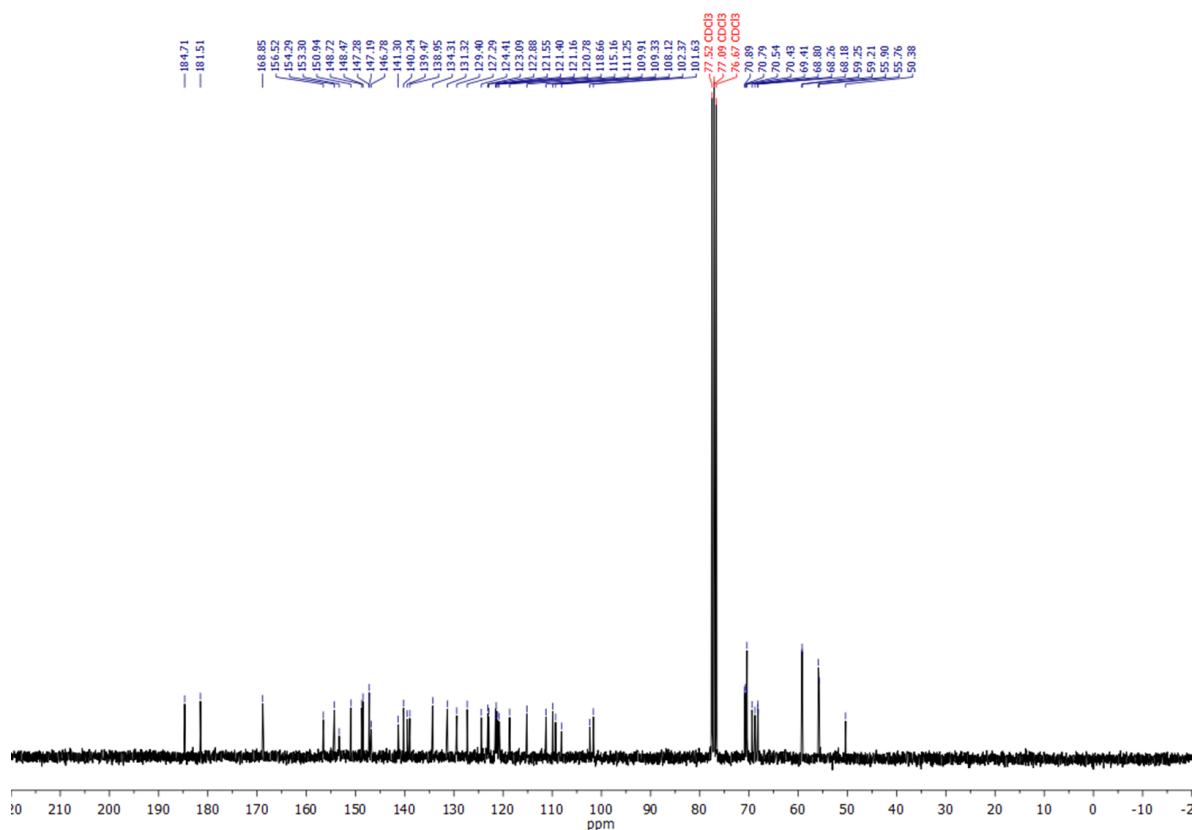


Figure S3. ^{13}C NMR spectrum of EPC.

EPC ($\text{C}_{51}\text{H}_{56}\text{N}_6\text{O}_{14}$)

^{13}C NMR (75 MHz) δ 184.71, 181.51, 168.85, 156.52, 154.29, 153.30, 150.94, 148.72, 148.47, 147.28, 147.19, 146.78, 141.30, 140.24, 139.47, 138.95, 134.31, 131.32, 129.40, 127.29, 124.41, 123.09, 122.88, 121.55, 121.40, 121.16, 120.78, 118.66, 115.16, 111.25, 109.91, 109.33, 108.12, 102.37, 101.63, 70.89, 70.79, 70.54, 70.43, 69.41, 68.80, 68.26, 68.18, 59.25, 59.21, 55.90, 55.76, 50.38.

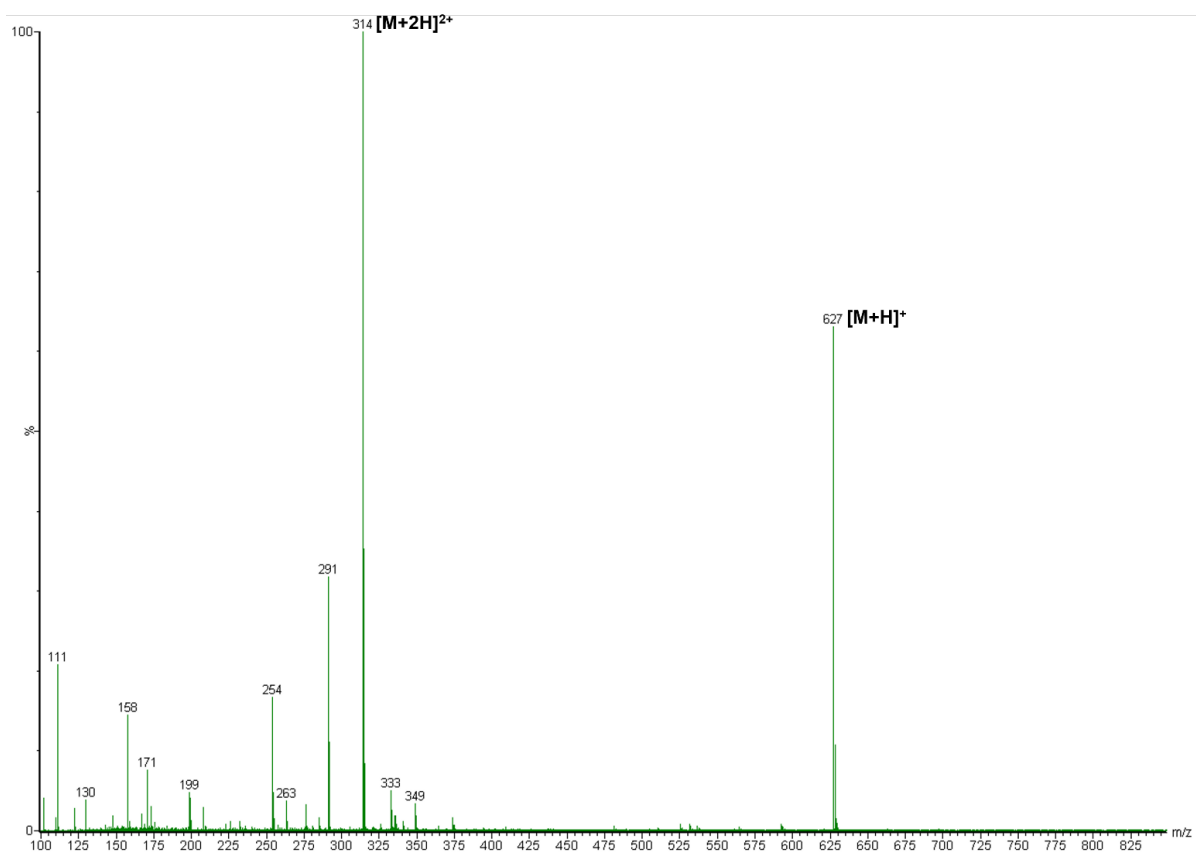


Figure S4. MS spectrum of ELT-PEG. HRMS: calculated $[M+H]^+$ for $C_{30}H_{38}N_6O_9$: 627.2773, found: 627.2774.

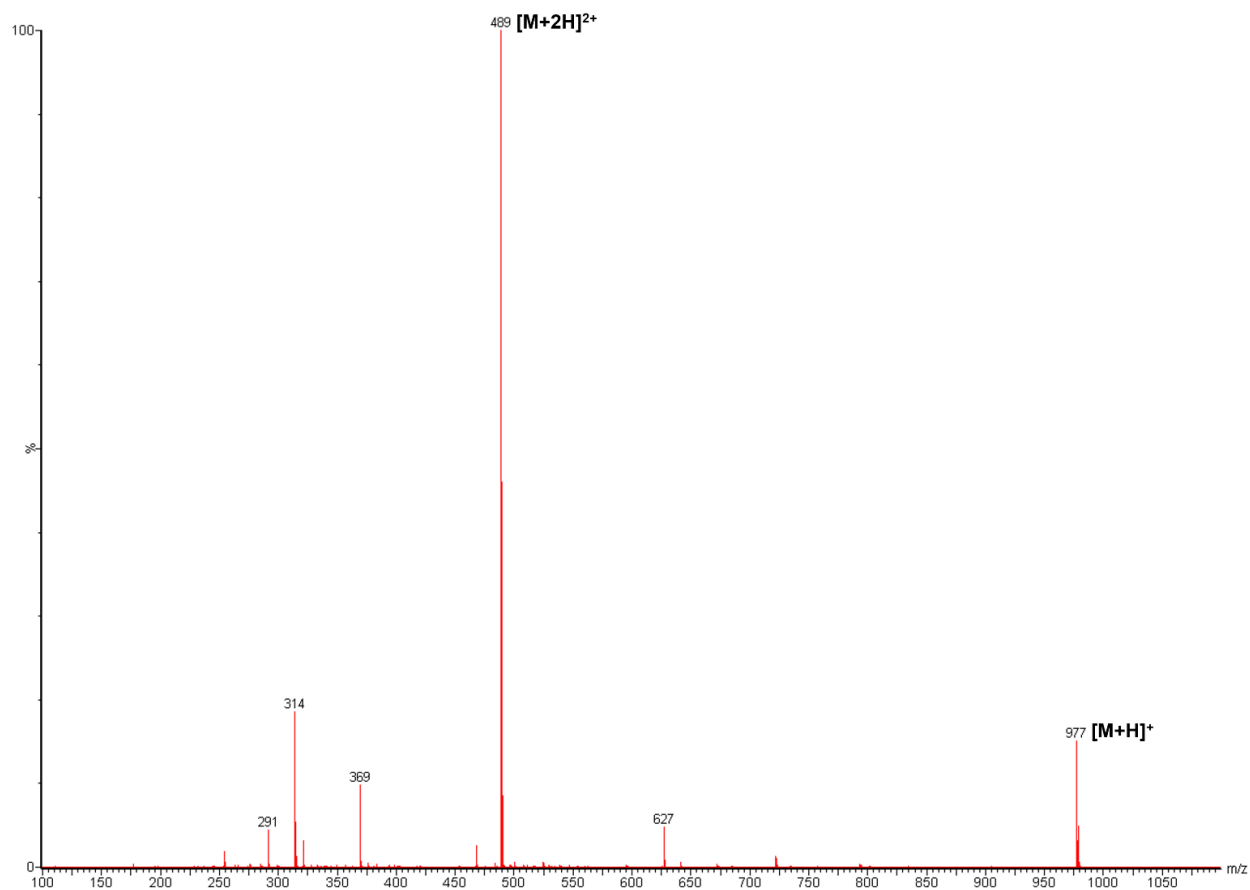


Figure S5. MS spectrum of EPC. HRMS: calculated $[M+H]^+$ for $C_{51}H_{56}N_6O_{14}$: 977.3927, found: 977.3899.

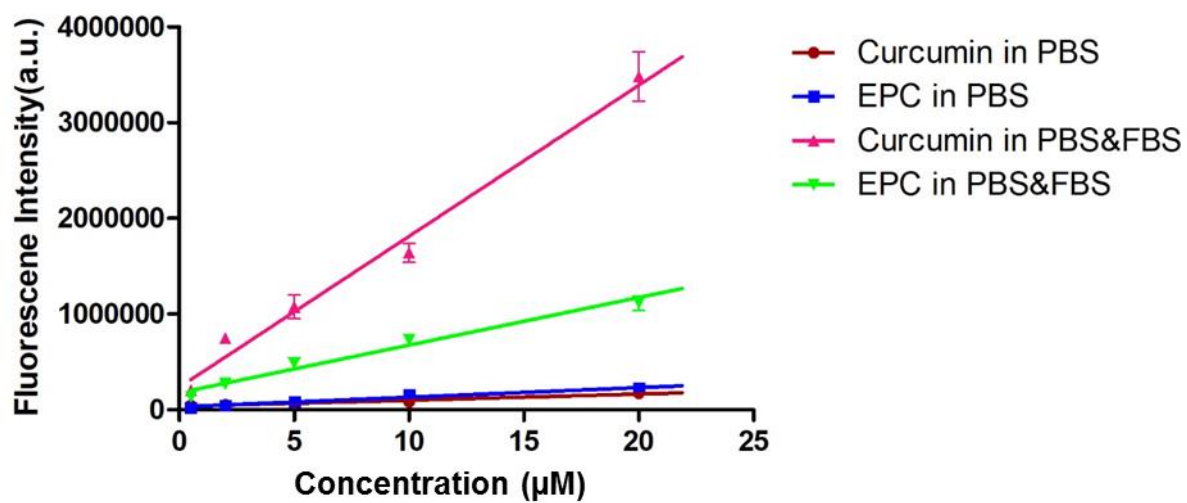


Figure S6. The fluorescence emission intensity of CCM and EPC in PBS supplemented with 10% FBS. $\lambda_{\text{ex}} = 420 \text{ nm}$.