Supporting information for

DiR loaded tumor targeting theranostic cisplatin-icodextrin prodrug nanoparticle for imaging guided chemo-photothermal cancer therapy

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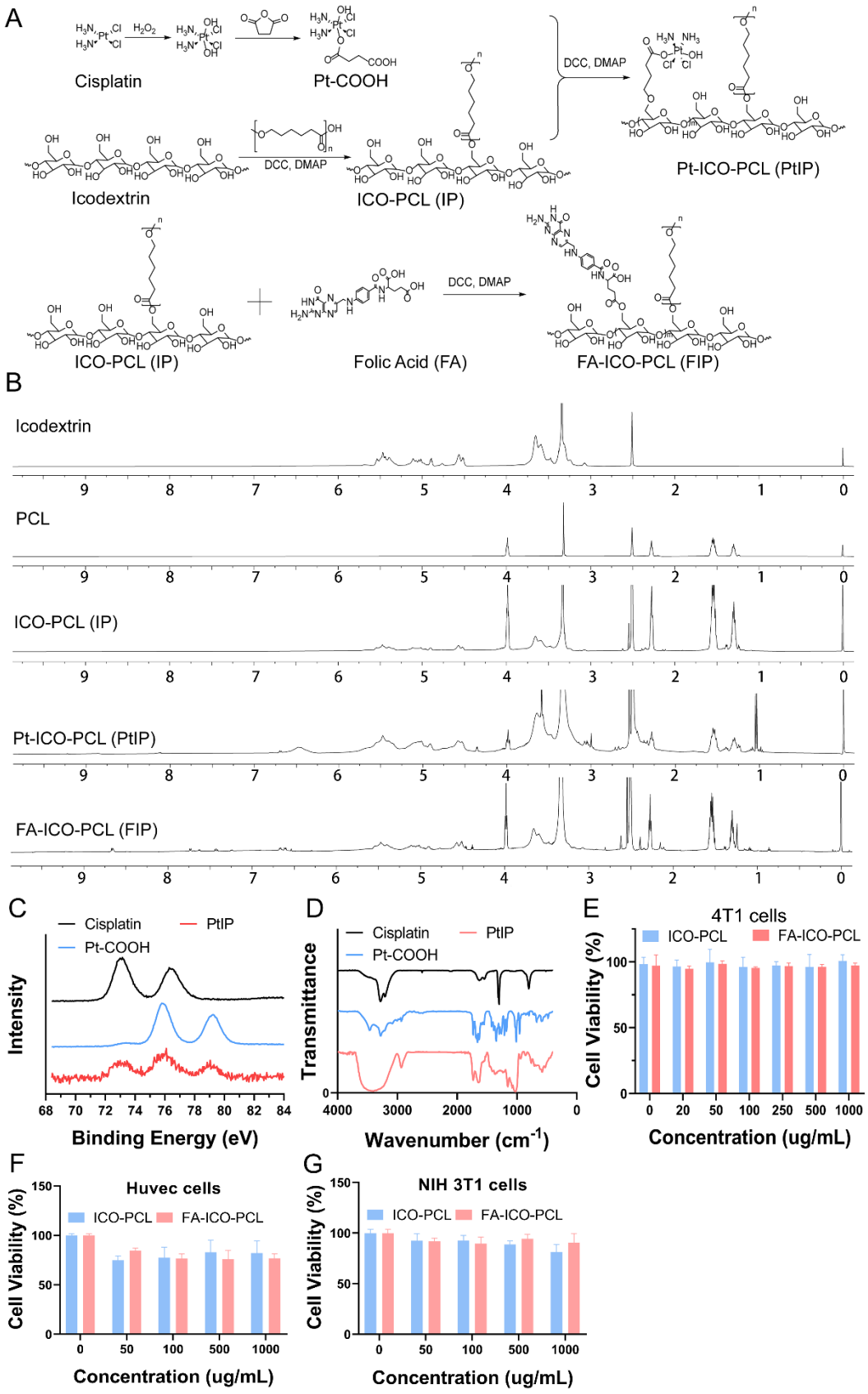

Figure S1. Synthesis and characterization of Pt-ICO-PCL (PtIP) and FA-ICO-PCL (FIP). (A) Synthetic route of PtIP and FIP. (B) ^{1}H NMR spectrum of Icodextrin, PCL, ICO-

PCL (IP), PtIP and FIP. (C) XPS spectrum of Cisplatin, Pt-COOH and PtIP. (D) FT-IR spectrum of Cisplatin, Pt-COOH and PtIP. (E) Cytotoxicity of IP and FIP on 4T1 cells (Mean ± SD, n=4). (F) Cytotoxicity of IP and FIP on Huvec cells (Mean ± SD, n=4). (G) Cytotoxicity of IP and FIP on NIH 3T3 cells (Mean ± SD, n=4).

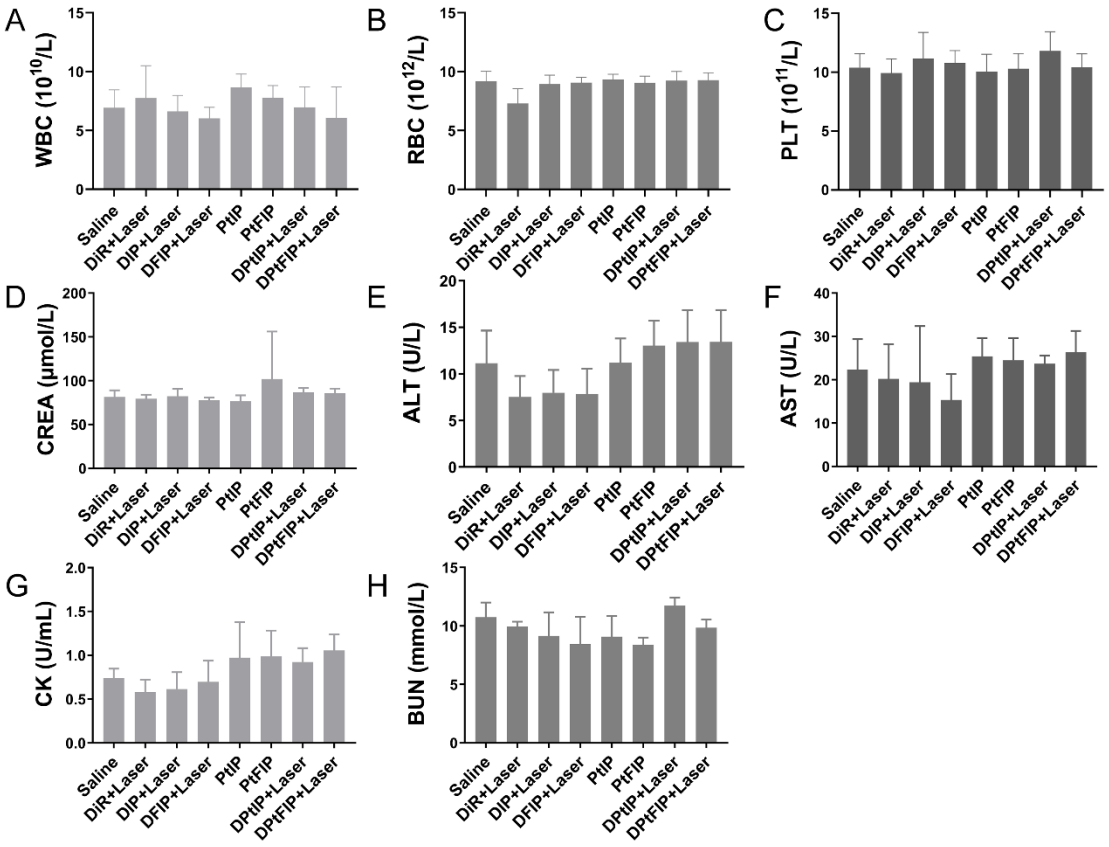

Figure S2. Blood routine examination and blood biochemistry analysis. (A) White blood cells. (B) Red blood cells. (C) Platelet. (D) Relative concentration of CREA in serum. (E) Relative concentration of ALT in serum. (F) Relative concentration of AST in serum. (G) Relative concentration of CK in serum. (D) Relative concentration of BUN in serum.

Table S1. DLS characters of different ICO-PCL NPs.

Sample	Z-average (nm)	Polydispersity index (PDI)	Count Rate
ICO-PCL$_{1000}$	175.1±4.6	0.371±0.152	5.2±1.0
ICO-PCL$_{2500}$	96.58±6.2	0.327±0.103	4.8±0.9
ICO-PCL$_{4047}$	192.8±5.6	0.415±0.124	45.3±1.6
ICO-PCL$_{7500}$	144.1±3.6	0.192±0.015	316.6±12.5
ICO-PCL$_{9800}$	134.3±3.4	0.182±0.014	238.3±9.8

Table S2. DLS characters of different DPtFIP NPs.

Pt-ICO-PCL: FA-ICO-PCL	Z-average (nm)	PDI	ζ potential (mV)
0: 10	56.0±0.8	0.166±0.013	-4.91±0.22
7: 3	71.1±1.5	0.183±0.018	2.47±0.35
8: 2	71.2±2.2	0.174±0.022	5.70±0.45
9: 1	94.9±1.4	0.217±0.019	7.54±0.22
10: 0	82.5±2.1	0.179±0.014	13.3±0.08

Table S3. IC50 of different formulations.

Formulations	IC50 (μg/mL)
PtIP	12.28
PtFIP	6.85
DPtIP	10.71
DPtFIP	7.1
DPtIP+Laser	6.58
DPtFIP+Laser	3.16