Supporting information of

Preparation of electrospray ALG/PDA-PVP nanocomposites and its application in cancer therapy

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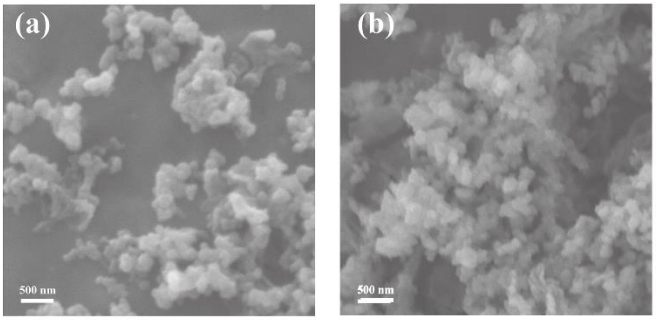

Figure S1. SEM images of materials at different bolus speeds: (a) 0.3 mL/h, (b) 0.8mL/h.

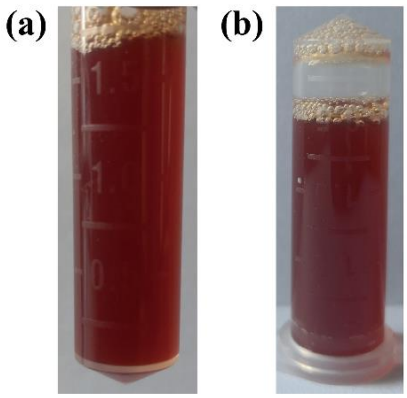

Figure S2. Digital photos of (a) fresh ALG/PDA/DOX-PVP and (b) ALG/PDA/DOX-PVP stored in mice serum for 24 h.

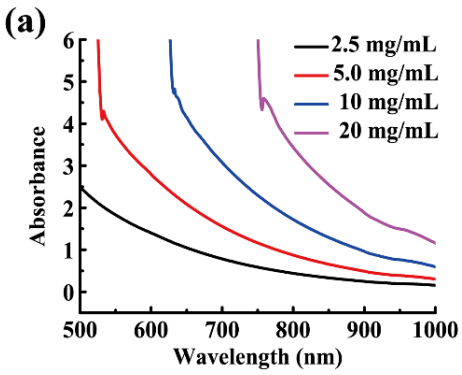

Figure S3. UV-vis-NIR spectra of ALG/PDA-PVP nanocomposites at different concentrations.

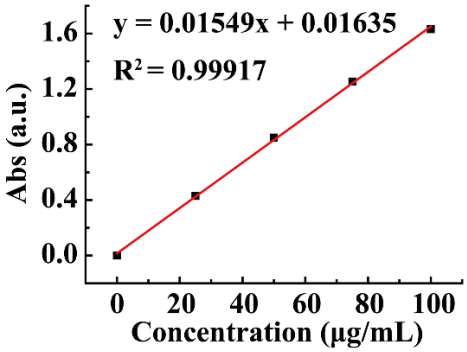

Figure S4. Standard curve of DOX.

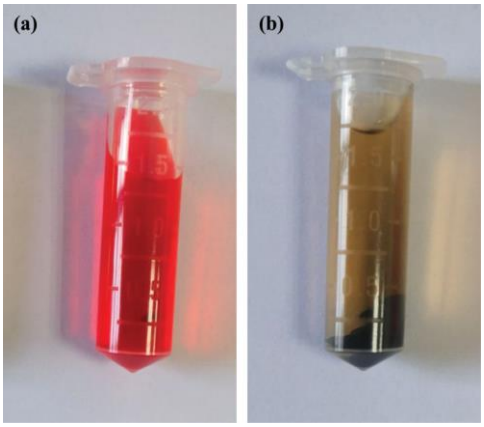

Figure S5. Pictures of (a) DOX solution (1 mg/mL) and (b) centrifuged coagulation bath containing ALG/PDA/DOX-PVP nanocomposites.

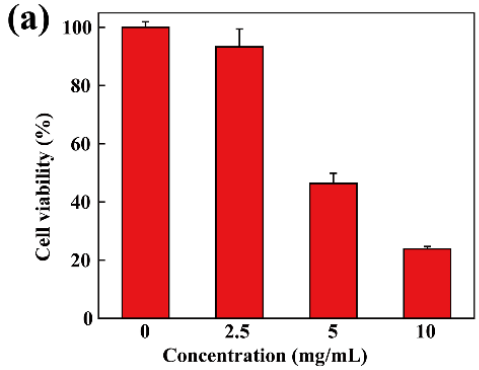

Figure S6. In vitro HT29 PTT performance of ALG/PDA-PVP nanocomposites at different concentrations under NIR laser irradiation (808 nm, 1.0 W/cm^2)

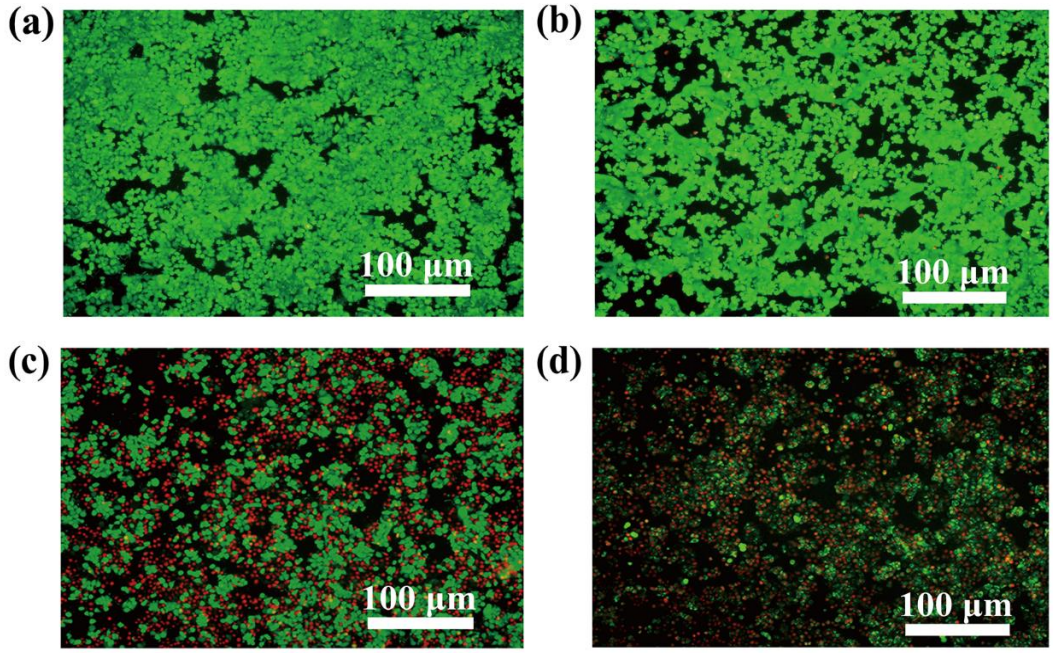

Figure S7. Live/dead stained morphology of cells cultured with different concentrations of ALG/PDA-PVP nanocomposites ((a) 0 mg/mL, (b) 2.5 mg/mL, (c) 5 mg/mL, and (d) 10 mg/mL) after photothermal therapy.

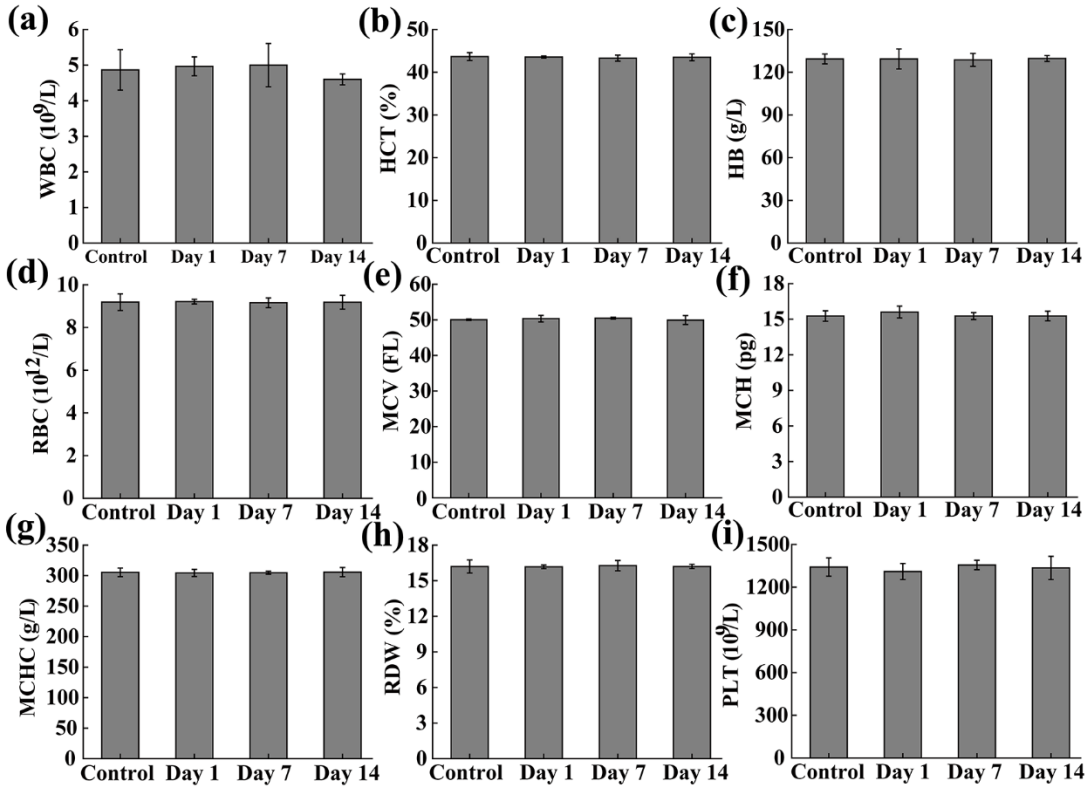

Figure S8. Blood routine examination results: (a) White blood cell count (WBC), (b)

hematocrit (HCT), (c) hemoglobin (HB), (d) red blood cell count (RBC), (e) mean corpuscular volume (MCV), (f) mean corpuscular hemoglobin (MCH), (g) mean corpuscular hemoglobin concentration (MCHC), (h) red cell distribution width (RDW), and (i) platelet (PLT) of healthy KM (control) injected with ALG/PDA-PVP for 1, 7 and 14 days.

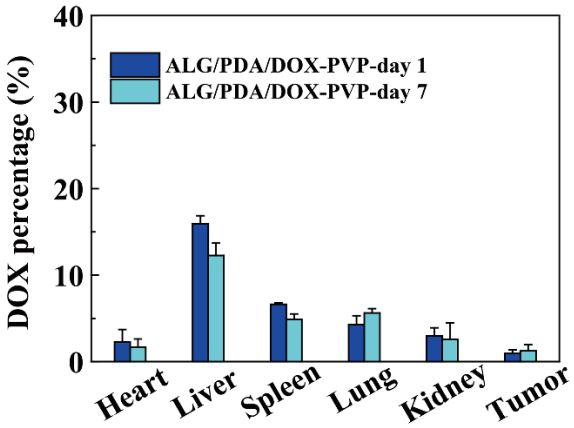

Figure S9. In vivo biodistribution of DOX in major organs and tumor after 1 and 7 days treatment with ALG/PDA/DOX-PVP nanocomposites.