Supplementary Information

pH-responsive hyaluronic acid-enveloped ZIF-8 nanoparticles for anti-atherosclerosis therapy

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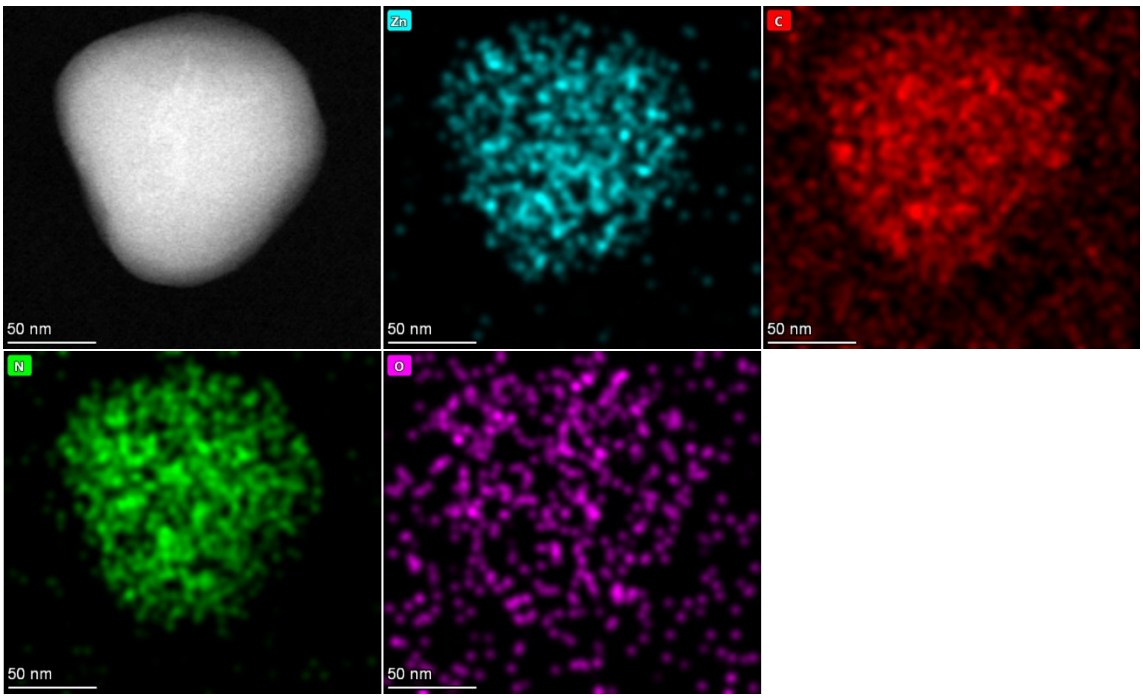

Figure S1. Dark-field EDX image of SIM/ZIF-8@HA NPs and corresponding EDX elemental (scale bar = 50 nm).

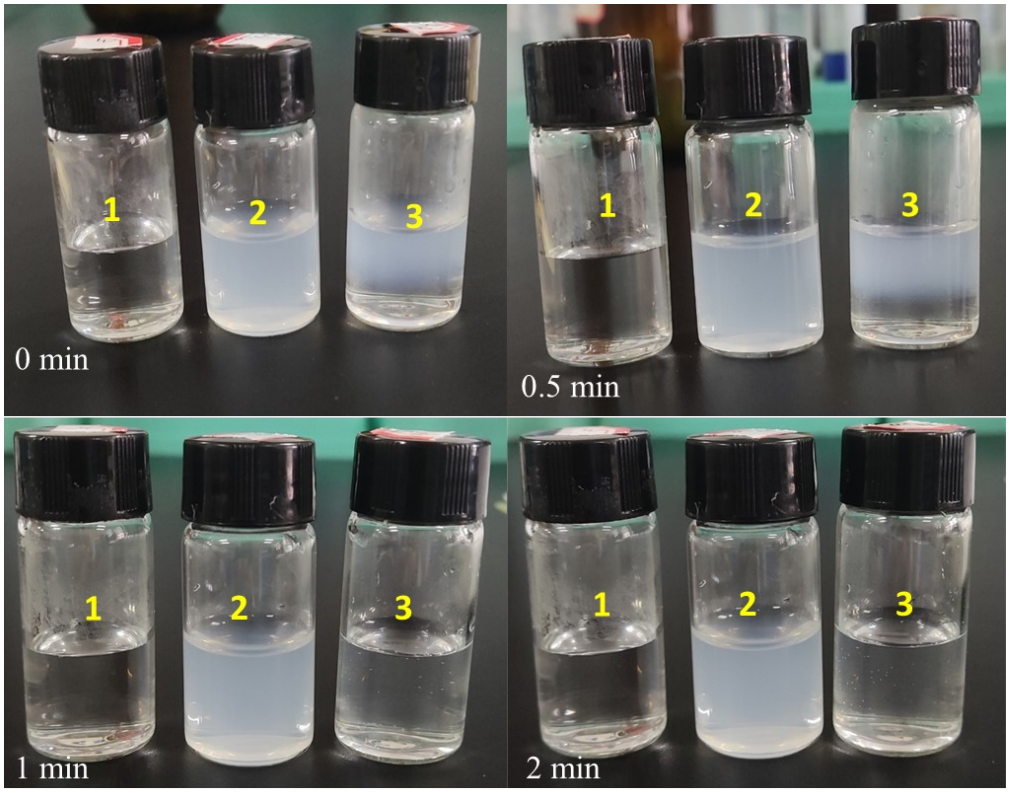

Figure S2. Degradation ability of SIM/ZIF-8@HA. Visual degradation study of SIM/ZIF-8@HA (1) Control (ultrapure water) (2) SIM/ZIF-8@HA and (3) SIM/ZIF-8@HA incubation in phosphate buffer saline (PBS) solution (pH 5) at different time points.

Table S1. Drug loading and encapsulation efficiency of SIM/ZIF-8 NPs (n = 7).

Sample	Drug Loading Efficiency (%)	Drug Encapsulating Efficiency (%)
SIM/ZIF-8	44.4	77.65

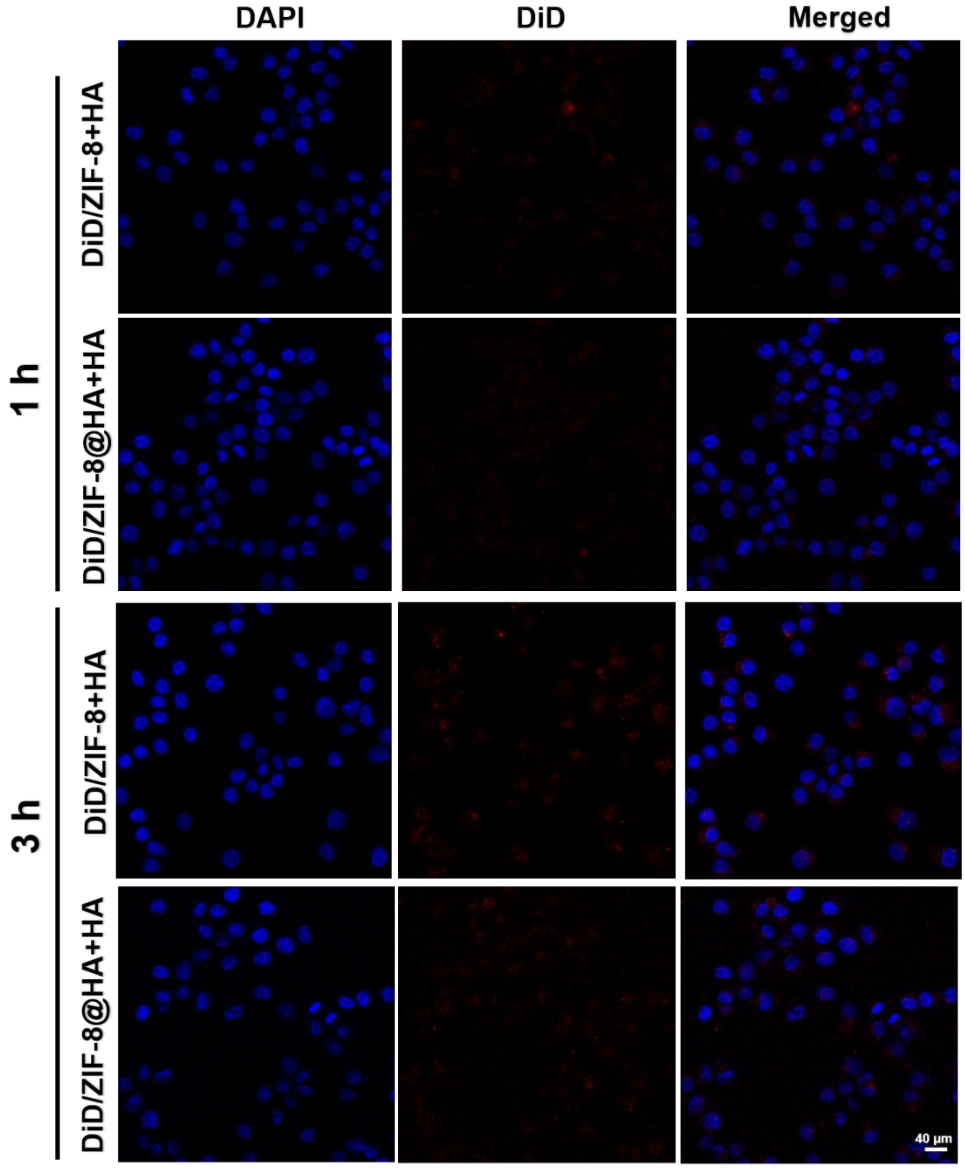

Figure S3. The fluorescent images of DiD/ZIF-8 and DiD/ZIF-8@HA co-incubated with HA pre-treated macrophages to compete CD44 binding, the cells were pre-treated with 5 mg/mL free HA for 3 h (scale bar= 40 μm).

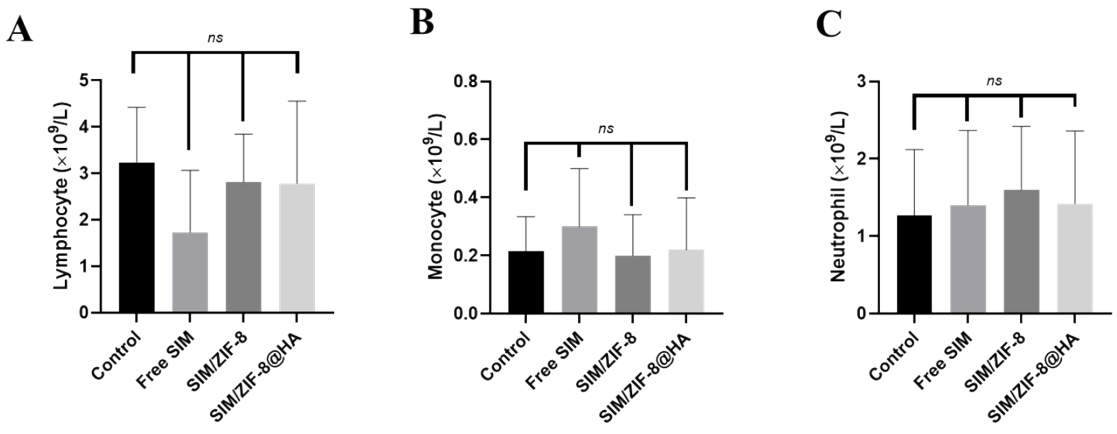

Figure S4. Blood cell counts of immune-associated cells including lymphocyte, monocyte and neutrophil after one month treatment (n=5, mean ± SD). (*ns*, no significance).

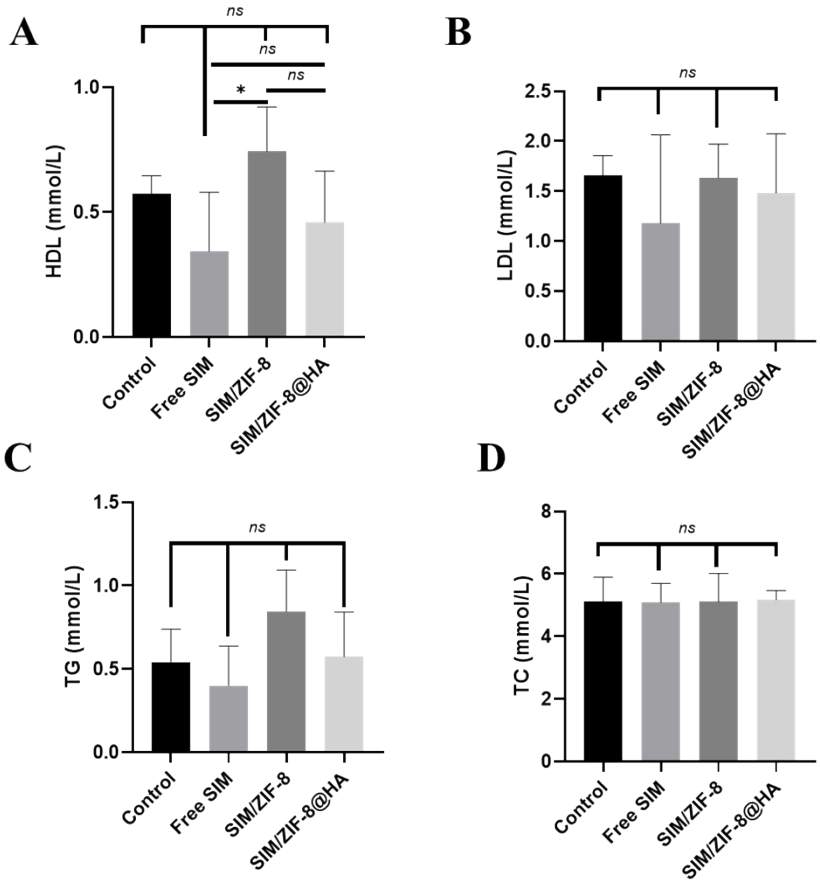

Figure S5. The blood lipid levels of high-density lipoprotein (HDL), low-density lipoprotein (LDL), triglyceride (TG), and total cholesterol (TC) (n=5, mean ± SD). (*$p < 0.05$, and *ns*, no significance).