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 ($n = 7$).

<table>
<thead>
<tr>
<th>Sample</th>
<th>Drug Loading Efficiency (%)</th>
<th>Drug Encapsulating Efficiency (%)</th>
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<tr>
<td>SIM/ZIF-8</td>
<td>44.4</td>
<td>77.65</td>
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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) \((n=5, \text{ mean } \pm \text{ SD})\). (*\(p < 0.05\), and ns, no significance).