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## **SUPPORTING INFORMATION**

Bifunctional pH-Sensitive Zn(II)-Curcumin Nanoparticles/siRNA Effectively Inhibit Growth of Human Bladder Cancer Cells *in Vitro* and *in Vivo* 

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Fig. S1 EDS spectrum of the obtained Zn(II)-Cur NPs. Cu peak came from the TEM grid.



Fig. S2 Drug release profiles under pH control at two different pH = 5 and 7.4 (n = 3, \*p < 0.01).



Fig. S3 Zeta potential distribution of Zn(II)-Cur NPs.



Fig. S4 SEM (left) and TEM (right) image of Zn(II)-Cur NPs/siEIF5A2 complex.



Fig. S5 Zeta potential distribution of Zn(II)-Cur NPs/siEIF5A2 complex.



**Fig. S6** The toxicity of  $Zn^{2+}$  at the concentration of 0, 50 nM, 100 nM, 150 nM and 200 nM at 12 h, 24 h and 48 h (n = 6, \*P < 0.05, \*\*P < 0.01, and \*\*\*P < 0.001 compared to other groups).



Fig. S7 Changes of body weight after injection of PBS, Zn(II)-Cur NPs, Zn(II)-Cur NPs/siNC and Zn(II)-Cur NPs/siEIF5A2 at 50 mg/kg. The means  $\pm$  SD are cumulative results from five independent experiments.