

## Support Information

### Supporting Information

*for*

### **Zwitterionic nanocapsules-based wound dressing with function of gradient release multi-drugs for efficient wound healing**

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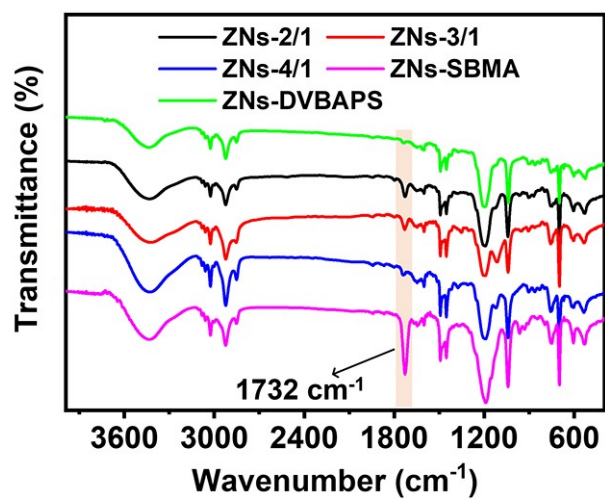
**Table S1.** The recipe for adjusting UCST of zwitterionic nanocapsules.

Run	The mass ratio of DVBAPS/SBMA	Amphi-RAFT agent (wt%)	Core/shell ratio	APS and TEMED ( $\text{mmol}\cdot\text{L}^{-1}$ )	Tween 80 and Span 80 (wt%)
1	2/1	6	1/1	5.04	0.5
2	3/1	6	1/1	5.04	0.5
3	4/1	6	1/1	5.04	0.5
4 <sup>a</sup>	2/1	6	1/1	5.04	0.5
5 <sup>a</sup>	3/1	6	1/1	5.04	0.5
6 <sup>a</sup>	4/1	6	1/1	5.04	0.5
7 <sup>b</sup>	3/1	6	1/1	5.04	0.5

<sup>a</sup> The ZNs loaded with Methyl Orange.

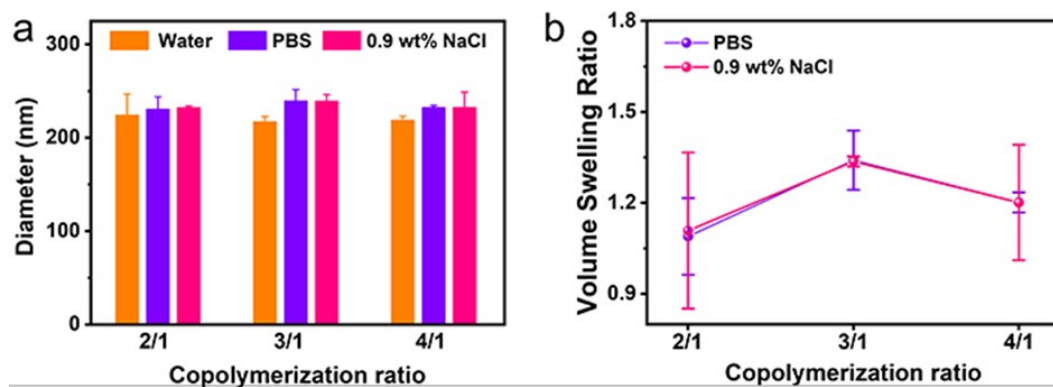
<sup>b</sup> The ZNs loaded with bFGF.

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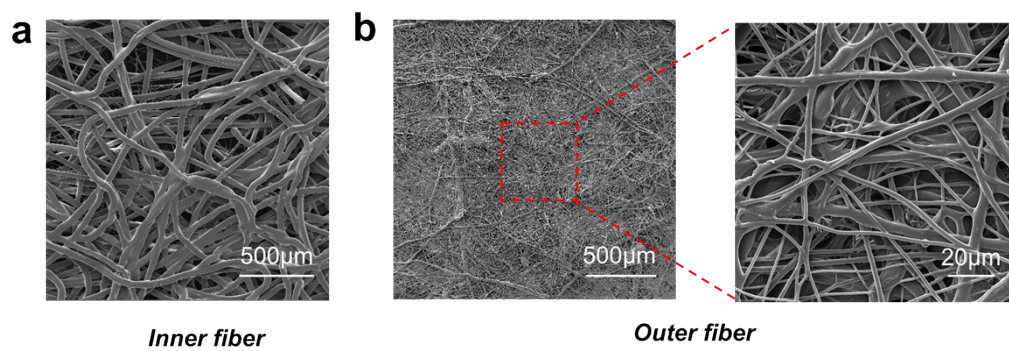
**Fig. S1** FTIR spectrum of ZNs with different DVBAPS/SBMA copolymerization ratios.

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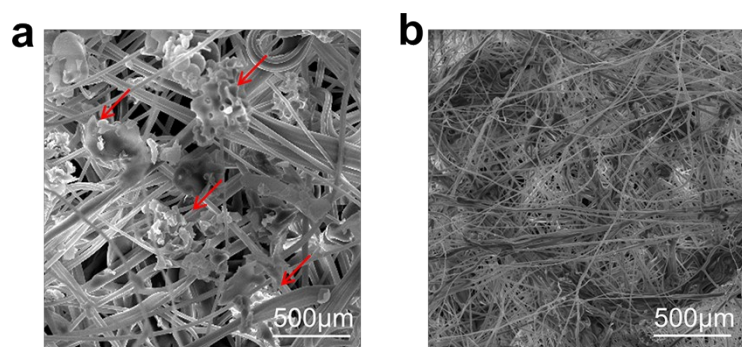
**Fig. S2** Salt-responsive behavior of the prepared ZNs. (a) Hydrodynamic diameters of the prepared ZNs with different mass ratios of DVBAPS/SBMA in water, PBS and 0.9 wt% NaCl. (b) Volume swelling ratios of ZNs with different mass ratios of DVBAPS/SBMA in PBS and 0.9 wt% NaCl.

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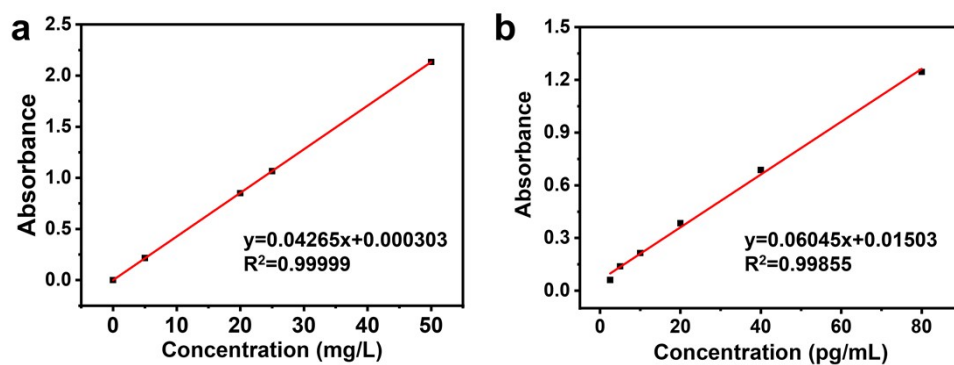
**Fig. S3** The SEM images of (a) inner fiber and (b) outer fiber of double-layer cotton fibers.

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**Fig. S4** The SEM images of (a) inner surface and (b) outer surface of ZNs@ cotton fabric.

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**Fig. S5** Standard curve of norfloxacin ( $\lambda=324$  nm) plotted by UV-vis; (b) standard curve of bFGF drawn by a microplate reader.