

## Supporting Information

### **Water-soluble branched polymer for combined chemo-immunotherapy of bacterial infections**

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**Table 1** Physicochemical and MBC/MIC values of poly(MBA-AEPZ)-Agm

Sample	Mw(Da)	PDI	MBC (nmol/L)		MIC (nmol/L)		MBC/MIC	
			<i>P. aeruginosa</i>	<i>S. aureus</i>	<i>P. aeruginosa</i>	<i>S. aureus</i>	<i>P. aeruginosa</i>	<i>S. aureus</i>
Poly(MBA-AEPZ)-Agm1	1850	1.01	1000	1000	500	1000	2	1
Poly(MBA-AEPZ)-Agm2	3354	1.56	1000	1000	500	1000	2	1
Poly(MBA-AEPZ)-Agm3	5489	1.39	1000	1000	500	1000	2	1
Poly(MBA-AEPZ)-Agm4	8834	1.06	1000	1000	500	500	2	2

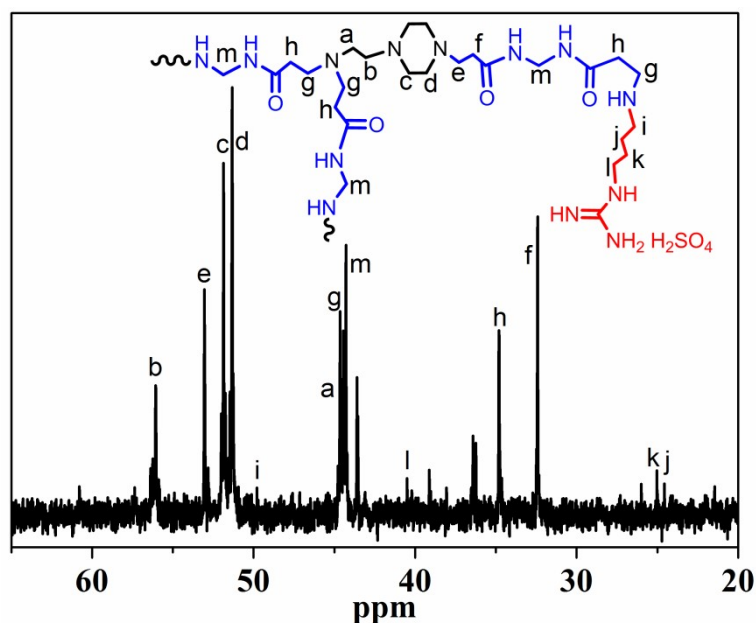


Fig. S1  $^{13}\text{C}$  NMR spectrum of poly(MBA-AEPZ)-Agm1.

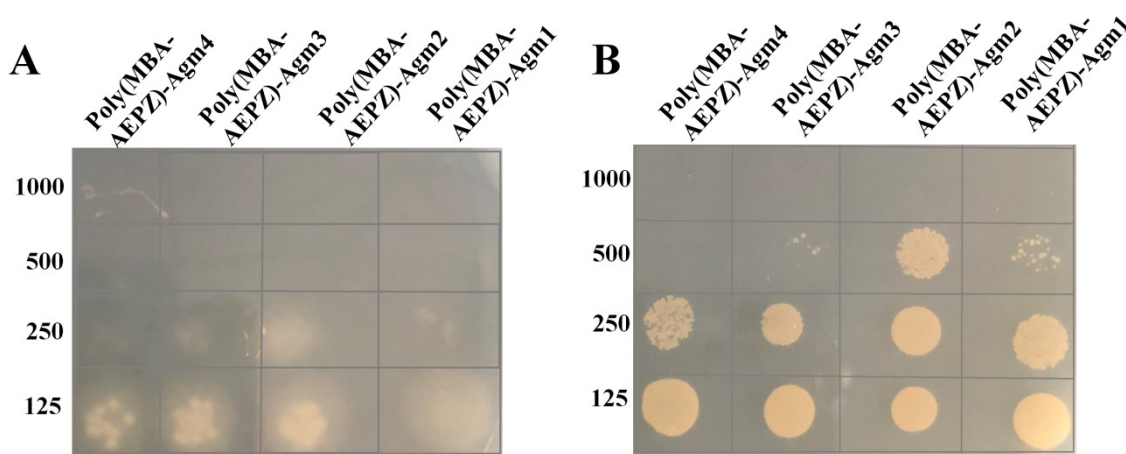


Fig. S2 Colony images of *P. aeruginosa* (A) and *S. aureus* (B) incubated with different poly(MBA-AEPZ)-Agm1.

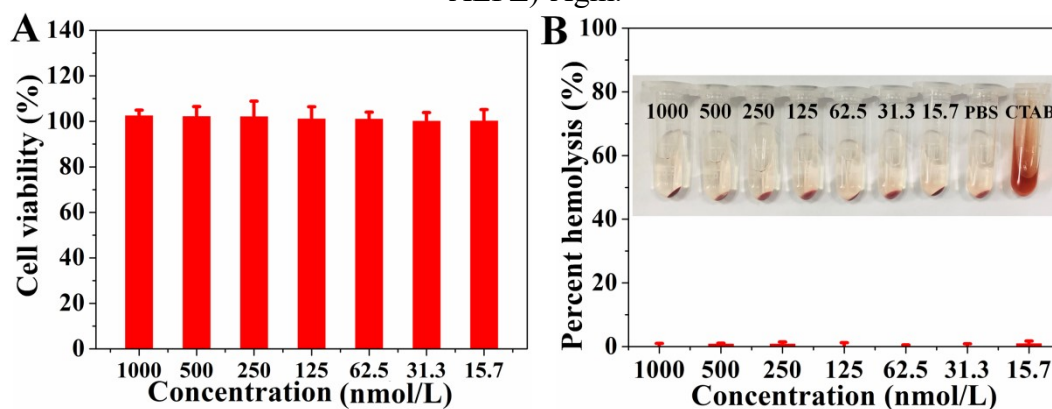
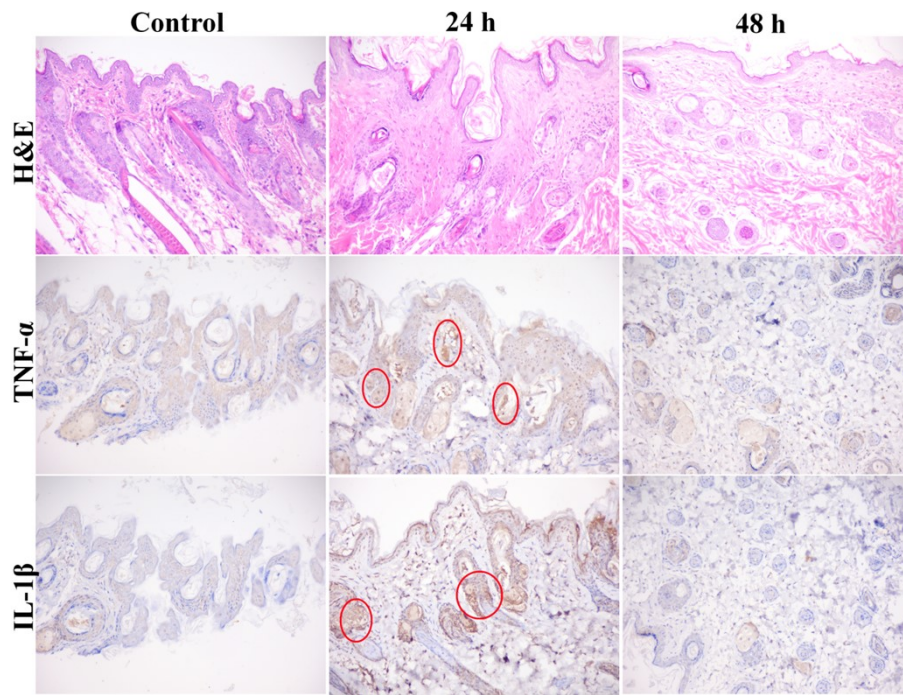


Fig. S3 The viability of RAW264.7 cells (A) and hemolytic activity of red blood cells (B) after being treated with different dosages of poly(MBA-AEPZ)-Agm1.



**Fig. S4** The representative images of H&E ( $\times 200$ ) and IHC ( $\times 200$ ) before and after being injected with poly(MBA-AEPZ)-Agm1 for 24 or 48 h.