

Supplementary materials

Lyophilized lipid liquid crystalline nanoparticles as an antimicrobial delivery system.

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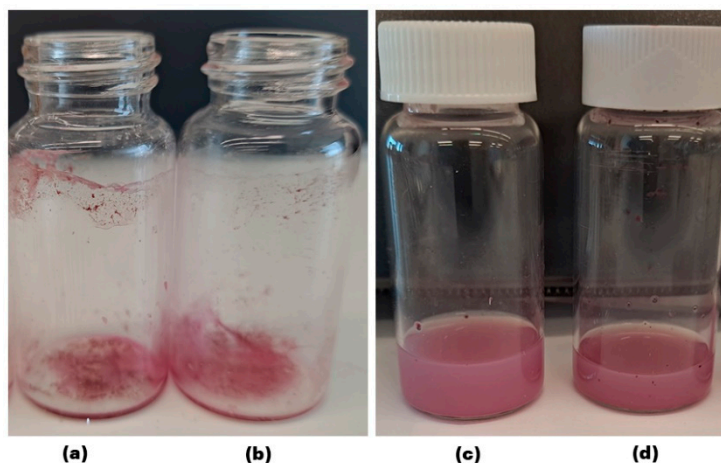


Figure S1. Illustrative images showing the physical appearance of GaPP-LCNP steaky cakes cryoprotected with 0.5% and 1% w/v trehalose following freeze-drying (a & b) respectively and the dispersions (c & d) after rehydration showing some steaky aggregates on the glass vial walls.

Table S1. Summary of z-average diameter and polydispersity index of LCNP and GaPP-LCNP before and after the lyophilization process.

Sample	LCNP before freeze drying		Reconstituted LCNP	
	z- average diameter (nm)	polydispersity index (PDI)	z- average diameter (nm)	polydispersity index (PDI)
Blank LCNP 0.5% trehalose	160 ± 13	0.28 ± 0.02	189 ± 7.1	0.23 ± 0.02
Blank LCNP 1% trehalose	175 ± 8.6	0.22 ± 0.04	210 ± 9.1	0.28 ± 0.03
Blank LCNP 2% trehalose	185 ± 6	0.21 ± 0.04	206 ± 10.5	0.23 ± 0.05
Blank LCNP 5% trehalose	312 ± 7	0.18 ± 0.14	418 ± 33	0.36 ± 0.03
GaPP-LCNP 0.5% trehalose	156 ± 8.5	0.19 ± 0.03	189 ± 1.3	0.23 ± 0.02
GaPP-LCNP 1% trehalose	196 ± 11.4	0.21 ± 0.04	218 ± 6.8	0.34 ± 0.05
GaPP-LCNP 2% trehalose	175 ± 4	0.20 ± 0.04	193 ± 6.5	0.15 ± 0.02
GaPP-LCNP 5% trehalose	264 ± 7	0.32 ± 0.05	312 ± 7	0.35 ± 0.02