

SUPPORTING INFORMATION

Preventing *Staphylococci* Surgical Site Infections with a Nitric Oxide-Releasing Poly(lactic acid-co-glycolic acid) Suture Material

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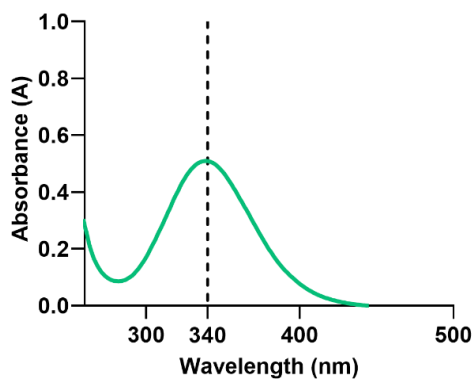


Figure S1. Representative UV-vis spectra of SNAP in THF, demonstrating the S-nitrosothiol bond peak on the SNAP molecule at 340 nm (molar absorptivity = $0.40 \text{ mL mg}^{-1} \text{ mm}^{-1}$).

Table S1. SNAP loading and leaching for various swelling solution concentrations. Data is represented as mean \pm SD ($n = 3$).

Swelling Solution (mg mL^{-1})	SNAP Loading (wt%)	12 h SNAP Leaching (wt%)
25	0.73 ± 0.17	0.52 ± 0.05
50	1.88 ± 0.08	1.17 ± 0.13
75	1.84 ± 0.07	n/a
100	2.09 ± 0.17	n/a

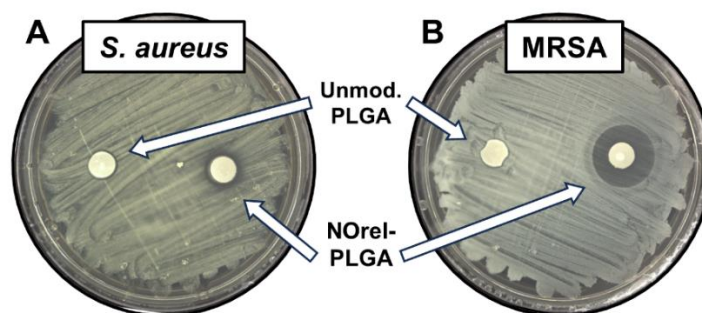


Figure S2. Representative images from zone of inhibition assay for (A) *S. aureus* and (B) MRSA. On each agar plate, unmodified PLGA is on the left, and NOrel-PLGA is on the right.

Table S2. Planktonic reduction against *S. aureus* and MRSA. Data is represented as mean \pm SD ($n = 3$).

Sample	Unit	<i>S. aureus</i>	MRSA
Inoculum (Control)	CFU mL ⁻¹	1.88 \pm 0.16 ($\times 10^7$)	5.02 \pm 0.54 ($\times 10^7$)
	Log reduction wrt. Control	n/a	n/a
	<i>p</i> value wrt. Control	n/a	n/a
Unmod. PLGA	CFU mL ⁻¹	1.07 \pm 0.23 ($\times 10^7$)	3.28 \pm 1.20 ($\times 10^7$)
	Log reduction wrt. Control	0.25	0.18
	<i>p</i> value wrt. Control	0.3450	0.7766
NOrel-PLGA	CFU mL ⁻¹	2.95 \pm 1.60 ($\times 10^5$)	4.50 \pm 4.06 ($\times 10^4$)
	Log reduction wrt. Control	1.80	3.05
	<i>p</i> value wrt. Control	< 0.0001	< 0.0001

Table S3. Adhered reduction against *S. aureus* and MRSA. Data is represented as mean \pm SD ($n = 3$).

Sample	Unit	<i>S. aureus</i>	MRSA
Unmod. PLGA	CFU mL ⁻¹	1.15 \pm 0.17 ($\times 10^5$)	4.93 \pm 2.04 ($\times 10^4$)
	Log reduction wrt. Control	n/a	n/a
	<i>p</i> value wrt. Control	n/a	n/a
NOrel- PLGA	CFU mL ⁻¹	1.06 \pm 0.05 ($\times 10^4$)	2.75 \pm 1.18 ($\times 10^2$)
	Log reduction wrt. Control	1.03	2.25
	<i>p</i> value wrt. Control	< 0.0001	< 0.0001

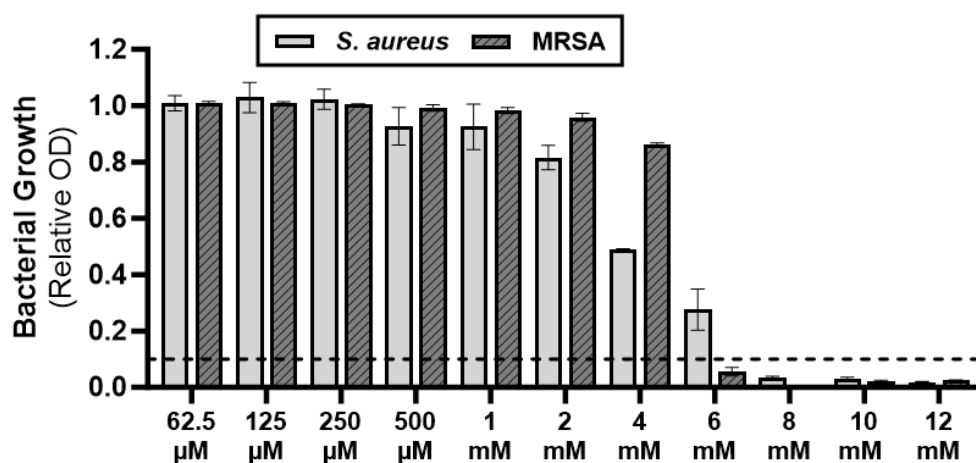


Figure S3. MIC results for SNAP against *S. aureus* and MRSA. Data is represented as mean \pm SD ($n = 3$).