SUPPLEMENTAL MATERIAL

Antibacterial Action of Nitric Oxide-Releasing Chitosan Oligosaccharides against *Pseudomonas aeruginosa* under Aerobic and Anaerobic Conditions

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Running Head (54 characters or less): Anaerobic Bactericidal Action of Nitric Oxide

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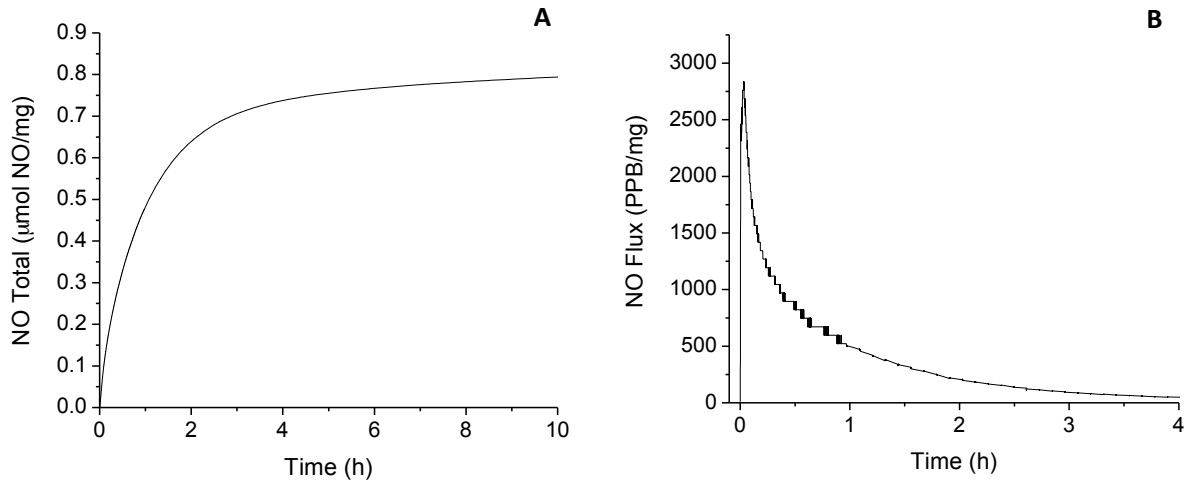

Figure S1. Chemiluminescence detection of NO release from COS-NO. The NO release from 1.0 mg of COS-NO was determined in deoxygenated PBS (pH 6.5, 37 °C) for comparison with other NO-releasing systems. (A) The NO total and (B) NO flux of representative measurements are shown. For n= 3 or more pooled experiments, the NO total was 0.86 ± 0.05 μmol NO/mg COS-NO, the NO-release duration was 10.2 ± 2.7 h, and the NO half-life was 0.63 ± 0.09 h.

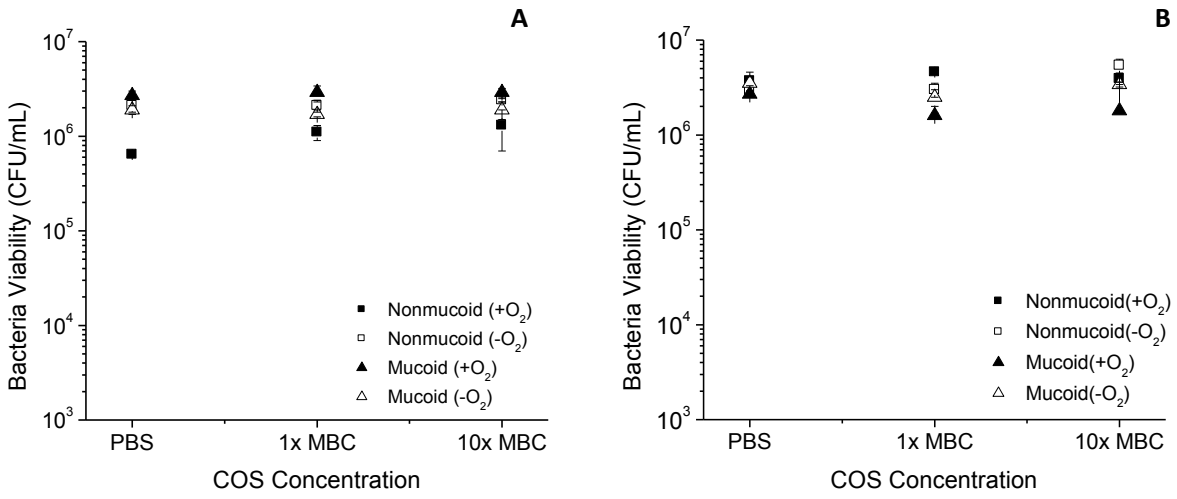

Figure S2. Planktonic bacteria viability (in CFU/mL) after a 4 h exposure to COS in PBS. Bacteria were grown (A) aerobically and (B) anaerobically in LB (with nitrate supplementation) and exposed to COS in PBS (pH 6.5). Bacteria were exposed to PBS, 1x, or 10x the reported MBC_{4h} against COS-NO. Nonmucoid bacteria are represented by squares (■, □) and the mucoid phenotype is represented by triangles (▲, Δ). Aerobic exposure conditions are represented by closed symbols (■, ▲) and anaerobic exposure conditions are represented by open symbols (□,Δ).

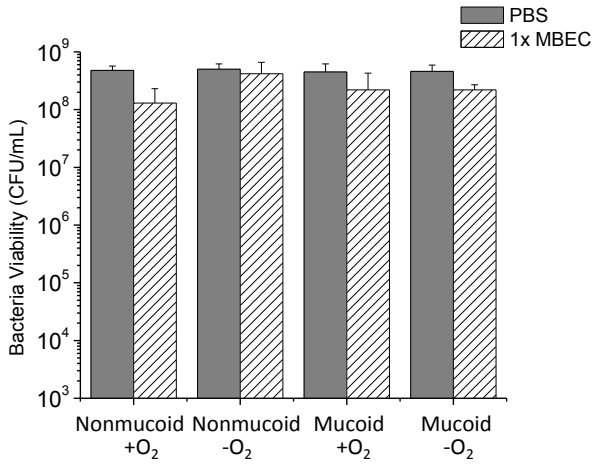

Figure S3. Biofilm viability (in CFU/mL) after exposure to COS. Bacteria biofilms were grown for 72 h, then exposed to COS under aerobic or anaerobic conditions for 18 h.