

Supplementary Materials

Table S1. Fifteen *P. aeruginosa* Bacteriophages Initial Titer.

Table 1. Titer (PFU mL ⁻¹) of isolated phage stock solution														
Phages	PA1	PA2	PA3	PA4	PA5	PA6	PA7	PA8	PA9	PA10	PA12	PA13	PA14	PA15
Titer (PFU mL ⁻¹)	3.78 x 10 ⁸	6.56 x 10 ⁸	3.33 x 10 ⁸	7.56 x 10 ⁹	3.56 x 10 ⁹	9.22 x 10 ⁸	7.33 x 10 ⁶	5.56 x 10 ¹⁰	1.67 x 10 ¹⁰	4.11 x 10 ¹⁰	8.67 x 10 ⁹	3.11 x 10 ¹⁰	2.167 x 10 ¹⁰	3.22 10 ¹¹

Table S2. Antibiotic Resistance of Clinical Isolates. 9 CF and 11 non-CF clinical isolates were selected to determine the minimum inhibitory concentration (MIC) against 5 antibiotics (2 to 64 µg mL⁻¹) using 96-well plates in triplicates. Bacterial growth was measured by OD595 nm, n=3.

Antibiotic Minimum Inhibitory Concentration (µg mL ⁻¹)					
<i>P. aeruginosa</i> Strain	Ciprofloxacin	Gentamicin	Imipenem	Netilmicin	Tobramycin
C450	4	2	2	2	2
C460	16	64	2	64	16
C461	2	4	2	8	2
C453	2	8	4	16	2
C458	8	>64	>64	>64	>64
C459	4	32	8	64	8
C462	16	8	2	8	2
C452	64	4	2	8	4
C457	2	32	8	64	4
C437	2	16	4	32	2
C420	2	16	4	32	2
C446	2	16	4	4	16
C410	2	8	2	8	2
C413	2	16	4	16	2
C438	2	16	4	16	4
C440	2	8	2	16	2
C433	2	16	4	32	4
C434	2	4	2	2	2
C389	2	4	16	16	2
C423	16	64	8	>64	2

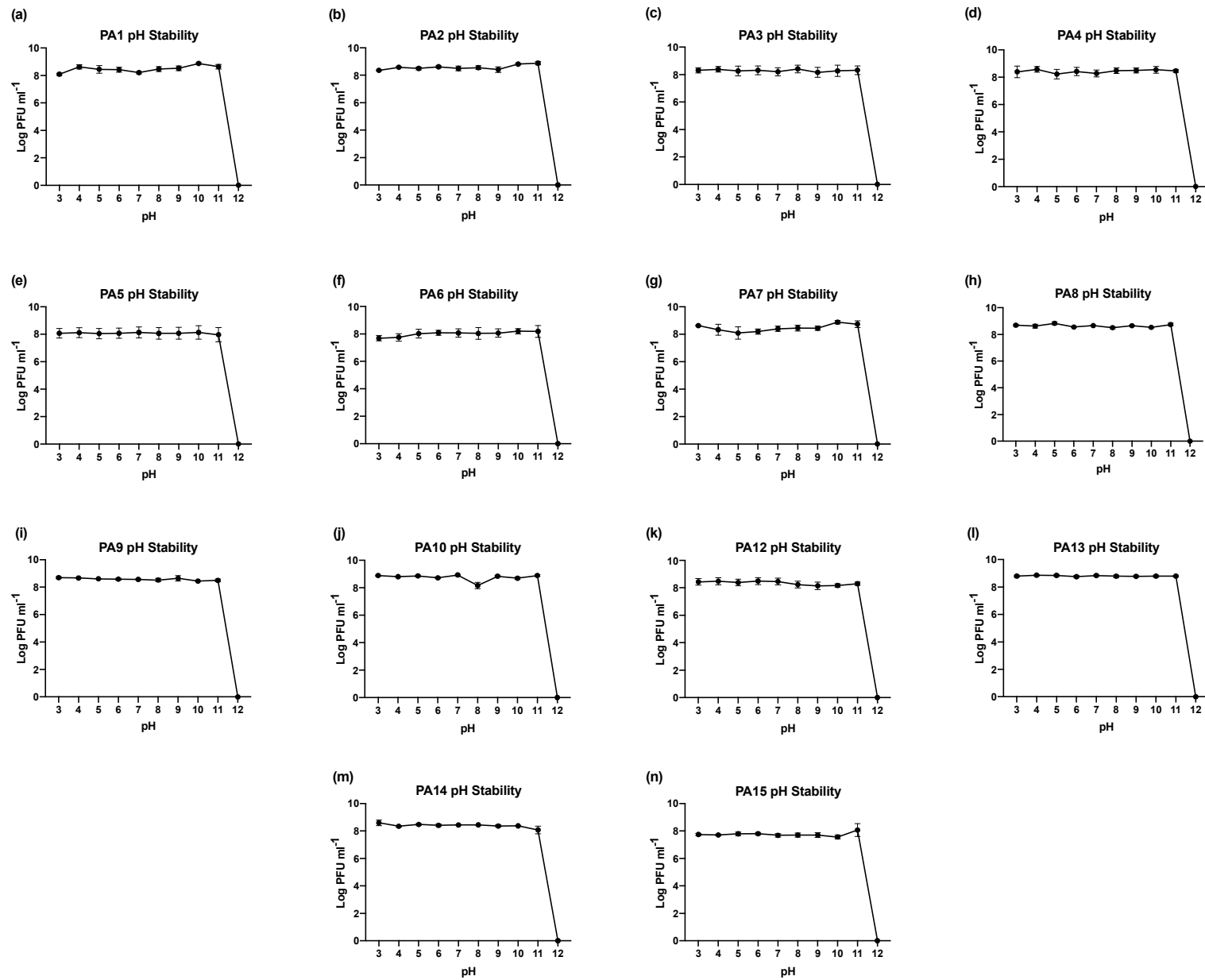


Figure S1. Bacteriophage pH Stability Test. Phages were incubated at different pH (3 to 12) conditions with phage titer determined to investigate their stability. Data expressed as mean \pm SEM for three independent experiments. Significant difference compared to values at pH=7 was determined using One-way ANOVA. ****, $p < 0.0001$.

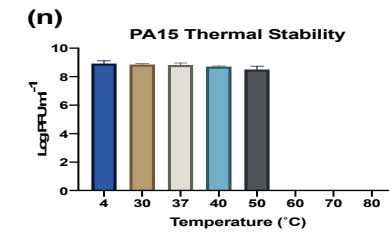
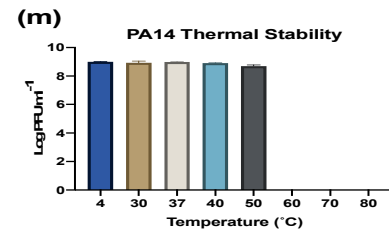
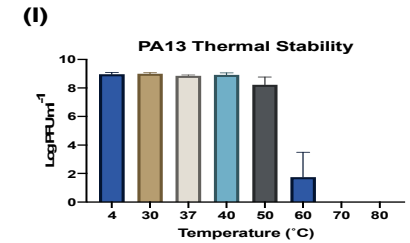
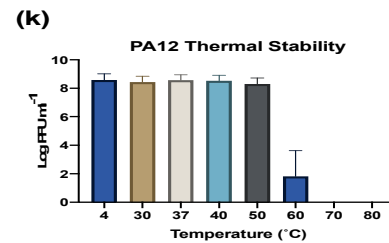
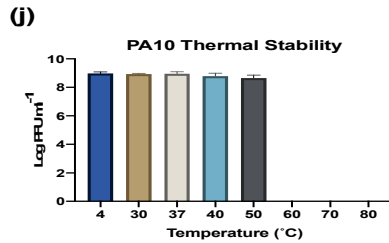
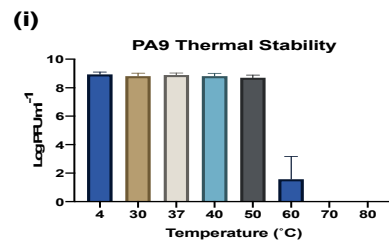
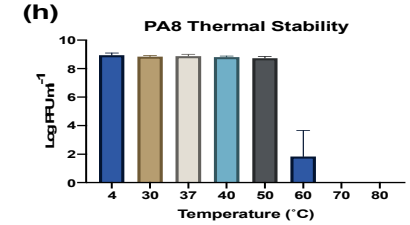
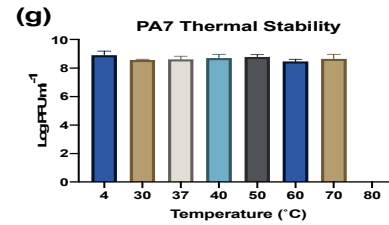
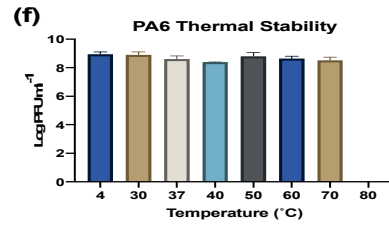
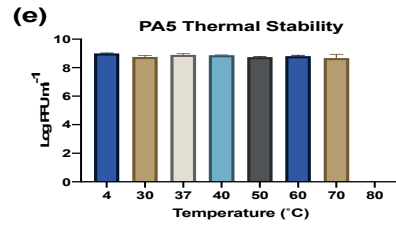
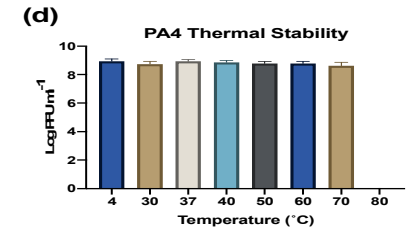
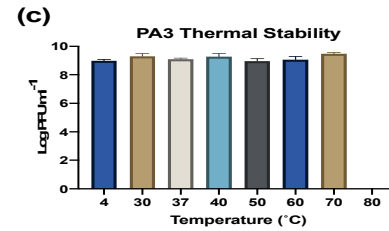
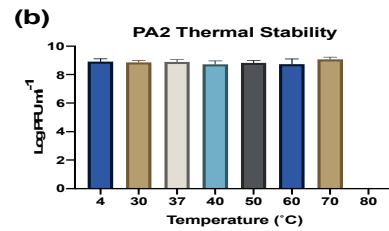
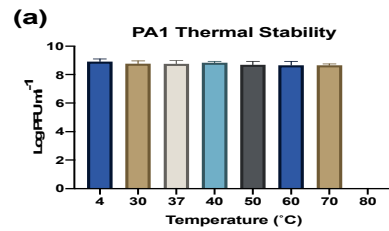


Figure S2. Bacteriophage Thermal Stability Test. Stability measured by viability in PFU ml⁻¹ for phages incubated in temperature conditions ranging between 4°C-80°C for 1 hour. Data expressed as mean ± SEM for three independent experiments. Significant difference compared to 4°C was determined using One-way ANOVA. ****, p<0.0001.

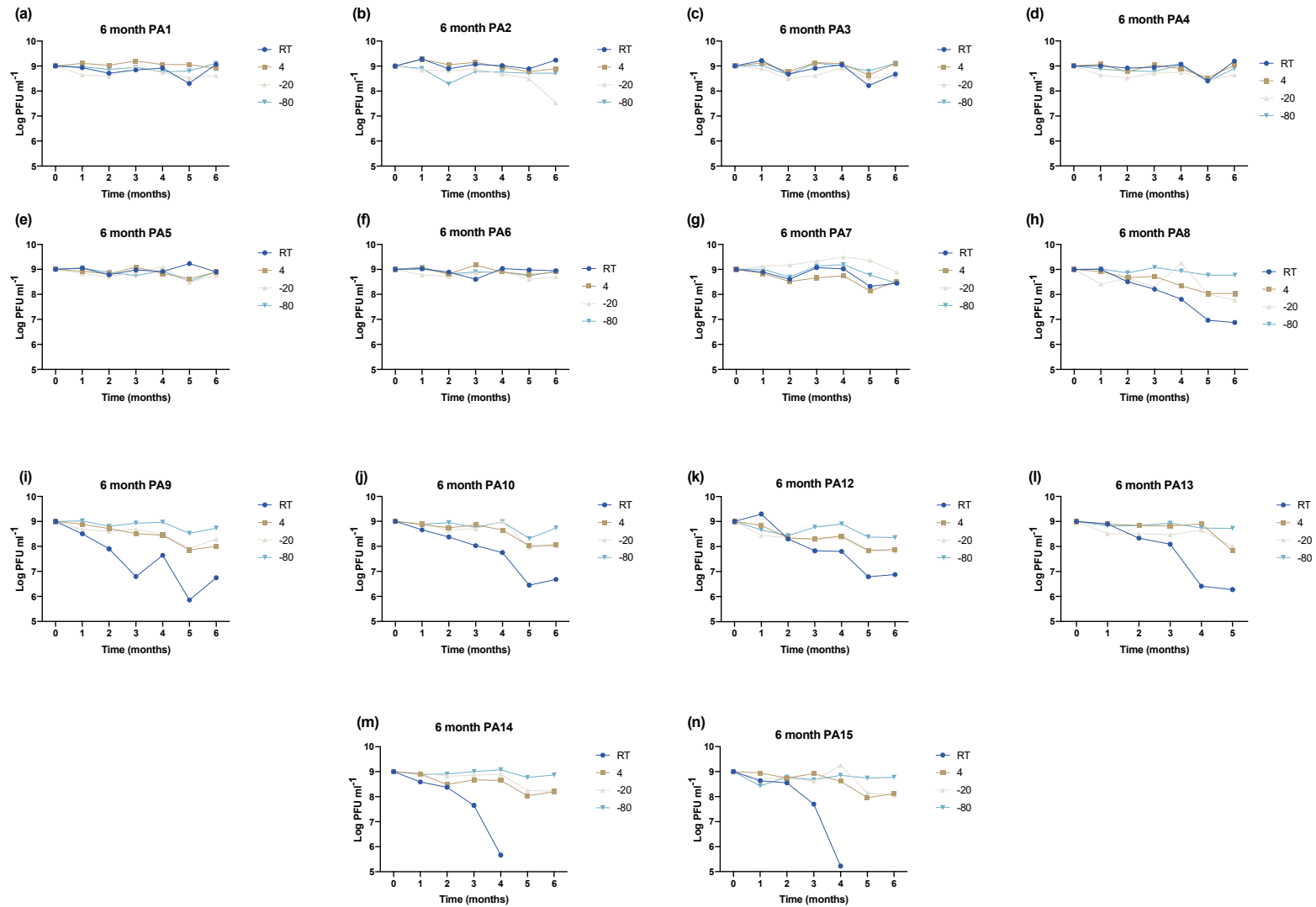


Figure S3. Bacteriophage Long-term Storage Stability Test. 6-month long-term stability of phages stored at room temperature (RT), 4°C, -20°C and -80°C.

Data expressed as mean.

C446 Biofilm Treated with PA4

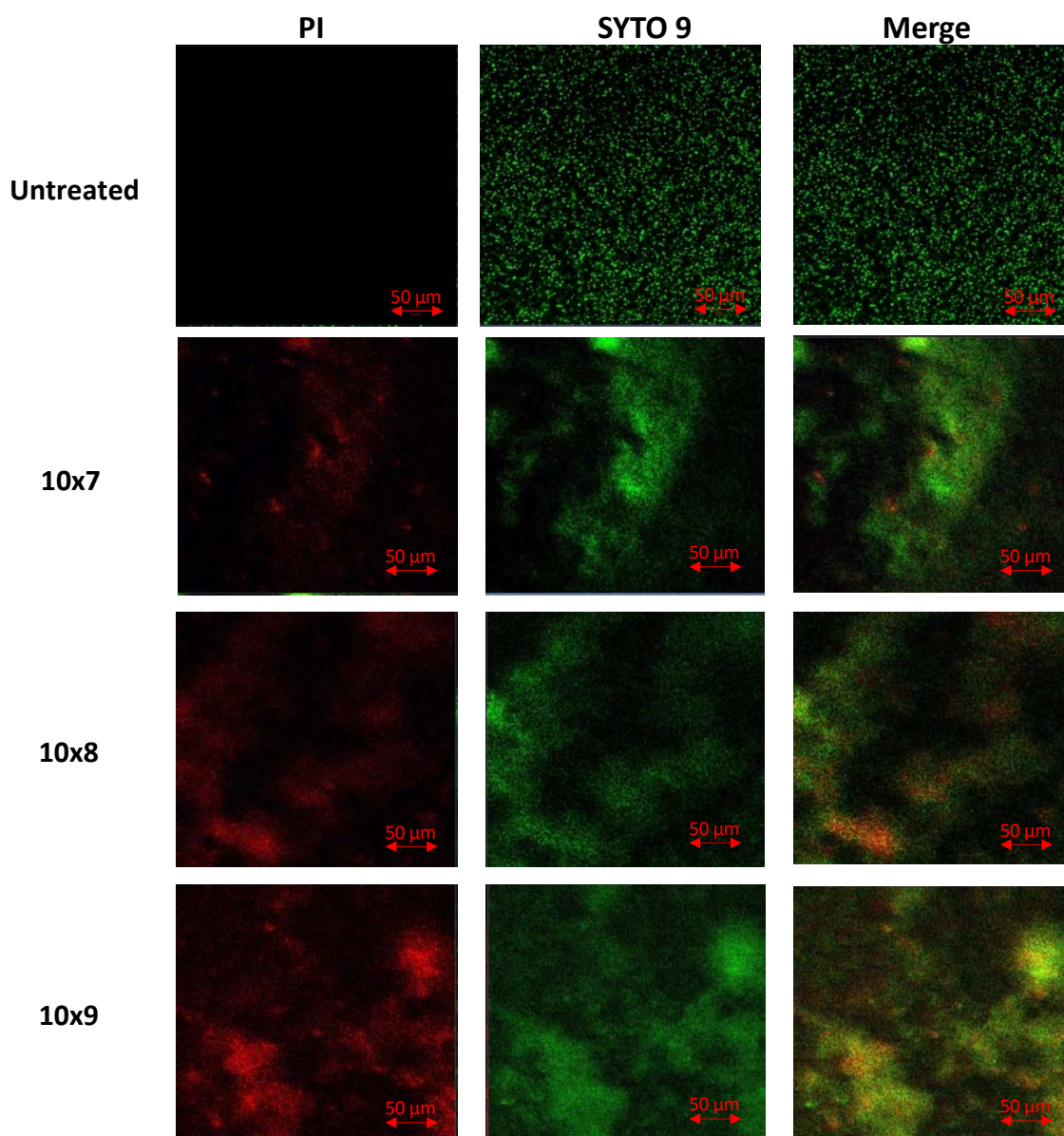


Figure S4. a) C446 biofilm treated with PA4.

C446 biofilm treated with PA4 at 10×7 , 10×8 and 10×9 PFU mL⁻¹ respectively. Biofilms without treatment (untreated) were used as control. LIVE/DEAD® Bacterial Viability Kit was used showing dead (PI, red) and live (SYTO® 9, green) biofilm associated bacteria in samples representative of each treatment group.

PA01 Biofilm Treated with PA4

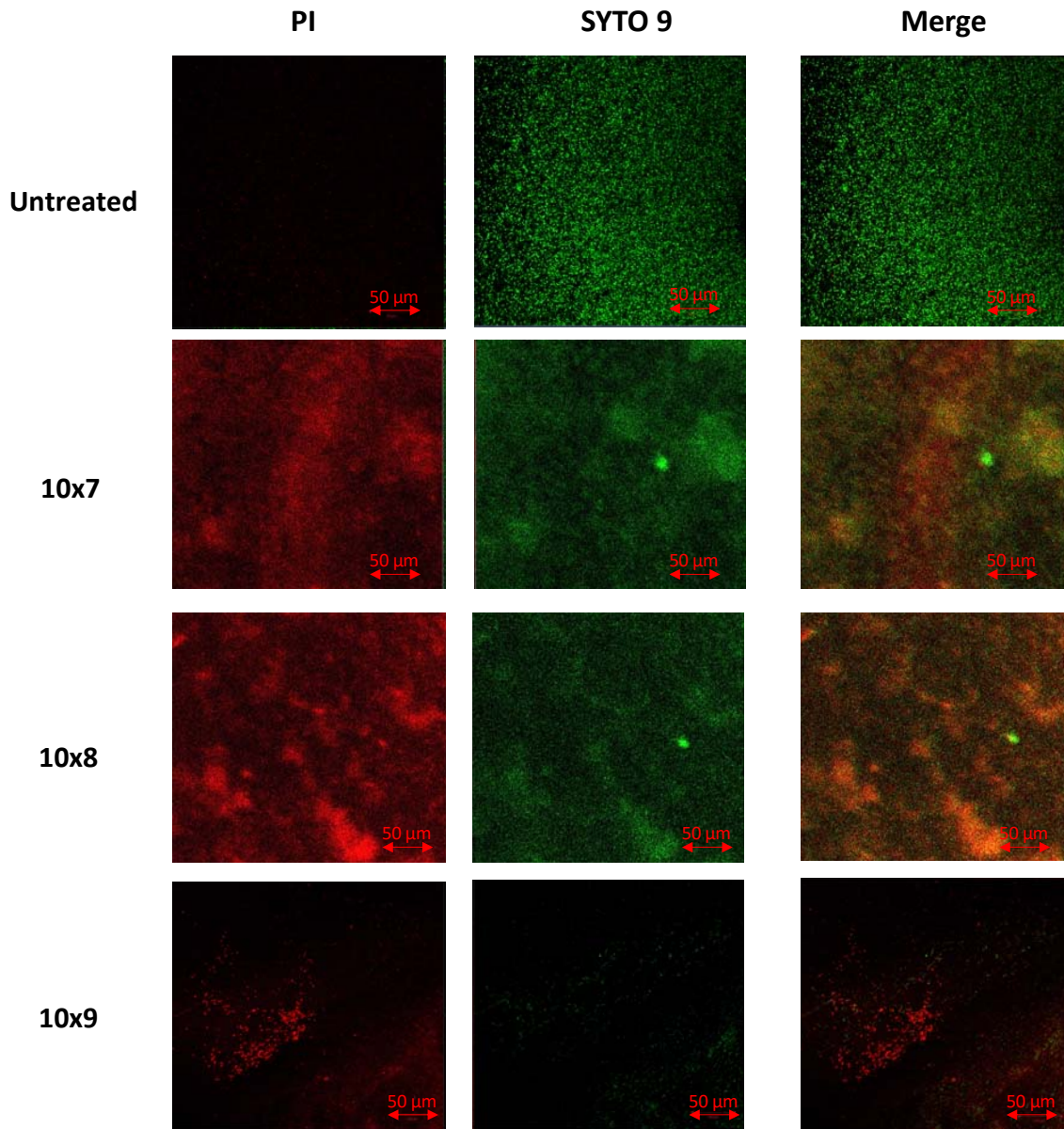


Figure S4. b) PA01 biofilm treated with PA4.

PA01 biofilm treated with PA4 at 10x7, 10x8 and 10x9 PFU mL⁻¹ respectively. Biofilms without treatment (untreated) were used as control. LIVE/DEAD® Bacterial Viability Kit was used showing dead (PI, red) and live (SYTO® 9, green) biofilm associated bacteria in samples representative of each treatment group.

C462 Biofilm Treated with PA4

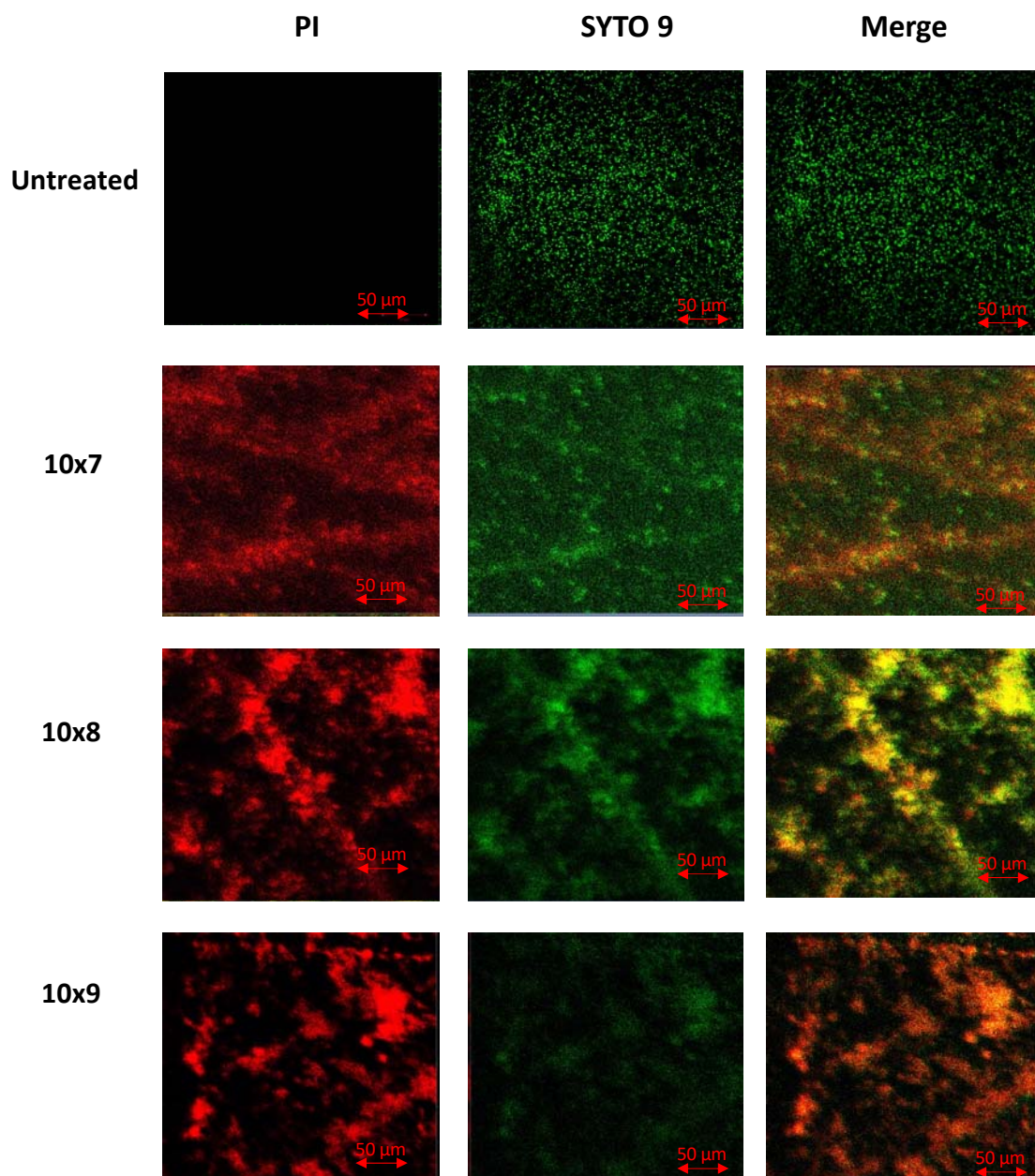


Figure S4. c) C462 biofilm treated with PA4.

C462 biofilm treated with PA4 at 10×7 , 10×8 and 10×9 PFU mL⁻¹ respectively. Biofilms without treatment (untreated) were used as control. LIVE/DEAD® Bacterial Viability Kit was used showing dead (PI, red) and live (SYTO® 9, green) biofilm associated bacteria in samples representative of each treatment group.