

SUPPORTING INFORMATION

Title: Chronic lung infection by *Pseudomonas aeruginosa* biofilm is cured by L-Methionine in combination with antibiotic therapy

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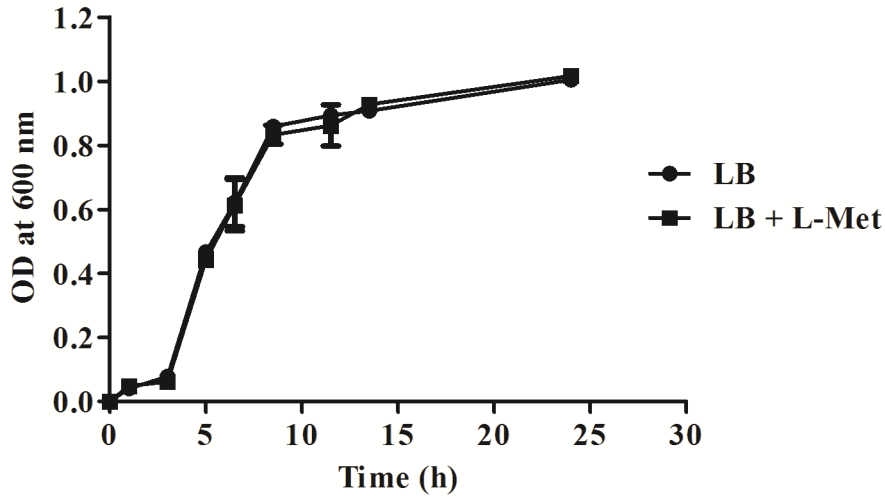
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Figure S1

a



b

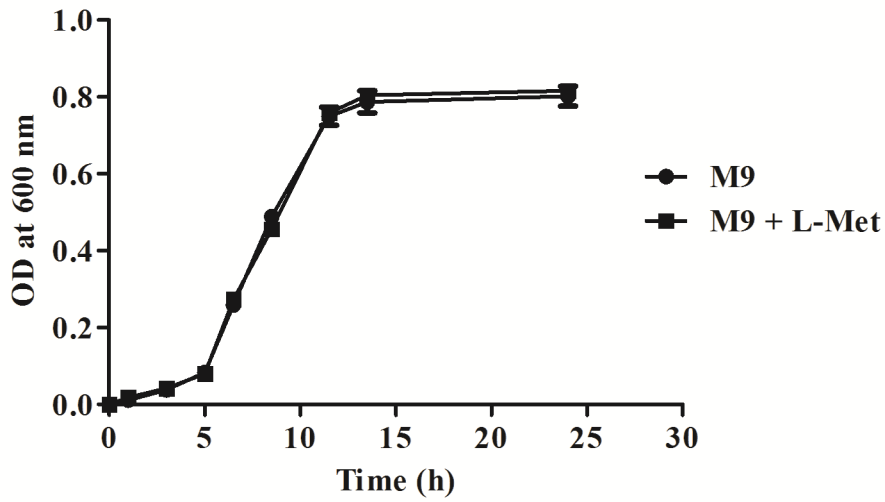


Figure S1. Growth curve. 1×10^4 stationary phase PA were inoculated into 10 ml of (a) Luria broth without NaCl (b) M9 minimal media in the presence or absence of $0.5 \mu\text{M}$ L-Met and kept at 37°C in shaking condition (180 rpm) and at different time points optical density was determined at 600 nm.

Figure S2

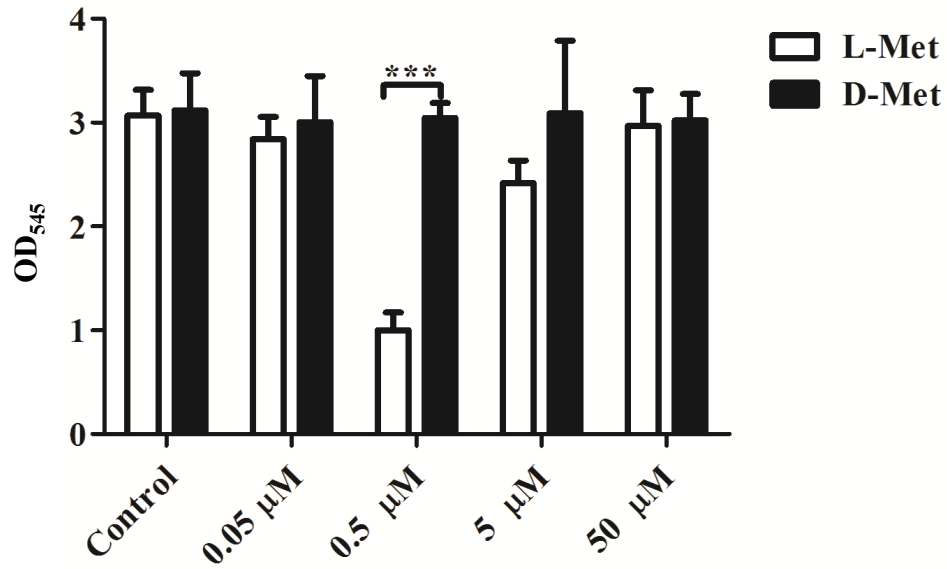


Figure S2. Effect of D-Met on PA biofilm. PA was incubated with different concentrations of L-Met or D-Met and at 72 h, the biomass was determined by crystal violet staining. . The Statistical significance was calculated using One-way ANOVA. Asterisks indicate statistical significance as follows: *** (p<0.001)

Figure S3

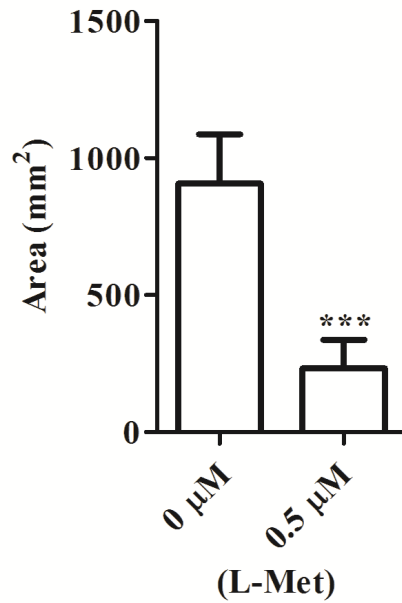
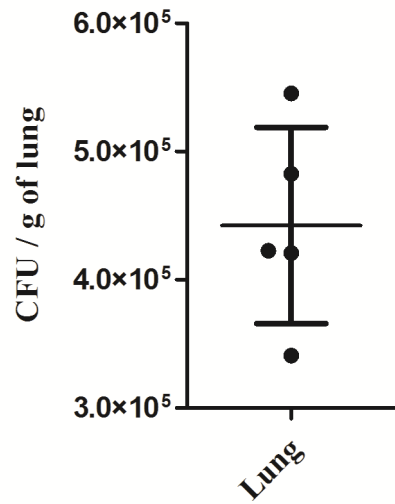


Figure S3. L-Met inhibits *Pseudomonas aeruginosa* twitching motility. Stationary PA was spotted on 1% LB agar plates with or without 0.5 μM L-Met and the plates were incubated at 37°C for 24 h. Areas of interstitial biofilms were measured and presented as the mean±SD from three independent experiments performed in triplicate. The Statistical significance was calculated using students' t test. Asterisks indicate statistical significance as follows: *** (p<0.001)

Figure S4

a



b

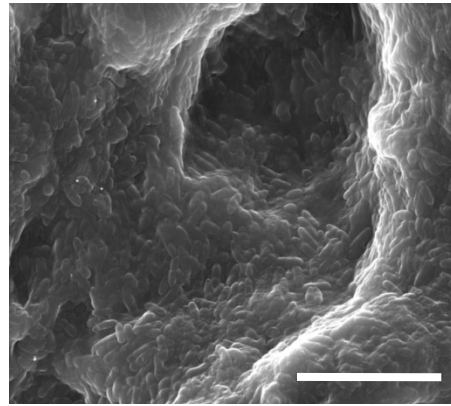


Figure S4. Establishment of PA lung infection model. BALB/c mice were infected with PA via the intranasal route for 3 days. **(a)** The mice were sacrificed and the lungs were removed, homogenized, and plated onto LB agar. **(b)** SEM images of infected lung containing PA biofilm. Scale bar: 10 μ m.

Figure S5

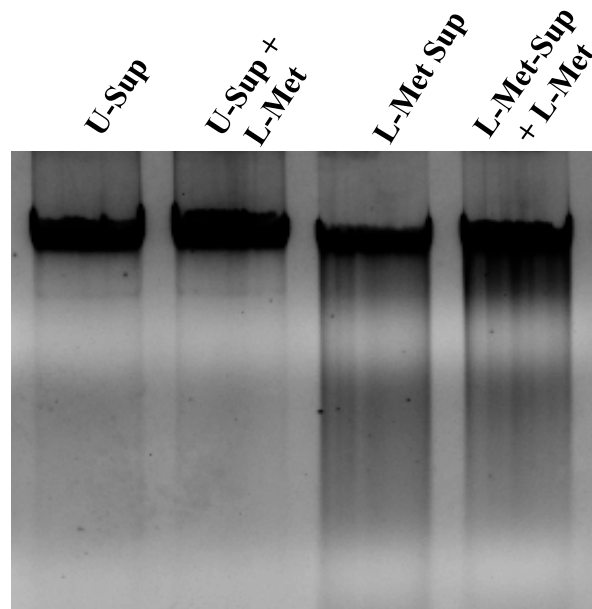


Figure S5. Effect of L-met on DNase activity. 100 μ l of 72 h old U-Sup or L-Met-Sup were incubated with L-Met (0.5 μ M) for 1h at 37°C and the samples were loaded in 1% agarose gel and visualized.