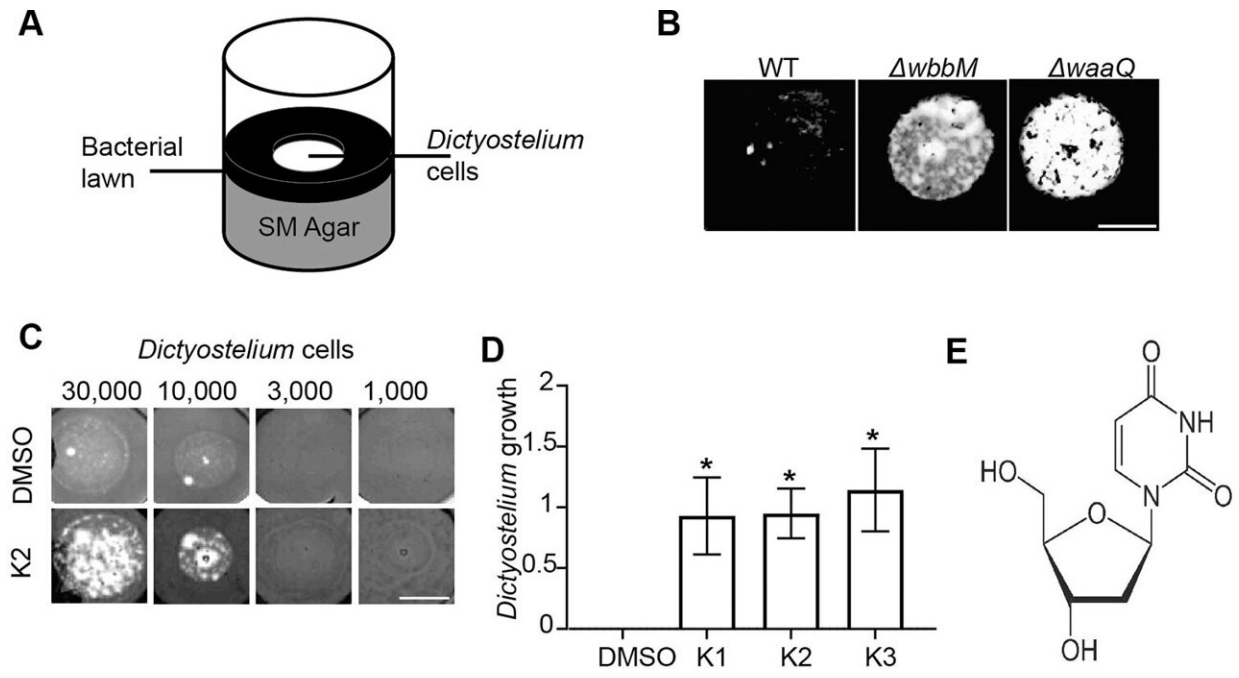
A new weapon against antibiotic-resistant bacteria

November 4 2022



Three compounds affect the interaction between K. pneumoniae and phagocytic amoebae. A. D. discoideum cells were deposited on a lawn of K. pneumoniae and allowed to form a phagocytic plaque for 10 days. B. Phg1A KO cells failed to grow on WT bacteria, but they grew readily on K. pneumoniae mutants with decreased virulence (ΔwaaQ, ΔwbbM) (scale bar: 4mm). C. K2 increased the ability of phg1a KO cells to create phagocytic plaques in comparison with the negative control (DMSO) (scale bar: 4mm). D. The effect of each compound was scored from 4 (visible growth of 1,000 cells) to 0 (no growth of 30,000 cells) and the score of the negative control (DMSO) substracted. In this scale, the result shown in Fig 1C would score as a 0 for DMSO, and 2 for K2. Repeated experiments showed a high variability, but a significant effect for all three

selected compounds (mean ± SEM; *: p