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Anti-biofilm peptide combinations in the eradication of pre-established biofilms of *Pseudomonas aeruginosa* and *Staphylococcus aureus*

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The emergence of resistance is a preoccupant health threat and the development of new strategies and the use of novel compounds are in demand. Specifically, biofilm infections are a serious threat, causing chronic, nosocomial and biomaterial related infections, being related to dissemination of antibiotic resistance. *Pseudomonas aeruginosa* and *Staphylococcus aureus* are great developers of resistance and their ability to form biofilms makes them responsible for severe chronic infections. In this work, we associated the use of novel compounds – antimicrobial peptides (AMPs) – with a combination strategy. The AMP/antibiotic colistin was combined with three other AMPs (linear tachyplesin I; temporin A; citropin 1.1). Previous results showed the ability of these AMPs to combine synergistically against these bacteria. Here, we test these combinations against single pre-established biofilms and the results show promise. Currently, we are testing these combinations on mixed biofilms to assess their use in polymicrobial infections.

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