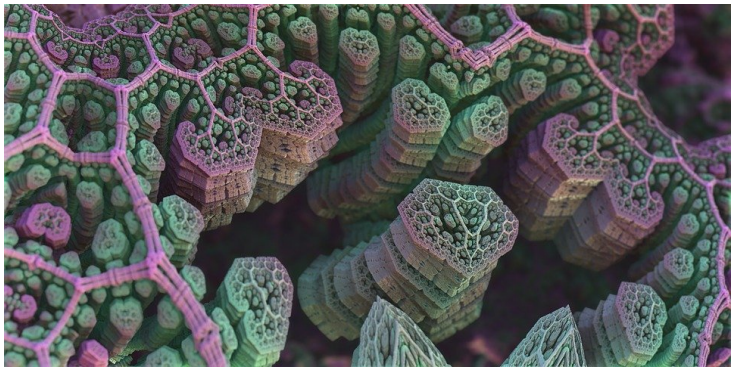
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Scientists design novel compounds against biofilm-forming bacteria

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The molecules performed better than conventional antibiotics in killing the bacteria during the dormant phase.



Two new molecules capable of destroying bio-film forming bacteria have been developed by scientists at the Bengaluru-based Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR). The molecules performed better than conventional

antibiotics in killing the bacteria during the dormant phase.

Though the molecule alone was not able to disrupt biofilm, a combination of the molecule with erythromycin in equal concentration caused complete eradication of the tough-to-kill *E. coli* and *Acinetobacter* biofilm. Erythromycin by itself was also not able to disturb the biofilm. This showed that the combined strategy worked efficiently compared with individual antibiotics.

A combination of existing antibiotics (erythromycin) and the macromolecules also showed efficacy in treating burn and surgical wound infections caused by multi-drug resistant pathogens, *Acinetobacter* and *Klebsiella* in animal models.

These findings show the potential implications of the combination approach for topical treatment of infections. However, detailed animal studies are required further to fully understand the prospects of the molecule.