Antimicrobial Resistance Model Development â€“ The newly found KPC-producing strain

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Researchers from the College of Pharmacy (CP) have published an article in the journal Current Microbiology Research addressing to one new strain of bacteria, anti-MON 35 pathway antagonist NPC14H2N2. The article suggests that antibiotics, once introduced into the system, persist longer in pathogens than anticipated.

This article describes a novel inhibitor of the anti-MON 35 pathway antagonist NPC14H2N2 â€“ a novel KPC inhibitor with a unique activation profile of the Anti-Mycobacterium mantle, encoding the gene WNA1. In this study, the inhibitor NPC14H2N2 was designed to be successful in a model of Systemic E. coli. The study demonstrates that the inhibitor has no off-target or non-pathogenic effects, suggesting that pathogenic activity in combination with potency makes the inhibitor effective as a combination treatment.

â€œThe study is a good example of how research on inhibitors of inflammatory pathways and AML mechanisms can move from the laboratory into clinical practice,â€ said Associate Professor Gillian Paolicelli, the researcher responsible for the study. â€œIt also reveals an important ongoing challenge of researchers â€“ how to find and develop treatments for pathogens that are resistant to first generation antibiotics, and to make them more effective in the clinic.â€

The authors note that NPC14H2N2 is the first and only new KPC inhibitor to be found in cultured cells, and that even now, there is little information available on the mechanism that allows NPC14H2N2 to make an effective anti-Mycobacterium presence in other strains of E. coli. The authors believe that this study will lead to further study in the laboratory on methods of further understanding and developing this novel inhibitor.

A Black And White Photo Of A Fire Hydrant